



BRAJENDRA MISHRA

Department of Mechanical & Materials Engineering
Worcester Polytechnic Institute
100 Institute Road, Worcester, MA 01609, USA
Tel: (508) 831-5711; Fax: (508) 831-5993
Email: bmishra@wpi.edu

Residence Address:
10 Whitehaven Lane
Worcester, MA 01609
Home: (508) 796-5283

PRESENT POSITIONS:

Kenneth G. Merriam Distinguished Professor: Mechanical & Materials Engineering
Donald M. Zwiap Distinguished Fellow: Worcester Polytechnic Institute
Director: Metal Processing Institute
Director: National Science Foundation Center for Resource, Recovery & Recycling
University Emeritus Professor, Metall. & Materials Engineering, Colorado School of Mines.

Additional Positions:

Chief Scientific Advisor: Global Minerals Recovery – a start-up focused on value-recovery from industrial mineral wastes.

EDUCATIONAL QUALIFICATION:

Ph.D., Thesis: University of Minnesota, Minneapolis, August 1986, Susceptibility of Inconel X-750 to stress-corrosion cracking.

M.S. [Matl.Sc.], Thesis: University of Minnesota, Minneapolis, March 1983, Electromigration of H₂ and D₂ in Tantalum: Isotope Effect.

B.Tech. [Met. Engr], Thesis: Indian Institute of Technology, Kharagpur, May 1981, Some studies on the magnetic ageing of electrical steels.

PROFESSIONAL EXPERIENCE (Academic):

Sept. 2001–Aug.2015: Professor, Kroll Institute for Extractive Metallurgy, Department of Metallurgical and Materials Engineering

Sept.1993-Aug. 2000: Associate Professor, Kroll Institute for Extractive Metallurgy, Department of Metallurgical and Materials Engineering

Sept. 1990-Aug. 1993: Research Assistant Professor, Kroll Institute for Extractive Metallurgy, Department of Metall. and Materials Engineering

PROFESSIONAL EXPERIENCE (Industry):

Sept. 1986-Aug. 1990: Product Development Engineer, R&D Division, Tata Steel, India.

May 1995-Sept. 1995: Faculty Intern, MOS-8 Division, Motorola, Austin, TX

May 1996-Aug. 1996: Faculty Intern, MOS-8 Division, Motorola, Austin, TX.

ENGINEERING CONSULTING SERVICES: 80 Companies (1991-present)

FUNDED RESEARCH PROJECTS: (from September 1990 to present): 135+ Projects as PI and Co-PI (over \$75 million)

Research Funding at WPI: (8/1/15-10/31/23): \$47 million.

PATENTS:

1. Production of electrolytic grade of iron-powder from sponge iron fines [co-inventors: R.R. Dash and S.K. Singh, National Metallurgical Laboratory], India, August 1990.
2. Abatement of PFC gases by molten aluminum. [co-inventors: G. DePinto and S. Dunnigan]: Motorola Corporation, September 1995.
3. A coating system for glass molding dies and forming tools. [co-inventors: JJ Moore and D. Zhong], Colorado School of Mines, February 2002.
4. Alumina-based thin film system for Aluminum die casting dies. [co-inventors: JJ Moore and S. Carrera] Colorado School of Mines, June 2002.
5. Removal of hard coatings by electrochemical technique, [co-inventors: JJ Moore and J. Matterson], Colorado School of Mines, June 2004.
6. Sensor Utilizing Thermoelectric Power for Measurement of Hydrogen Content in Metallic Hydride, [co-inventors: DL Olson and YD Park], Colorado School of Mines, October 2009 (applied for)
7. H. Obaid, David L. Olson and Brajendra. Mishra, "Long Chain Hydrocarbon Cracking Using Ultrasonic Waves", U. S. Patent Application # 61375345, EFSID: 8255798, August, 2010.
8. C. Stanton and B. Mishra, "Recovery of Samarium and Cobalt from Spent Sm-Co Permanent Magnets", U.S. Provisional patent Granted, March 2015.
9. M. Jung and B. Mishra, "Vanadium Recovery Methods", US Serial number 10,486,983, Worcester Polytechnic Institute, November 2019.
10. P. Eduafo, M. Strauss and B. Mishra, "Recovery of Mixed Rare-earth Oxides from Fluorescent Lamp Wastes", US Prov. Patent No. 62/431,553, Colorado School of Mines, February 2017.
11. S. Gostu and B. Mishra. "Hydrothermal methods for Processing Bauxite Residue", US Serial No. 16,213,243. Worcester Polytechnic Institute, February 2019.
12. H. Tanvar and B. Mishra, "Acid Wash of Red Mud (Bauxite Residue), U.S. Application No. PCT/US2021/62785, Worcester Polytechnic Institute, December 2020.

THESIS ADVISORY:

In Progress: Ph.D. 3 Post-doc. 5

Completed: M.S. 39 Ph.D. 49; Post-doc. 15

AWARDS:

1. Scholastic Excellence Award, 1981, IIT, India.
2. United States Bureau of Mines Fellowship, 1982-85.
3. Doctoral Dissertation Grant, Dow Chemical Corp, 1984.
4. University of Minnesota Doctoral Dissertation Award, 1985-86.
5. Computer Applications in Process Control, 1st Place Award, Tata Steel, 1990.
6. ASM Visiting Lectureship Award, 1992
7. TMS Light Metals Division Reactive Metals Award, 1998
- 8. Fellow: ASM International, 2004**
9. Best 2007 Congress Paper, North Amer. Die Casting Assoc., 2007
10. Honorary Membership, Indian Institute of Metals, 2008

11. Alexander Scott TMS Distinguished Service Award 2009
- 12. EPD-TMS Distinguished Lecturer, The Minerals, Metals & Materials Society 2013**
- 13. AIME Presidential Citation 2014**
14. Best Scientific Paper: World Resources Forum, Arequipa, Peru 2014
- 15. Fellow: TMS-AIME, 2016**
- 16. Kenneth Andrew Roe Award of AAES, 2016**
- 17. Distinguished Alumnus Award, Indian Institute of Technology, Kharagpur, 2017**
18. International Award of Materials Engineering for Resources, ICMR, Japan, 2017
19. Thermec 2018 Distinguished Award, Thermec, Paris, France, 2018
20. The Donald N. Zwiop Distinguished Fellow Award, WPI, 2023

HONORS:

1. Chairman: Extraction & Processing Division, TMS 2002-05
- 2. President: The Minerals, Metals and Materials Society, 2006**
3. President: Faculty Senate, Colorado School of Mines, 2006-07
- 4. President: American Inst. Of Mining, Metall. & Petroleum Engineers, 2007-2012**
5. Distinguished Lecturer: Govt. Center of Excellence, Tokyo, 2009
- 6. Distinguished Professor of Chemical Engineering, Petroleum Institute 2010**
7. Member, International Ship Structures Committee, 2010-2018.
8. Chair, Working Group on Advanced Surface Technology, TMS-DOE Panel
9. Honorary Professor, Kazakh National Technical University, Almaty 2012
10. 2013 Distinguished Lecturer, Education city, Doha, Qatar, 2013
11. Natl. Acad. of Science Panel Member on Energy Sustainability, 2012
12. EU-Japan-USA Trilateral FORUM Speaker on Critical Matls.: US DOE, Brussels 2013.
13. EU-Japan-USA Trilateral FORUM Speaker on Critical Materials: US DOE, Tokyo 2015.
- 14. University Emeritus Professor, Colorado School of Mines, 2015**
15. Member, Amer. Assoc. of Engineering Societies Board, 2017-2020.
16. Trustee, TMS Foundation Board, 2018-2020

MEMBERSHIP:

The Minerals, Metals and Materials Society of AIME
 American Society for Materials International
 National Association of Corrosion Engineers International
 Society for Mining & Exploration Engineers

SERVICES:

Editorial Board: J. of High Temperature Chem. Processing, Japan
 Editorial Board: Inst. of Metals J. on Mining & Metallurgy, UK
 Editorial Advisory Board: OP Jindal Tech. Bulletin
 Editorial Board: Kazakhstan J. for Mining & Metallurgy Associate
 Editorial Board: Functional Composites and Structures Journal, KIM, Korea
 Editorial Board: Minerals, MDPI Journal
 Assoc. Editor: Journal of Sustainable Metallurgy
 ASM Metals Handbook Review Board
 ASM Engineered Materials Handbook Review
 Board Metals & Materials Transactions Review Board [B]
 Journal of Electrochem. Soc. Review Board
 Journal of Materials Science & Engineering Review Committee
 National Science Foundation Review Panels (PFI, SBIR/STTR and IUCRCs)

Research & Teaching Experience (1990 - present)

(A) Research guidance in chemical processing:

1. Calcium electrowinning from calcium oxide: Ph.D.
2. Cerium electrorefining by fused salt electrolysis: Ph.D.
3. Salt scrub reduction using combustion synthesized intermetallics (Post-doc)
4. Behavior of RCRA Constituents in pyrochemical processes (Post-doc)
5. Testing of Leaded Rubber Gloves: (Post-doc)
6. Washing technologies for cyanide contaminated substrates (Post-doc)
7. Recovery of value-added products from red-mud: M.S.
8. Removal of technetium from nickel and stainless steel: (Post-doc)
9. Electrolytic separation of uranium and magnesium by molten salt: (Post-doc)
10. Mineralogical investigation of perovskite phase in red-mud: M.S.
11. Recovery of iron and titanium from red-mud: Ph.D.
12. Electrochem. removal of nitride and carbide films for substrate reuse: (Post-doc)
13. Comparison of corrosion resistance of electroplated Chromium from Cr³⁺ vs. Cr⁶⁺ baths: M.S.
14. Synthesis of high strength bricks from fly-ash/red-mud composite mix: (post-doc)
15. Extraction of Oxygen from Lunar Regolith by Molten Salt Electrolysis: Ph.D.
16. Oxidation Kinetics Studies of Plutonium, Ph.D.
17. Evaluation of Titanium Extraction Processes by Molten Salt Electrolysis, M.S.
18. Developing a Pyrochemical Method to Produce Fuel Gas by Injection Water and Coal into Molten Steel. A Process called Supernova Process, M.S. (terminated).
19. Use of Lamb waves to assess the amount of carbide formation of the inner wall of a superalloy refinery pipes with external sensors, Ph.D.
20. Recovery of rare earth Metals from Phosphor Dust, M.S.
21. Recovery of Iron & Alumina from Red Mud, M.S.
22. Conversion to Metals and alloys from Oxides of Rare-earths by Molten Salt Electrolysis, Ph.D.
23. Recovery of valuable Metals from Waste Industrial Fines, Ph.D.
24. Recovery of Rare Earth Metals from Spent CFL Phosphor Dust, Ph.D.
25. Recovery of Lithium Phosphorus Fluoride Electrolyte from Spent Lithium Ion Batteries, MS.
26. Investigation of Chemical Processes for the Production of Commercially Viable High Volume Value-added Products from Bauxite Residue: Ph.D.
27. Recovery of Valuable Metals from Flue Dust and Other Fines from Mechanical Treatment of e-Scrap: (Post-doc)
28. Waste Water Treatment Sludge & High Value Grinding Swarf Recycling: (Post-doc)
29. Separation of Eu and Y from Phosphor Dust: Ph.D.
30. Recovery of Value-Added Products from Red Mud and Foundry Bag House Dust: Ph.D.
31. Hydrometallurgical Separation of Metal Oxides in Bauxite Residue: Ph.D. (ongoing)
32. Investigation of Copper Contamination in Steel Scrap: Ph.D.
33. Optimization of sorting and separation techniques for remanufacturing of product-centric recycled and reclaimed scrap: Ph.D.
34. Characterization and Beneficiation of Gold ore: Ph.D.
35. Optimization of Beneficiation and Extraction Techniques of Tantalite Ores: Ph.D.
36. Recovery of Electrolyte in Lead Acid batteries: Ph.D. (ongoing)
37. Filtration of Machining Fluid for Recycling: Ph.D. (ongoing)
38. Application of Treated Bauxite Residue for Water Purification: M.S. (ongoing)

39. Semi-solid casting of aluminum alloys for HPDC: Ph.D. (ongoing)
40. Separation of Terbium and Europium from Phosphor Dust: (Post-doc- ongoing)
41. Separation of Niobium from coated high strength steel substrates: (Post-doc-ongoing)
42. Scale-up of hydromet. process for magnetite recovery from bauxite residue: (Post-doc-ongoing)
43. Estimation of carbon-footprint in automotive parts recycling (Post-doc – ongoing)
44. Production of advanced Al-Cu-Li alloy from urban scrap reutilization (Post-doc – ongoing)
45. Recycling of scrap aluminum alloys by precipitation of impurity intermetallics (post-doc)

(B) Research guidance in materials synthesis and PVD technology:

1. Combustion synthesis of gallide intermetallics: M.S.
2. Development of oxidation resistant coatings for Mo-electrodes: Ph.D
3. Combustion synthesis of MoSi₂-SiC layered intermetallic structures: M.S.
4. High strength glass-fiber reinforced steel composite: M.S.
5. Development of wear-resistant coating for tool steels: M.S.
6. Microstructural characterization of roll-bonded SS-alloy steels: M.S.
7. Development of hardfacing consumables: M.S.
8. Abatement of PFC gases using molten aluminum: M.S.
9. Development of Lithium anodes for thin film batteries: (Post-doc)
10. Development of coatings for optical lens dies: M.S.
11. Application of low-pressure plasma for wear resistant thin films: Ph.D.
12. Wetting properties of thin films for Al-pressure die casting dies: M.S.
13. Diagnostics of PVD plasma during TiN and TiO₂ thin film deposition: Ph.D.
14. Development of self-lubricating graphite-TiC composite coatings: Ph.D.
15. Development of metal-carbide composite wear-resistant coatings: Ph.D.
16. Finite element modeling of fracture toughness in DLC coatings: Ph.D.
17. Development of multi-functional thin film coatings for Al-pressure casting dies: Ph.D.
18. Effect of sputtering parameters in ion-beam assisted deposition of c-BN: Ph.D.
19. Development of Coatings and Characterization based for Mo and W Refractory Metals, (Post-doc)
20. Vapor Deposition of Pd-Based Thin Films, Coalescence, (Post-doc)
21. Development of Coatings for High Performance Pump Components, (Post-doc)
22. Optical & Decorative Properties of Ultra-thin Films, (Post-doc)
23. Nanostructured, Multifunctional Cr-B-Al-N Coatings for Aerospace Applications, Ph.D.
24. Seebeck and magnetic behavior of Al_{0.5}Ni_{0.5} hydrogen storage materials, M.S.
25. Optimization of AZ91 Magnesium Alloys for Automotive Applications, Ph.D.
26. Mechanical Testing of Uranium Alloys: Independent,
27. Underwater TEP Sensor to Assess H₂ in Nuclear Reactor Pressure Vessel Steel: Ph.D.
28. Uranium-Molybdenum alloy development, Ph.D.
29. Development of Uranium-Carbon Phase Diagram, M.S.
30. Development and calibration of SiC irradiation sensors, MS.
31. Development of uranium grain refinement by nucleation agents, Ph.D.
32. Case study of ACFM Non-destructive testing technique to measure crack lengths on structural members in service, M.S.
33. Case study of the use of NDE tools for assessment of residual strain in marine structures, M.S.
34. Development of Melting and Containment Crucible Materials for Uranium Processing, Ph.D.
35. Weldability of aluminum-beryllium alloys used in space components: (post-doc)
36. Residual Stress in Aluminum Casting: (post-doc)

37. Improvement of Impact Strength and Fracture Toughness through Chemically introduced Residual Stress: (MS)
38. In-situ Manufacturing Techniques for Al-Matrix Nano-composites: Ph.D.
39. Experimental investigation of in-situ microstructural transformations in wire arc additively manufactured Maraging 250-grade steel: Ph.D.
40. Design & Synthesis of a Novel Al-Cu-Li Alloy from Secondary Resource (Post-doc)

(C) Research guidance in corrosion:

1. Formation of iron carbonate scale on steel pipes: Ph.D.
2. Alternative techniques for Hydrogen-induced-cracking measurement: M.S.
3. Study of corrosion behavior of Ce as a surrogate for radioactive metals: M.S.
4. Development of corrosion-resistant coatings on stainless steel tube: M.S. (completed)
5. Corrosion of thin film magnetic media used in disk drives: M.S.
6. Corrosion effect on cleaning of type 304 SS with type D-721 solvents: M.S.
7. Effect of dessicants on corrosion of sheet steels in high humidity: post-doc
8. Development of corrosion resistant decorative thin film coatings: Ph.D.
9. Corrosion and magnetic properties measurement in Ni-Mg battery alloys: Ph.D
10. Effect of H₂S on the corrosion of line pipe steels in brine solutions: Ph.D.
11. Effect of magnetic pigging of pipelines on hydrogen stress cracking susceptibility: Ph.D.
12. Study of oxidation Kinetics of plutonium: Ph.D.
13. Anodic Polarization effects on stress corrosion cracking of Inconel-600: Ph.D.
14. Electrodecon of Titanium Cleaning, Post-doc.
15. Develop Analytical Techniques to Assess Microbiological Corrosion and Identify the Organisms Involved, Ph.D
16. Assess the Hydrogen Content in Line Pipe with Electronic Measurement Techniques, TEP and Eddy Current Analysis, Ph.D.
17. Determine the Influence of the Magnetic Reminisce from Pigging Inspection of on the Hydrogen pick up and Solubility from Cathodic Protection on Line Pipe Steel, Ph.D.
18. Developing Advanced Methods to Non Destructively Sense for Potential Stress Corrosion Cracking Sites on Uranium Parts Using a Thermoelectric Power (Seebeck) Coefficient Surface Contact Probe, M.S.
19. Evaluation of Stress Corrosion Cracking Susceptibility of Inconel 600 under Anodic Polarization, Ph.D.
20. Development of Oxidation Resistant Thermal Barrier Coatings for MoSiB₂ Turbine Material by Molten Salt Electrodeposition, Ph.D.
21. Effect of Pigging on Hydrogen Cracking Susceptibility in Linepipe Steels, Ph.D.
22. Extended Life Prediction Statistical Assessment and Mechanistic Interpretation of Corrosion in Double Hull Tankers, Res. Assoc.
23. Assess the Hydrogen Content in Line Pipe with Electronic Measurement Techniques, TEP and Eddy Current Analysis, Ph.D.
24. Materials Development and Characterization for Oil and Gas Exploration and Transport, MS.
25. Electrochemical Behavior of Titanium and its Alloys as Dental Implants in Normal Saline and Phosphate Buffer Solutions, Ph.D.
26. Investigation of Hydrogen Analysis Techniques in Zr-alloys, MS.
27. Microbiologically Influenced Corrosion Behavior of Carbon Linepipe Steels in Oil- Water Mixtures Characterized by Electrochemical Techniques, Post-Doc.
28. Characterization and Mechanistic Interpretation of MIC of Oil Linepipe Steels using rRNA Gene Sequencing, Post-Doc.

29. Effect of Concentration and Temperature of Ethanol in Fuel Blends on Microbial and Stress Corrosion Cracking on High-Strength Steel, Ph.D.
30. Corrosion Resistance Assessment of Tubulars and Cladded Tubulars for CO₂, Acid Gas, and Sour Environments Associated with the Processing of Oil Shale: Ph.D.
31. Corrosion of Linepipe Steels under Alternating Current: Ph.D.
32. Assessment of Emerging Marine Corrosion and Wastage NDE Methodologies and Development of Marine Corrosion and Wastage Sensor, M.S.
33. Corrosion Behavior of Expanded Tubes in Harsh Environments, Ph.D.
34. Magnetic Field Effects on Microbiologically Influenced Corrosion by Sulfate Reducing Bacteria of Pipeline Steel, Ph.D.
35. Characterization of Microbes and their effect on Corrosion of Pipelines using DNA Sequencing, Ph.D.
36. Assessment of Emerging Marine Corrosion and Wastage NDE Methodologies and Development of Marine Corrosion and Wastage Sensor, M.S.
37. Developing Advanced Methods to Non-Destructively Sense for Potential Stress Corrosion Cracking Sites on Uranium Parts Using a Thermoelectric Power (Seebeck) Coefficient Surface Contact Probe”, MS
38. Investigation of sour corrosion and cracks on structural materials for natural gas production, work will be performed at test facility in Qatar, M.S.
39. Eddy current testing with acoustic resonant enhancement to assist in characterizing steel microstructure, Ph.D.
40. Use of Lamb waves to assess the amount of carbide formation of the inner wall of a super-alloy refinery pipes with external sensors, Ph.D.
41. Effect of Pigging on Hydrogen Cracking Susceptibility in Linepipe Steels, Ph.D.
42. Optimization of AZ91 Magnesium Alloys for Automotive Applications, Ph.D.
43. Underwater TEP Sensor to Assess Hydrogen in Nuclear Reactor Pressure Vessel Steel, Ph.D.
44. Development of Advanced Austenitic Stainless Steels for Down-hole Applications, Ph.D.
45. Development of High Interstitial Austenitic Stainless Steel for Drill Collar Application in Oil Exploration, Ph.D.
46. Development of Corrosion Resistance in Polymeric Coatings with Conductive Oxide Nanoparticles, Ph.D.
47. Assessment of Polymeric Pipes for Corrosion Resistance using NDE Methodologies, Ph.D.
48. Corrosion Behavior of Expanded Tubes in Harsh Environments, Ph.D.
49. Exfoliated Hexagonal Boron Nitride based Polymer Composite Coatings for Carbon Steel Protection in a Saline Environment: Ph.D.
50. Flow Accelerated Corrosion of the Heat Exchanger Carbon Steel Tubing in Air Cooled Condensers: Ph.D.
51. Phase Field Modeling of Galvanic Corrosion in Magnesium-aluminum Joints: Post-doc.
52. Galvanic Corrosion Studies of Al-Mg Friction Stir Welded Joints for Automotive Applications: Ph.D.

Teaching:

1. From Ore to Steel: Tata Steel Supervisory/Operation Staff, Jamshedpur, India, 1988.
2. Failure Modes and Effects Analysis: Motorola, MOS 8 and Plant Facilities Engineering Staff, Austin, TX, 1996.

Graduate/undergraduate courses at CSM:

1. Physical chemistry of iron and steelmaking (graduate & undergraduate) [MTGN 430/530]

2. Oxidation of metals (graduate) [MTGN554]
3. Glass science and liquid oxide system (graduate) [MTGN 505]
4. Materials Selection and Design (undergraduate) [MTGN 466]
5. Engineering Materials Engineering (undergraduate) [MTGN 212/SYGN 202]
6. Introduction to Thermodynamics (undergraduate) [DCGN 209]
7. Advanced Topics in Corrosion (graduate & undergraduate) [MTGN 451/551]
8. Extractive Metallurgy for Non-Metallurgists [SPACE] [MTGN 598]
9. EPICS 201 and 251 (undergraduate)
10. Chemical Processing of materials (undergraduate) [MTGN 334]
11. Materials Processing and Design (undergraduate) [MTGN 465]

Graduate/undergraduate courses at the Petroleum Institute:

1. Materials Science (undergraduate) [MEEG334]
2. Materials Engineering & Corrosion (graduate) [CHEG 575]

Graduate/undergraduate courses at the Worcester Polytechnic Institute:

1. Corrosion Science & Engineering (graduate) [MTE 594]
2. Chemical Processing of Materials (undergraduate) [ME 4832]
3. Introductory Materials Engineering (undergraduate) [ES 2001]
4. High Temperature Oxidation (graduate) [MTE 594]
5. Great Problems Seminar: Resource, Recovery & Reuse (undergraduate) [FY 1100]
6. Interactive Qualifying Project: International Project Center-Bangkok [IQP-BM2]
7. Interactive Qualifying Project: International Project Center-Hongkong [IQP-BM2]

PUBLICATIONS:

Refereed Publications in Journals:

1. B. Mishra and J.M. Sivertsen, "Electromigration of hydrogen and deuterium in tantalum: Isotope effect", *Met. Trans.*, 14A, p.1255, [1983].
2. B. Mishra, A.K. Sinha and J.J. Moore, "Effect of single ageing on microstructure and impact strength of Inconel X-750", *Met. Trans.* 16A, p 822, [1985].
3. B. Mishra and J.J. Moore, "Inconel X-750: Selection of heat treatment for PWR Applications", *Scripta Met*, 21(9), p 1179, [1987].
4. B. Mishra and J.J. Moore, "Effect of single-ageing on stress-corrosion cracking susceptibility of Inconel X-750 under PWR Conditions", *Met. Trans.*, 19A, p 1295, [1988].
5. B. Mishra and J.J. Moore, "Effect of refining techniques on stress-corrosion cracking behavior of Inconel X-750, *J. of Matl. Sc.*, 23(7), p 2294, [1988].
6. B. Mishra, S. Al-Hassan, D.L. Olson and M. Salama, "Physical characteristics of iron carbonate scale formation in linepipe steels", *NACE Corrosion* 92, p 13/1-13/11, NACE, Houston, TX, [1992].
7. S. Al-Hassan, B. Mishra and B.L. Olson, "Prediction of microstructural effect on corrosion of linepipe steels in CO₂-brine solution", *CORROSION* 93, pp 90/1-90/13, NACE, Houston TX, [1993].
8. B. Mishra and D.L. Olson, "Electrolytic Extraction of Beryllium", *Mineral Processing and Extractive Metallurgy Review*, Vol. 13, pp. 127-143, Gordon & Breach, UK, [1994].
9. B. Mishra, S.R. Pritchett and J.J. Moore, "Synthesis of calcium-gallium salt scrub reduction alloys and their efficiency in actinide recovery", *J. Matl. Synthesis & Processing*, 2(1), pp. 57-68, [1994].
10. B. Mishra and J.J. Moore, "Thermodynamic Estimation of ΔH for CaGa₂ Intermetallic",

- Met Trans, 25B, p. 151, [1994].
11. S. Govindarajan, J.J. Moore, B. Mishra and D. Olson, "Physical vapor deposition of molybdenum and silicon thin films", Surface & Coatings Technology, vol. 68/69, pp. 45-50, Elsevier Science S.A., [1994].
 12. B. Mishra, D. Olson and S.A. David, "Post-weld electro-transport of hydrogen", J. of Materials Engineering and Performance, Vol. 3(5), pp. 612-618, [1994].
 13. J.J. Moore, D.W. Readey, H.J. Feng, K. Monroe and B. Mishra, "The combustion synthesis of advanced materials", Journal of Metals, vol. 46 (11), p. 72-78, [1994].
 14. B. Mishra, S.R. Pritchett and J.J. Moore, "Combustion synthesis of LiGa and LiAl intermetallic alloys", Met. & Matl. Trans B, Vol. 26B, pp. 121-134, [1995].
 15. S. Govindarajan, B. Mishra, D. Olson, J.J. Moore and J. Disam, "Synthesis of MoSi₂ on Mo substrates", Surface & Coatings Technology, 76-77, pp. 7-13, Elsevier Science SA, [1996].
 16. W.K. Grant, C. Loomis, J.J. Moore, B. Mishra, D. Olson and A.J. Perry, "Characterization of hard chromium nitride coatings deposited by cathodic arc vapor deposition", Surface & Coatings Technology, vol. 86/87, pp. 788-796, Elsevier Science S.A., [1997].
 17. S. Govindarajan, J.J. Moore, B. Mishra, D. Olson, T. Ohno and J. Disam, "On the possibility of tailoring a compositional gradient in thin films sputtered from a MoSi₂ + X SiC composite target", Surface & Coatings Technology, vol. 86/87, pp. 33-40, Elsevier Science S.A., [1997].
 18. S. Al-Hassan, B. Mishra, D. Olson, M.M. Salama, "Development of a predictive model for corrosion of steel in CO₂-containing solutions", CORROSION, Vol 53 (11), pp. 852-59, [1997].
 19. B. Mishra, A.G. Raraz, D. Olson and W.A. Averill, "Formation of explosive compounds in acid-contaminated leaded rubber gloves - Part I: Theoretical analysis", Journal of Hazardous Materials, Vol. 56, pp. 107-116, [1997].
 20. B. Mishra, A.G. Raraz, D. Olson and W.A. Averill, "Formation of explosive compounds in acid-contaminated leaded rubber gloves - Part II: Experimental verification", Journal of Hazardous Materials, Vol. 56, pp. 117-128, [1997].
 21. B. Mishra, G. DePinto, S. Dunnigan and K. Schwechel, "Effect of aluminum sputtering process parameters on the step-coverage in micro-electronic device manufacturing", J. of Electronic Materials, Vol 26 (4), pp. 376-382, [1997].
 22. P.B. Ferro, B. Mishra, D. Olson and W.A. Averill, "Molten salt electrowinning of calcium", J. of waste Management, Vol 17(7), pp. 451-461, [1997].
 23. B. Mishra, "The effective minimization and processing of nuclear wastes", Journal of Metal, Vol. 49(7), p.13, [1997].
 24. P.B. Ferro, B. Mishra, D. Olson and W.A. Averill, "Electrolytic extraction of calcium", Golden Jubilee Issue of Trans. IIM, Vol 51(1), pp. 69-77, [1998].
 25. S. Al-Hassan, B. Mishra, D. Olson, M.M. Salama, "Effect of microstructure on the corrosion of steels in CO₂- containing aqueous solutions", CORROSION, Vol. 54(6), pp. 480-491, [1998].
 26. R.L. Stephens and B. Mishra, "Waste treatment and recycling using pyrometallurgical processes, J. of Metals, Vol. 50(7), pp. 20, [1998].
 27. J.J. Moore, C. Suryanarayana and B. Mishra, "Surface Engineering at the Colorado School of Mines", Surface Engineering, Vol. 15 (2), pp. 97-100, [1999].
 28. F. Kustas, B. Mishra & J. Zhou, "Metal/carbide Co-sputtered Wear Coatings", Surface & Coatings Technology, Vol. 120-121, pp. 489-494, [1999].
 29. J.J. Moore, C. Suryanarayana, B. Mishra, "Oxidation-Resistant Coatings for Molybdenum Electrodes Developed at the Colorado School of Mines", British Corr. Journal, 34, pp 13-

- 14, (1999).
30. A.M. Peters, I. Remanis, J.J. Moore, B. Mishra, R. Weiss, "Cathodic Arc Evaporation of Functionally Graded Chromium Nitride Thin Films for Wear Resistant and Forming Applications", *Material Science Forum* 308/311pp. (1999).
 31. D. Olson and B. Mishra, "Welding, Brazing & Joining of Refractory Metals and Alloys, *Mineral Proc. & Extractive Metallurgy Review*, Gordon & Breach Publications, pp 22-44, [2000].
 32. B. Mishra and D. Olson, "Corrosion of Refractory Metal in Molten Lithium & Lithium Chloride, *Mineral Proc. & Extractive Metallurgy Review*, Gordon & Breach Publications, pp 1-20, [2000].
 33. E.J. Young, E. Mateeva, J.J. Moore, B. Mishra, M. Loch, "Low Pressure Plasma Spray Coatings", *Thin Solid Films*, Vol. 377-378, pp 789-792, (2000).
 34. J.R. Treglio, T.B. Dennin, J.J. Moore, B. Mishra, A.J. Perry, "Advanced Plasma Surface Modification System for High Energy Metal Ion Beam Assisted Deposition", *Surface Engineering*, Vol.17, pp 183-185, (2001).
 35. B. Mishra and W.A. Grant, "Role of Electroplated Chromium on the Corrosion Resistance of Decorative Thin Film Coatings, *Surface Engineering*, Elsevier, Vol. 17, pp 204-208, (2001).
 36. B. Zhong, E. Sutter, J.J. Moore, G.W. Mustoe, B. Mishra, "Structure and Mechanical Properties of Magnetron Sputtered Coatings in the Ni-Al-N Ternary System", *Surface Engineering*, Elsevier, NY, Nov. 2001.
 37. K. Kearns, B. Mishra, P. Reid, J. Moore, "Experimental Determination of Interactions Between Molten Aluminum and Selected Die Coatings for Aluminum Pressure Die Casting", *Surface Engineering*, Elsevier, NY, Nov. 2001.
 38. B. Mishra, A. Staley and B. Kirkpatrick, "Recovery of Iron from Bauxite Residue", *Proc. Recycling and Waste Treatment in Mineral and Metal Processing: Technical & Economic Aspects: Vol.2*, pp. 567-76, [2002].
 39. S. Niyomsoan, W. Grant, D. Olson and B. Mishra, "Variation of Color in Titanium and Zirconium Nitride Decorative Thin Films", *Thin Solid Films*, Vol. 415, pp. 187-194, Elsevier Publications, [2002].
 40. F. Kustas, B. Mishra and J. Zhou, "Wear Behavior of B₄C-Mo Co-sputtered Wear Coatings", *Surface & Coatings Technology*, Vol. 141, pp. 48-54, [2001].
 41. F. Kustas, B. Mishra and J. Zhou, "Fabrication and Characterization of TiB₂/TiC and Tungsten Co-sputtered Wear Coatings", *Surface & Coatings Technology*, Vol. 153, pp. 25-30, [2002].
 42. A.M. Peters, J. Alleman, J.J. Moore, B. Mishra, "Influence of Chromium Interlayers on Residual Stresses and Critical Loads of Chromium Nitride Coatings Deposited by Cathodic Arc Evaporation", *Surface and Coatings Technology*, Vol. 157, pp. 81-86, (2002).
 43. A. Ghosh, S. Das, S. Chatterjee, B. Mishra and P. Ramachandra Rao, "Influence of Thermo-mechanical Processing and Different Post-cooling Techniques on Structure and Properties on an Ultra-Low carbon C-Bearing HSLA Forging", *J. of Matl. Sc. & Engineering*, A 348, pp. 299-308, [2003].
 44. D. Olson, B. Zander, B. Mishra, Z. Gavra, B. Smith, Y.B. Park, "Advanced Analytical Approach to Determine Hydrogen Contents in Welds", *Proc. Intl. Conf. Technological & Research Developments in Welded Defence Equipment*, Melbourne, Australia, Paper # 16, pp. 1-111, WTIA, Silverton, NSW, 1811 [2002].
 45. B. Mishra, A. Staley and B. Kirkpatrick, "Recovery of value-added Products from Red mud", *J. Minerals & Metallurgical Processing*, Vol 19 (2), pp. 87-94, [2002].
 46. P. Termsuksawad and B. Mishra, "Abatement of Hexafluoroethane, C₂F₆, by Molten

- Aluminum”, *J. of Waste Management*, [2003].
47. S. Saidarasamoot, D. Olson, B. Mishra, J. Spencer and G. Wang, “Assessment of the Emerging Technologies for the Detection and Measurement of Corrosion Wastage of Coated Marine Structures”, *Proc. 22nd Intl. Conf. on Offshore Mechanics and Arctic Engineering: OMAE 2003-37371*, Cancun, Mexico, [2003].
 48. M. Ghosh, S. Chatterjee & B. Mishra, “The Effect of Intermetallics on the Strength Properties of Diffusion Bonds Formed Between Ti-5.5Al-2.4V and 304 Stainless Steel”, *J. of Materials Science & Engineering*, Elsevier Publication, A 363, 1-2, pp. 268-274, [2003].
 49. D. Olson, A.N. Lasseigne, M. Marya and B. Mishra, “Weld Features that Differentiate Weld and Plate Corrosion”, *Practical Failure Analysis*, Vol. 3(5), ASM International, pp. 43-57, [2003].
 50. P. Termsuksawad, S. Niyomsoan, R. B. Goldfarb, V. I. Kaydanov, B. L. Olson, B. Mishra and Z. Gavra, “Measurement of hydrogen in alloys by magnetic and electronic techniques”, *J. of Alloys & Compounds*, Vol. 373 (1-2), pp. 86-95 [2004].
 51. A. Ghosh, B. Mishra, S. Das and S. Chatterjee, “An ultra-low carbon Cu bearing steel: influence of thermomechanical processing and aging heat treatment on structure and properties”, *Materials Science & Engineering A* 374(1-2), pp. 43-55, [2004].
 52. J. Kraikaew & B. Mishra, “The Effect of H₂S on the Corrosion of HSLA Line Pipe Steels”, *Proc. 1st KMITL Intl. Conf. on Integration of Sc. & Tech for Sustainable Development*, Vol 1., pp. 119-122, [2004].
 53. D. Olson, W. Finch & B. Mishra, “Uranium Resource Processing: Secondary Resources by Gupta and Singh” –Book Review, *AAPG Bulletin*, Vol 88 (8), pp. 1207-1210, [2004].
 54. B. Zhong, K.H. Kim, I-W Park, T. Dennin, B. Mishra, E. Levashov and J.J. Moore, “Nanocomposite Coating Systems Tailored for Specific Engineering Applications”, *4Nanostructured Thin Films and Nano-dispersion Strengthened Coatings*, Voevodin Ed., Kluwer AcaB. Publ., pp. 91-102, [2004].
 55. S. Carrera, J.J. Moore, J. Lin, B. Mishra and P. Reid, “Optimization of Multilayer Coating “Architecture for Aluminum Pressure Die Casting”, *Proc. 108th Metalcasting Congress*, Rosemont, IL, NADCA & AFS Publication, [2004].
 56. B. Mishra, J.J. Moore and J. Matterson, “Electrochemical Removal of Die-coatings to Facilitate Re-use of Dies”, *Proc. 108th Metalcasting Congress*, Rosemont, IL, NADCA & AFS Publication, [2004].
 57. B. Zhong, B. Mishra, J.J. Moore and A. Madan, “Effect of Pulsed Plasma Processing on Controlling Nanostructure and Properties of Thin Film/Coatings”, *Surface Engineering*, Vol. 20(3), pp. 196-204, [2004].
 58. B. Mishra, D. Olson, & P. Termsuksawad, “Sensing of Hydrogen in Advanced NiMH Battery Materials”, *Advanced Materials for Energy Conversion II*, Ed. D. Chandra et al., TMS Publication, Warrendale, PA, pp. 111-118, [2004].
 59. B. Mishra, “Separation of Reactive Metals Using Molten Salt Processes”, *Metal Separations Technologies III*, Ed. R.E. Aune & M. Kekkonen, Engineering Foundation, EDITA, Helsinki, pp. 152-163, [2004].
 60. S. Niyomsoan, P. Termsuksawad, D. Olson, B. Mishra, V.I. Kaydanov and Z. Gavra, “The relationship between the thermoelectric power and phase structure in AB₂ hydrogen storage materials”, *Materials Science & Engineering A*, Vol. 391 [1-2], pp. 264-271, [2005].
 61. B. Mishra and D. Olson, “Molten Salt Applications in Materials Processing”, *J. of Physics & Chemistry of Solids*, Vol 66(2-4), pp. 396-401 [2005].
 62. P. Termsuksawad, S. Niyomsoan, B. Mishra, D. Olson, Z. Gavra and V.I. Kaydanov, “Prediction of hydrogen absorption behavior in AB₅ hydrogen storage alloys by electronic techniques”, *Materials Science & Engineering B*, Vol. 117(1), pp. 45-51, [2005].

63. A. Ghosh, B. Mishra, S. Das and S. Chatterjee, "Structure and Properties of a low Carbon Copper Bearing High Strength Steel", *Materials Science & Engineering A*, Vol. 396(1-2), pp. 320-332, (2005).
64. A. Ghosh, B. Mishra, S. Das and S. Chatterjee, "Microstructure, Properties and Age Hardening Behavior of a Thermomechanically Processed Ultra Low Carbon Copper Bearing High Strength Steel", *Metallurgical & Materials Transactions A*, Vol. 36A, 703-713, [2005].
65. M. Ghosh, S. Kundu, S. Chatterjee and B. Mishra, "Influence of Interface Microstructure on the Strength of the Transition Joint between Ti-6Al-4V and Stainless Steel", *Metallurgical & Materials Transactions A*, Vol. 36A, pp. 1891-1899, [2005]
66. B. Mishra, "Corrosion of Heat Treating Furnace Equipment", *Metals Handbook: Vol 13C – Corrosion*, ASM International, [2005]
67. B. Mishra, "Corrosion of Plating, Anodizing, and Pickling Equipment", *Metals Handbook: Vol 13C – Corrosion*, ASM International, [2005]
68. B. Mishra and J.J. Pak, "Corrosion in the Mining and Mineral Industry", *Metals Handbook: Vol 13C – Corrosion*, ASM International, [2005]
69. A. Kunrath, B. Zhong, B. Mishra and J.J. Moore, "Surface Coatings for Protection and Wear: Future trends", Chapter 15: *Wear Handbook*, [2004].
70. Y. Park, D. Olson and B. Mishra, "Studies on Hydrogen Absorption Properties of $\text{LaNi}_{5-x}\text{Sn}_x$ and $\text{La}_{0.95}\text{Ni}_{4.6}\text{Sn}_{0.3}$ Alloys using Magnetic and Thermoelectric Power Measurements", *J. Intl. Metals and Alloys*, Vol. 211-6, pp. 423-431, (2005).
71. Y. B. Park, B. L. Olson, B. Mishra and Z. Gavra, "Characterization and Prediction of Hydrogen Storage Alloys by Using Electronic Measurements" pp. 69-75, in *Proc. 6th Intl Conf. on New Energy Systems and Conversions*, Nov. 9-13, 2003, Busan, Korea, (2003).
72. Y. B. Park, V. I. Kaydanov, B. Mishra and B. L Olson, "Analysis of Microstructure Using Thermoelectric Diagnostics for Non-destructive Evaluation of Materials", in *Proc. QNDE Conf. 2004*, American Institute of Physics, Melville, N. Y. (2004).
73. B. Zhong, K-H Kim, I-W Park, T. Dennin, B. Mishra, E. Levashov and J.J. Moore, "Engineered Tribological Coatings", *Proc. 47th Annual tech. Conf. of Vacuum Coaters*, Dallas, TX, pp. 1-8, [2004].
74. Ge Wang, Sittha Saidarasamoot, David I. Olson, B. Mishra, John S. Spencer and Swieng Thuanboon, "Tanker Corrosion", Chapter 25, in "Handbook of Environmental Degradation of Materials", William Andrew Publishing, NY, (2005).
75. B. Zhong, I-W Park, A.O. Kunrath, B. Mishra, A.A. Voevodin, E.A. Levashov and J.J. Moore, "Nanostructured Ti-B-C-N Thin Films Produced from Composite Targets using Unbalanced Magnetron Sputtering", *48th Annual Tech. Conf. Proceedings of Soc. Vac. Coaters*, ISSN 0737-5921, [2005].
76. A. Ghosh, B. Mishra and S. Chatterjee, "Development of Low carbon Microalloyed Ultra High Strength Steels", *Intl. Symp. Microalloying for New Steel Processes and Applications*, *Materials Science Forum*, Vols. 500-501, pp. 551-558, [2005].
77. B. Zhong, J.J. Moore, E. Sutter and B. Mishra, "Microstructure, Composition, and Oxidation Resistance of Nanostructured NiAl and Ni-Al-N Coatings Produced by Magnetron Sputtering", *Surface & Coatings Technology*, Vol. 200, pp. 1236-1241, [2005].
78. P. Ried, J.J. Moore, S. Carrera, J. Lin, S. Meyers, B. Mishra, and A. Kunrath, "Design Methodology for Optimized Die Coatings Used in Aluminum Pressure Die Casting", *Die casting Engineer*, Vol. September, pp. 40-55, [2005].
79. F. Sanchez, B. Mishra and D. Olson, "Magnetization Effect on Hydrogen Absorption in High-Strength Steels and its Implications", *Scripta Materialia*, Vol. 53, pp. 1443-1448, [2005].

80. J. Goldsmith, E. Sutter, J.J. Moore, B. Mishra and M. Crowder, "Microstructure of amorphous diamond-like carbon thin films and changes during wear", *Surface and Coatings Technology*, Volume 200, Issue 7, pp.2386-2390 [2005].
81. B. Mishra, "The World is Flat: The Globalization of Materials R&D – Implications for Materials Societies", www.tms.org/pubs/journals/JOM/0506/Marechaux-0506.html
82. J. Lin, A.O. Kunrath, B. Zhong, S. Myers, B. Mishra and J.J. Moore, "Development of Multi-layered and Graded Die Coatings for Materials Processing Applications", *Advances in Science & Technology*, Vol. 45, pp. 1145-1154, [2006].
83. I.-W. Park, B. Mishra, K.H. Kim, and J.J. Moore, "Multifunctional Ti-Si-B-C-N Tribological Coatings for Aerospace Applications", *Materials Science Forum*, Vol. 539-543, pp. 173-180, [2007].
84. J. Lin, J.J. Moore, B. Mishra, W.B. Sproul and J.A. Rees, "Examination of the Pulsing Phenomena in Pulsed Close-Field Unbalanced Magnetron Sputtering [P-CFUBMS] of Cr-Al-N Thin Films", *Surface & Coatings Technology*, Vol. 210, pp. 4640-4652, [2007].
85. J.M. Anton, B. Mishra and J.J. Moore, "Investigation of Processing Parameters for Pulsed Closed Field Unbalanced Magnetron Sputtered Titanium Carbide Thin Films", *Surface Engineering*, Vol. 23(1), pp. 23-27, [2007]
86. J.E. Jackson, Y.B. Park, A.N. Lasseigne, C. Sangphagdee, D. Olson, B. Mishra, and V.Kaydanov, "Characterization of Engineering Materials Utilizing Thermoelectric Power Measurements", *Materials in Clean Power Systems: Applications, Corrosion, and Protection*, Edited by Z.G. Yang, K.S. Weil, and M.P. Brady, TMS Publication, Annual Meeting, pp. 1-10 (2006)
87. A.N. Lasseigne, M. A. Imam, V. Kaydanov, B. Mishra, and B. L. Olson, "Characterization of Hydrogenization Behavior of NaAlH₄ Utilizing Thermoelectric Power and Magnetic Analyses", *Advanced Materials for Energy Conversion III*, pp. 199-206, TMS Publication, Warrendale, PA (2006)
88. A. N. Lasseigne, M. A. Imam, Y. B. Park, V. I. Kaydanov, B. Mishra, and B. L. Olson, "Characterization of Hydrogen Storage Capabilities of the Two-Phase Region of LaNi₅", *Advanced Materials for Energy Conversion III*, pp. 127-136, TMS Publication, Warrendale, PA (2006)
89. J.E. Jackson, D. Olson, B. Mishra, and A.N. Lasseigne, "Deposition of Al-Si Metallic Coating Precursors on Mo-Si-B Turbine Materials", *MPMD 7th Global Innovations Proceedings: Trends in Materials R&D for Sensor Manufacturing Technologies*, Edited I.E. Anderson, N.R. Moody, J.W. Sears, B.F. Bahr, H.L. Fraser, and J.E. Smugeresky, pp. 39-48, TMS Publication, Warrendale, PA [2006]
90. B. Mishra, "TMS Strategic Planning: A Journey and a Destination", *Journal of Materials*, Vol. 58(7), pp. 14-16, TMS Publication, Warrendale, PA, [2006]
91. K. Walsh, B. L. Olson, Loren Jacobson, Edgar Vidal and B. Mishra, "Beryllium Chemistry and Processing", ASM Publication, Materials Park, OH, (2006).
92. J. Lin, B. Mishra, J.J. Moore, and W.B. Sproul, "Microstructure, Mechanical and Tribological Properties of Cr_{1-x}Al_xN Films Deposited by Pulsed-Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS)", *Surface and Coatings Technology*, Vol. 201, pp. 4329-4334. (2006).
93. J. Lin, S. Carrera, A.O. Kunrath, B. Zhong, S. Myers, B. Mishra, P. Ried, and J.J. Moore, "Design Methodology for Optimized Die Coatings: The Case for Aluminum Pressure Die-Casting", *Surface and Coatings Technology*, Vol. 201: pp. 2930–2941, (2006).
94. A.N. Lasseigne-Jackson, B. Mishra & D. Olson, "Characterization of Hydrogen Storage Capabilities in Advanced Battery Materials", *Materials & Manufacturing Processes*, Vol. 22, pp. 433-439, (2007).

95. J.E. Jackson, A.N. Lasseigne-Jackson, D. Olson, B. Mishra, M.S. Heilig and J.K. Collins, "The Effect of Magnetic Fields on Corrosion in Pipeline Steel", Proc. 26th OMAE 2007, OMAE 2007-29560, (2007).
96. J.J. Moore, I-W. Park, J. Lin, B. Mishra and K.H. Kim, "Nanostructured, Multifunctional Tribological Coatings" – Chapter 6, in Nanocomposite Thin Films and Coatings–Processing, Properties and Performance, Ed. S. Zhang and N. Ali, pp. 329-380, Imperial College Press, UK, [2007].
97. I-W. Park, B. Mishra, K.H. Kim, and J.J. Moore, "Multifunctional Ti-Si-B-C-N Tribological Coatings for Aerospace Applications", Materials Science Forum, Vol. 539-543, pp. 173-180, [2007]
98. J.M. Anton, B. Mishra and J.J. Moore, "Investigation of Processing Parameters for Pulsed Closed Field Unbalanced Magnetron Sputtered Titanium Carbide Thin Films", Surface Engineering, Vol. 23(1), pp. 23-27, [2007]
99. J. Lin, B. Mishra, M. Pinkas, and J.J. Moore, "Pulsed Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS) Deposited TiC/a:C Thin Films", Materials Science Forum, Vols. 561-18 565, pp. 1177-1180, [2007].
100. J. Lin, J.J. Moore, B. Mishra, M. Pinkas, W.B. Sproul, and J.A. Rees, "Effect of Asynchronous Pulsing Parameters on the Structure and Properties of CrAlN Films Deposited by Pulsed Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS)", Surface and Coatings Technology, Vol. 202, pp. 1418-1436, [2007].
101. J. Lin, B. Mishra, J.J. Moore, W.B. Sproul, and J.A. Rees, "Effects of substrate to chamber wall distance on structure and properties of CrAlN coatings deposited by pulsed-closed field unbalanced magnetron sputtering (P-CFUBMS)", Surface and Coatings Technology, Vol. 201 pp. 6960-6969, [2007].
102. J. Lin, B. Mishra, J.J. Moore, W.B. Sproul, and J.A. Rees, "Examination of the pulsing phenomena in pulsed-closed field unbalanced magnetron sputtering (P-CFUBMS) of Cr-Al-N thin films", Surface and Coatings Technology, Vol. 201, pp. 4640-4652, [2007]
103. I-W. Park, J. Lin, W.C. Moerbe, J.M. Anton, B. Mishra, J.J. Moore, W.B. Sproul, K.H. Kim, A.A. Voevodin, E.A. Levashov, and G.L. Doll, "Nanostructured, Multifunctional Tribological Coatings", Int. J. Nanomanufacturing, Vol. 1(3), pp.389-429, (2007).
104. A.N. Lasseigne-Jackson, J. Anton, J.E. Jackson, D. Olson, and B. Mishra, "Development of Electromagnetic Techniques for Hydrogen Content Assessment in Coated Linepipe", Rev. QNDE 2006, pp. 1159-1164, American Institute of Physics, Melville, N. Y. (2007).
105. J.E. Jackson, D. Olson, B. Mishra, and A.N. Lasseigne-Jackson, "Deposition and Characterization of Al-Si Metallic TBC Precursor on Mo-Si-B Turbine Materials," International Journal of Hydrogen Energy, Vol. 32, pp. 3789-3796, (2007).
106. S. Kundu, S. Chatterjee, D. Olson, and B. Mishra, "Effects of Intermetallic Phases on the Bond Strength of a Diffusion-bonded Joints between Titanium and 304 Stainless Steel using Nickel Interlayer", Met. Trans. Vol, 38A, (9), pp. 2053-2060, (2007).
107. S. Kundu, S. Chatterjee, B. Mishra and David Olson, "Interface Microstructure and Strength Properties of the Diffusion Joints of Titanium-Cu Interlayer- Stainless Steel," Met. Trans. Vol, 39A, (10), pp. 2053-2060, (2008).
108. A.N. Lasseigne-Jackson, A. Zamarron, I. Ashraf, B. Mishra, and D. Olson, "Thermoelectric Power Hydrogen Sensors for Reversible Hydrogen Storage Materials", Materials Science Forum, Vols. 561-565, pp. 1633-1636, [2007].
109. J. Lin, B. Mishra, J.J. Moore, and W.B. Sproul, "Oxidation behavior study of CrNx and CrAlN Coatings by DSC and TGA Analysis", Surface and Coatings Technology, Vol. 202(14), pp. 3272-3283, (2008).
110. J. Lin, S. Myers, B. Mishra, J.J. Moore and P. Ried, "Optimization of a Graded, Multi-

- Layer Die Coating System for Use in Al Pressure Die Casting”, *Die Casting Engineer*, Vol. 50 (6), pp 30-36, [2007].
111. J. E. Jackson, B. Mishra and D. Olson, “The Future of Microstructural Characterization: An Electron Metallography Laboratory”, in CP975, *Review of Quantitative Nondestructive Evaluation*, Vol. 27, pp. 1085-1092, American Institute of Physics, ed. B.O. Thompson and B. E. Chimenti, (2008).
 112. A. L. Lasseigne-Jackson, J. M Anton and T. A. Siewert, B. L. Olson, B. Mishra and J. E. Jackson, “Development of Electromagnetic Techniques for Hydrogen Content Assessment in Coated Linepipe Steel”, CP 975, *Review of Quantitative Nondestructive Evaluation*, Vol. 27, pp. 1117-1124, American Institute of Physics, ed. B.O. Thompson and B. E. Chimenti, (2008)
 113. S. Niyomosoan, P. Termsuksawad, R. Goldfarb, B. L. Olson, B. Mishra, Hydrogenization of Intermetallic Compounds Characterized by Magnetic Susceptibility and Thermoelectric Power Measurement, in CP975, *Review of Quantitative Nondestructive Evaluation*, Vol. 27, pp. 1109-1116, American Institute of Physics, ed. B.O. Thompson and B. E. Chimenti, (2008),
 114. B. Mishra, J. E. Jackson, A.N. Lasseigne, and B. L. Olson, “Generation II Materials Science to Achieve New Methods to Design, Process and Inspect Welds and Joints Necessary for Full Utilization of Advanced Materials” Proc. ICMT 2008 Conference, pp. 1- 10, Chennai, India, February (2008).
 115. B. P. Johnson, R. K. Schulze, R. J. Hanrahan, B. L. Olson, B. Mishra, “Early Stage Actinide Oxide Development: Kinetics Expressions and Mechanisms”, *Plutonium Futures*, (2008), also LANL Report LA-UR-08-03527.
 116. J.K. Collins, D. Olson and B. Mishra, “AC Induced Corrosion of 13Cr Super Martensitic Line Pipe Steel in Sea Water”, Proc. of International Pipeline Conference 2008, Calgary, Alberta, Canada, pp 1-13, ASME (2008).
 117. H.H. Almahamedh, C. Williamson, J.R. Spear, B. Mishra and D. Olson, “Characterization of Microbiologically Influenced Corrosion of Carbon Pipeline Steels Using Advanced Analytical Techniques,” in Proc. SIIC 2008, UK (2008), pp. 55-62, Saudi International Conference, June 9-10, 2008, University of Leeds, U. K.
 118. A. N. Lasseigne, K. Koenig, D. Olson, J. E. Jackson and B. Mishra, “Real-Time Low Frequency Impedance Measurements for Determination of Hydrogen content in Pipeline Steel”, Proc. QNDE 2008, Chicago, IL. (2008).
 119. J.E. Jackson, J.A. Roubidoux, B. Mishra and D. Olson, “Assessment of Magneto-corrosion by Magnetic and Impedance Measurements”, Proc. QNDE 2008, Chicago, IL. (2008).
 120. C. A. VanHorn, B. L. Olson, and B Mishra, “Assessing Residual Stress on Machined Uranium Using Nondestructive Thermoelectric Power Coefficient and Induced Impedance Measurements”, Proc. QNDE 2008, Chicago, IL. (2008).
 121. J. Lin, B. Mishra, J.J. Moore, W.B. Sproul and J.A. Rees “The Effect of Magnetron Pulsing on the Structure and Properties of Tribological Coatings”, *J. Nanoscience and Nanotechnology*, (Nanosmat-2008), (2008).
 122. J. Lin, J.J. Moore, B. Mishra, M. Pinkas and W.B. Sproul, “Syntheses and characterization of TiC/a:C composite coatings using pulsed closed field unbalanced magnetron sputtering (P-CFUBMS)”, *Thin Solid Films*, Vol. 517, pp. 1131-1135, (2008).
 123. Jianliang Lin, John J Moore, B. Mishra, Malki Pinks, William B. Sproul, and J.A. Rees, “Effect of Asynchronous Pulsing Parameters on the Structure and Properties of CrAlN Films Deposited by Pulsed Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS)”, *Surface and Coatings Technology*, Vol. 202, pp.1418-1436, (2008).

124. J. Lin, B. Mishra, J. J Moore, M. Pinkas, W. B. Sproul, "Structure and Properties of Ti-B-C-N Nanocomposite Coatings Synthesized Using Pulsed Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS), *Surface Coatings and Technology*, Vol. 203, pp. 588-596, (2008).
125. J. Lin, B. Mishra, J.J. Moore, and W.B. Sproul, "A study of the oxidation behavior of CrN and CrAlN thin films in air using DSC and TGA analyses", *Surface and Coatings Technology*, Vol. 202, pp. 3272-3281, (2008).
126. J. Lin, Z.L. Wu, X.H. Zhang, B. Mishra, J. J Moore, W. B. Sproul, "A Comparative Study of CrNx coatings Synthesized by DC and Pulsed Magnetron Sputtering", *Thin Solid Films*, Vol. 517(6), pp. 1887-1894, (2009).
127. J.E. Jackson, B. L. Olson, B. Mishra, J. A. Roubidoux, and A. N. Lasseigne, "The Effect of High Magnetic and Electric Fields on Hydrogen Ingress and Magneto-corrosion in Pipeline Steel", IPC paper IPC2008- 64458, *Research Letters in Materials Science*, Vol. 24, pp. 5-9, (2009).
128. J. Lin, B. Mishra, J.J. Moore, W.B. Sproul, "Structure and Properties of Nanostructured Tribological Coatings", *International Journal of Refractory Metals and Hard Materials*, Vol. 28(1), pp. 2-14, (2009).
129. J. Lin, J.J. Moore, B. Mishra, M. Pinkas, W.B. Sproul, "CrN/AlN superlattice coatings synthesized by pulsed closed field unbalanced magnetron sputtering with different CrN layer thicknesses", *Thin Solid Films*, Vol. 517(20), pp. 5798-5804, (2009).
130. J.E. Jackson, D. Olson, B. Mishra, A.N. Lasseigne and A.J. Roubidoux, "Magneto-corrosion of Pipeline Steel," in *Effects of Hydrogen on Materials*, Proceedings of the 2008 Intl. Hydrogen Conference, ASM Intl., Materials Park, OH, pp. 540-547, (2009).
131. A.N. Lasseigne, J.B. McColskey, T.A. Siewert, K. Koenig, J.E. Jackson, D. Olson, B. Mishra, "Non-Destructive Determination of the Diffusion Coefficient of Hydrogen in Steel," in *Effects of Hydrogen on Materials*, Proceedings of the 2008 Intl. Hydrogen Conference, ASM Intl., Materials Park, OH. pp. 524-531, (2009).
132. A.N. Lasseigne, K. Koenig, D. Olson, J.E. Jackson, B. Mishra and J.B. McColskey, "Real-Time Low Frequency Impedance Measurements for Determination of Hydrogen Content in Pipeline Steel," AIP Conf. Proc. #1092, QNDE 2008, vol. 28B, pp. 1283-1290, AIP, Melville, NY (2009).
133. C.A. VanHorn, D. Olson, and B. Mishra, "Assessing Residual Stress on Machined Uranium Using Nondestructive Thermoelectric Power Coefficient and Induced Impedance Measurements," AIP Conf. Proc. #1092, QNDE 2008, vol. 28B, pp. 1317-1324, AIP, Melville, NY (2009).
134. J.E. Jackson, J.A. Roubidoux, B. Mishra, and D. Olson, "Assessment of Magneto-corrosion by Magnetic and Impedance Measurements," AIP Conf. Proc. #1092, QNDE 2008, vol. 28B, pp. 1371-1378, AIP, Melville, NY (2009).
135. S. M. Bhola, H. H. Obaid, J. R. Spear, B. Mishra, D. L. Olson, "Characterization of Microbiologically Influenced Corrosion Carbon Linepipe Steel by Electrochemical Techniques", *Proc. NACE 2009*, paper # 09397, [2009].
136. H.H. Obaid, S. Bhola, C. Williamson, J. Spear, B. Mishra, and D Olson, "Characterization and Mechanistic Interpretation of Microbiologically Influenced Corrosion of Oil linepipe Steels using RNA Gene Sequencing" *Proc. NACE 2009*, paper # 09396, [2009].
137. R. Bhola, S. Bhola, B. Mishra, and D.L., Olson, "Electrochemical Behavior of Titanium and Its Alloys as Dental Implants in Normal Saline", *Research letters in Physical Chemistry*, Hindawi Publishing, Vol. 2009, 4 pages, [2009].
138. J. Lin, J.J. Moore, W.B. Sproul, B. Mishra, J.A. Rees, Z. Wu, R. Chistyakov. B. Abraham, "Ion energy and mass distributions of the plasma during modulated pulse power

- magnetron sputtering”, *Surface and Coatings Technology*, Vol. 203, pp. 3676–3685, (2009).
139. Jianliang Lin, John J. Moore, William D Sproul, B. Mishra, Zhili Wu, “Modulated Pulse Power Sputtered Chromium Coatings” *Thin Solid Films*, Vol. 518, pp. 1566-1570, (2009).
 140. J. Lin, J.J. Moore, B. Mishra, M. Pinkas, W.B. Sproul, “Nano-structured CrN/AlN multilayer coatings synthesized by pulsed closed field unbalanced magnetron sputtering”, *Surface and Coatings Technology*, Vol. 204(6-7), pp 936-940, (2009).
 141. J. Lin, B. Mishra, S. Myers, J.J. Moore and P. Ried, “The Development of a Nanostructured, Graded Multilayer Cr-CrxNy-Cr1-xAlxN Coating Produced by Pulsed Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS) for Use in Aluminum Pressure Die Casting Dies”, *J. Nanoscience and Nanotechnology*, Vol. 9, pp. 3514–3523, (2009).
 142. Jianliang Lin, In-Wook Park, B. Mishra, Malki Pinkas, John J Moore, Jennifer M. Anton, Kwang Ho Kim, Andrey A. Voevodin, Evgeny and A. Levashov “Processing, Structure, and Properties of Nanostructured Multifunctional Tribological Coatings”, *J. Nanoscience and Nanotechnology*, Vol. 9, pp. 4073-4084, (2009).
 143. I-W. Park, B. Mishra, J. Lin & J.J. Moore, “Development of Multifunctional Nanocomposite Coatings using Unbalanced Magnetron Sputtering”, *Proc. Surface Modification Technologies - XXII*, EB. Sudarshan & Nylen, University West Press, Trollhatten, Sweden, pp. 52-57, [2009].
 144. J. Lin, J. J Moore, B. Mishra, M. Pinkas, W. B. Sproul, “The Structure, Mechanical and Tribological Properties of TiBCN Nanocomposite Coatings”, *Acta Materialia*, Vol. 58(5), pp. 1554-1564, (2010).
 145. J. Lin, J.J. Moore, W.C. Moerbe, M. Pinkas, B. Mishra, G.L. Doll, W.B. Sproul, “Structure and properties of selected (Cr-Al-N, TiC-C, Cr-B-N) nanostructured tribological coatings”, *Intl. J. of Refractory Metals and Hard Materials*, Vol. 28(1), pp. 2-14. (2010).
 146. B. Mishra, J. Lin, J.J. Moore & W.B. Sproul, “Advances in Thin Film Technology through the Application of Modulated Pulsed Power Sputtering”, *Materials Science Forum*, Vols. 638-642, pp. 208-213, (2010).
 147. R. Bhola, S.M. Bhola, B. Mishra & D. Olson, “Effect of povidone iodine addition on the corrosion behavior of cp-Ti in normal saline”, *J. of Materials Science: Materials in Medicine*, doi: 10.1007/s10856-010-4001-0, Vol. 21(5): pp 1413-1420 [2010].
 148. R. Bhola, S.M. Bhola, B. Mishra, L. Hongjun, “Biocompatible Denture Polymers -A review”, *Trends in Biomaterials and Artificial Organs*, Vol. 23(3), pp. 129-136, [2010].
 149. R. Bhola, S.M. Bhola, B. Mishra, D. Olson, “Electrochemical Evaluation of Wrought Titanium 15 Molybdenum Alloy for Dental Implant Applications in Phosphate Buffer Saline, *Portugaliae Electrochemica Acta* 2010; 28(2): pp. 135-142 [2010].
 150. S. Kundu, S. Chatterjee, B. Roy, B. Mishra and B. Olson, “Influence of Interface Microstructure and Residual Stress on the Mechanical Properties of Titanium/17-4 Stainless Steel Solid State Bonded Joints”, *Met. Trans E-TP-10-513A*, (2010).
 151. S.M. Bhola, R. Bhola, B. Mishra and D. Olson, “Electrochemical impedance spectroscopic characterization of the oxide film formed over low modulus Ti-35.5Nb-7.3Zr-5.7Ta alloy in phosphate buffer saline at various potentials”, *Journal of Materials Science*, Vol. 45(22), pp. 6179-6186, [2010].
 152. S.M. Bhola, R. Bhola, L. Jain, B. Mishra and D.L. Olson, “Corrosion Behavior of Mild Carbon Steel in Ethanolic Solutions”, *Journal of Materials Engineering and Performance*, Vol. 20(3), pp. 409-416, [2010].
 153. R. Bhola, S.M. Bhola, B. Mishra and D.L. Olson, “The role of fluoride ions on the corrosion of Ti36 in Normal Saline Solutions as applied to Dental Implants” *International Journal*

- of Electrochemical Science, Vol. 5, pp. 917-930, [2010].
154. R. Bhola, S. Bhola, B. Mishra and D.L., Olson, "Co-Titanium Alloys as Implants in Ringers Lactate Solution", Review of Progress in Quantitative Nondestructive Evaluation, eds. D. O. Thompson and D. E. Chimenti, AIP, Melville, New York, Vol. 29B, pp.1381-1388 [2010].
 155. L. Jain, C. Williamson, S. Bhola, R. Bhola, J. Spear, B. Mishra, D.L. Olson, and R. Kane, "Microbiological and Electrochemical Evaluation of Corrosion and Microbiologically Influenced Corrosion of Steel in Ethanol Fuel Environments", NACE Corrosion 2010, San Antonio, Texas, USA, Paper no. 10070. [2010].
 156. R. Bhola, S. Bhola, A. Tewari and B. Mishra, "Implant Corrosion & Osteo-integration". International Journal of Materials Science, Vol.5(4), pp. 523-536 [2010].
 157. R. Bhola, S.M. Bhola, B. Mishra, D.L. Olson, and Reed Ayers, "Electrochemical Behavior of Titanium and its Alloys in Ringers Lactate Solution," Rev. QNDE, Vol.29, pp. 1381-1388 [2010].
 158. R. Bhola, S.M. Bhola, B. Mishra and D.L. Olson, "Microbiologically Influenced Corrosion and Its Mitigation", Materials Science Research India, Vol. 7(2), pp. 407-412 [2010].
 159. S.M Bhola, R. Bhola, L. Jain, B. Mishra and D. L. Olson, "Electrochemical Evaluation of Corrosion of Mild Steel in Ethanolic Solutions", Rev. QNDE, Vol. 29, [2010].
 160. K. Koenig, A.N. Lasseigne, J.W. Cisler, B. Mishra, and D. Olson, "Non-Contact Non-Destructive Hydrogen and Microstructural Assessment of Steel Welds," International Journal of Pressure Vessels and Piping, Vol. 87, pp. 605-610, [2010].
 161. K. Koenig, J. W. Cisler, A. N. Lasseigne, R. H. King, B. Mishra, and D.L. Olson, "Nondestructive, Non-contact Hydrogen Content Assessment of Coated Steel Linepipe Welds", Rev. QNDE, Vol. 29A, pp. 1167-1174, (2010).
 162. P. Kiattisaksri, P. J. Gibbs, K. Koenig, A. N. Lasseigne, P. F. Mendez, B. Mishra, and B. L. Olson, "Assessment of the State of Precipitation in Aluminum Casting A 356.2 Alloy using Non-destructive Microstructure Electric Property Measurements", Rev. QNDE, Vol. 29A, pp 1285-1292 (2010).
 163. J. I. Roubidoux, J. E. Jackson, A.N, Lasseigne ,B. Mishra and B. L Olson "Non Linear Analytical Modeling of Interfacial Phenomena and Nanosize Microstructural Features to Better Correlate NDE Electronic Property Measurements to the Material State", Rev. QNDE, Vol. 29A. pp. 1277-1284, AIP. , Melville, NY, (2010).
 164. E. A. Pfief, A. N. Lasseigne, K. Krzywosz, E. V. Mader, B. Mishra and B. L. Olson, "Characterization of Hydrogen content in Zircoly-4 Nuclear Fuel cladding", Rev. QNDE, Vol. 29A, pp 1317-1324, AIP, Melville, NY, (2010).
 165. R. Bhola, S.M. Bhola, B. Mishra and D. Olson, "Microbiologically Influenced Corrosion and Its Mitigation", Materials Science Research India, Vol. 7(2), pp. 407-412, (2010).S.M. Bhola, R. Bhola, B. Mishra and D.L. Olson, "Corrosion in Titanium Dental Implants/Prostheses - Alloy to Application: A Review", Trends in Biomaterials and Artificial Organs, Vol. 25(1), pp. 34-46 [2011].
 166. S. Bhola, R. Bhola, B. Mishra and D., Olson, "Povidone-iodine as a corrosion inhibitor towards a low modulus beta Ti-45Nb implant alloy in a simulated body fluid", Journal of Materials Science: Materials in Medicine, Vol. 22, pp. 773-779, [2011].
 167. R. Bhola and B. Mishra, "Characterization of a Biomedical Titanium Alloy using Various Surface Modifications to Enhance its Corrosion Resistance and Biocompatibility", Materials Science Forum, Vols. 706-709, pp. 105-112 [2011].
 168. R. Bhola, S.M. Bhola, R. Ayers, B. Mishra, D.L. Olson, and T. Ohno, "Cellular response of titanium and its alloys as implants", Journal of Oral Implantology, Vol. 37(4), pp. 387-399, [2011].
 169. R. Bhola, S. M. Bhola, B. Mishra, R. Ayers, and D.L. Olson, "Electrochemical

- Characterization of a Low modulus Ti_{35.5}Nb_{7.3}Zr_{5.7}Ta Alloy in a simulated body fluid using EIS for biomedical applications”, Proc. 7AIP, Vol. 1335(1), pp. 1184-1191 [2011]
170. B. Mishra, P. Kiattisaksri, J. Poncelow & D. Olson, “Quantitative Non-destructive Evaluation of Steel Microstructure using Elastic Wave Perturbation”, Materials Science Forum, Vol 710, pp. 27-35, (2011).
 171. P.T. Jones, T. Van Gerven, K. Van Acker, B. Geysen, K. Binnemans, J. Franssaer, B. Blanpain, B. Mishra & D. Apelian, “CR3: Cornerstone to the Sustainable Inorganic Materials Management (SIM2) Research Program at K.U. Leuven”, J. of Metals, Vol. 63(12), pp. 14-15, [2011].
 172. Y. Wang, B. Apelian, B. Mishra and B. Blanpain, “Lithium Ion Battery Recycling: A CR3 Communication”, J. of Metals, Vol. 63(9), pp. 10-11, [2011].
 173. T. Anand, B. Mishra, B. Apelian and B. Blanpain, “TMS Partners in Progress: The Case for Recycling of Rare Earth Metals – A CR3 Communication”, J. of Metals, Vol. 63(6), pp. 8-10, [2011].
 174. “Linking Transformational Materials & Processing for an Energy-Efficient and Low-Carbon Economy - Creating the Vision and Accelerating Realization”, Innovation Impact Report-Phase III, B. Mishra, Group Team Leader & Section Editor– Functional Surface Technologies, pp. 20-37, [2011].
 175. Engineering Solutions for Sustainability: Materials & Resources – Workshop Report & recommendations” Ed. B. Mishra, ISBN: 978-1-118-17585-9, [2011].
 176. R. Bhola, S.M. Bhola, R. Ayers, B. Mishra, D. Olson, & T. Ohno, “Cellular response of titanium and its alloys as implants”, Journal of Oral Implantology 37(4) 387-399, [2011].
 177. A.B. Gavanluei, B. Mishra, and D. Olson “Effect of Temperature on the Loss of Ductility of S-135 Grade Drill Pipe Steel and Characterization of Corrosion Products in CO₂ Environments” Met. Trans. A, 43 (8) pp. 2850-2856, (2012).
 178. N. Nayak, B. Apelian, B. Mishra and B. Blanpain, “Opportunities and Barriers to Resource Recovery and Recycling from Auto Shredder Residue – A CR3 Communication”, Journal of Metals, Vol. 64 (12), pp 1373-74, [2012].
 179. B. Mishra, C.B. Anderson, P.R. Taylor, C.G. Anderson, B. Apelian and B. Blanpain, “CR3 Update: Recycling of Strategic Metals”, Journal of Metals, Vol. 64 (4), pp 441-443, [2012]
 180. P.T. Jones, B. Geysen, Y. Tielemans, Y. Pontikes, B. Blanpain, B. Mishra and B. Apelian, “Closing Materials Loops: The Enhanced Landfill Mining Concept”, J. of Metals, Vol. 64(7), pp 743-748, [2012]
 181. T.A. Chepustanova, K.K. Mamyrbayeva, V. Lukanov and B. Mishra, “Mechanism of Nonoxidizing and Oxidative Pyrrhite Leaching”, J. Minerals & Metallurgical Processing, Vol. 29(3), pp. 159-164, [2012]
 182. A.C. Seibi, P. Rostron, A. Elramady, B. Mishra, O. Al Nazer and S. Al Ameri, “Effect of Radial Expansion of Cr-Mo Steel Tubes on Their Corrosion Behavior in Sea Water”, Material Sciences & Applications, doi: 10.4236/msa.2012.39084, Vol. 3(9), pp. 587-595, [2012].
 183. S. Kundu, B. Roy, S. Chatterjee, B. Olson, B. Mishra, “Influence of Interface Microstructure on the Mechanical Properties of Titanium/ 17-4 PH Stainless Steel Solid State Diffusion Bonded Joints “, Materials and Design, Vol. 37, pp. 560-568, [2012].
 184. F. Al-Abbas, R. Bhola, J. R Spear, D. L Olson and B. Mishra. Electrochemical Characterization of Microbiologically Influenced Corrosion on Linepipe Steel Exposed to Facultative Anaerobic Desulfovibrio sp., Int Journal of Electrochemical science, Vol. 8, pp. 859-871, [2012].
 185. S.M. Bhola, R. Bhola, B. Mishra and D.L. Olson, “Effect of Water on the Corrosion Behavior of Mild Carbon Steel in E10 blend”, Journal of Materials Engineering and

- Performance, Vol. 22(1), pp. 316-321 [2013].
186. F.M. Al-Abbas, C. Williamson, S.M. Bhola, J.R. Spear, D.L. Olson, B. Mishra and A. Kakpovbia, "Influence of Sulfate Reducing Bacterial Biofilm on Corrosion Behavior of Low-Alloy, High-Strength Steel (API-5L X80)", *J. of Intl. Biodeterioration & Biodegradation*, Vol. 78, pp. 34-42, [2013].
 187. S. M. Bhola, S. Kundu, F. M. Al-Abbas, B. Mishra and D.L. Olson, "An Electrochemical Study on Chlorhexidine Gluconate Addition to Normal Saline for Oral Implant Applications", *Int. J. Electrochem. Sci.*, Vol. 8, pp. 5172 – 5182, [2013].
 188. S. M. Bhola, G. Singh and B. Mishra, "Flavin Mononucleotide as a Corrosion Inhibitor for Hot Rolled Steel in Hydrochloric Acid", *Int. J. Electrochem. Sci.*, Vol. 8, pp. 5635 –5642, [2013].
 189. F. M. Al-Abbas, S.M. Bhola, J.R. Spear, D.L. Olson and B. Mishra, "The Shielding Effect of Wild Type Iron Reducing Bacterial Flora on The Corrosion of Linepipe Steel", *Engineering Failure Analysis*, Vol. 33, pp. 222-235 [2013].
 190. S. M. Bhola and B. Mishra, "Effect of pH on the electrochemical properties of oxides formed over β – Ti-15Mo and mixed Ti-6Al-4V alloys" *Int. J. Electrochem. Sci.*, Vol. 8, pp. 7075-7087 [2013].
 191. F. M. Al-Abbas, C. Williamson, S.M. Bhola, J.R. Spear, D.L. Olson, B. Mishra and A. Kakpovbia, "Microbial Corrosion in Linepipe Steel under the influence of Sulfate reducing bacterial consortium isolated from an oil field", *J. of Materials Engineering and Performance*, Vol 22(11), pp.3517-3529 [2013].
 192. B. Mishra, NR Gubel, R. Bhola, Chapter-5, "Uranium Processing, Uranium Processing & Properties", Edited by Morrell JS, Jackson MJ, pp. 123-172, [2013].
 193. S. Kundu, D. Roy, R. Bhola, D. Bhattacharjee, B. Mishra, B. Chatterjee, "Microstructure and tensile strength of friction stir welded joints between interstitial free steel and commercially pure aluminum" *Materials and Design*, Vol. 50, pp. 370-375 [2013].
 194. R. Bhola, C. Chandra, F. M. Al-abbas, S. Kundu, B. Mishra, D. L. Olson, "Corrosion Response of Ti6Al4V and Ti15Mo Dental Implant Alloys in the Presence of Listerine Oral Rinse" *International Journal of Corrosion*, Vol. 2013, 7 pages [2013].
 195. S.M. Bhola, F.M. Al-Abbas, R. Bhola, J.R. Spear, B. Mishra, D.L. Olson and A.E. Kakpovbia, "Neem extract as an inhibitor for bio-corrosion influenced by sulfate reducing bacteria: A preliminary investigation", *Engineering Failure Analysis*, Vol. 36, pp. 92-103, [2014].
 196. S. M. Bhola, S. Kundu, B. Mishra and S. Chatterjee, "Structure and properties of solid state diffusion bonding of 17-4PH stainless steel and titanium", *Materials Science and Technology*, Vol. 30(2), pp. 248-256 [2014].
 197. S. M. Bhola, S. Kundu, R. Bhola, B. Mishra, S. Chatterjee, "Electrochemical Study of Diffusion Bonded Joints between Micro-duplex Stainless Steel and Ti6Al4V Alloy, *J. of Materials Science & Technology*, Vol. 30(2), pp. 163-171 [2014].
 198. F.M. Al Abbas, J.R. Spear, A. Kakpovbia, N.M. Balhareth, D. Olson and B. Mishra, "Bacterial attachment to metal substrate and its effects on microbiologically-influenced corrosion in transporting hydrocarbon pipelines", *Journal of Pipeline Engineering*, pp. 72-93, Vol 11 (3), [2012].
 199. V.S. Blackwood, T.W. Koenig, J.M. Porter, D. Olson, B. Mishra, R.B. Mariani, D. Porter, "Elemental Solubility Tendency for the Phases of Uranium by Classical Models used to Predict Alloy Behavior", *Proc. Energy Technology 2012: Carbon Dioxide Management and Other Technologies*, DOI: 10.1002/9781118365038, pp. 357-370, [2012].
 200. G. Wang, S. Saidarasamoot, B. L. Olson, B. Mishra, J.S. Spencer, and S. Thuanboon, "Tanker Corrosion", in *Handbook of Environmental Degradation of Materials*, 2nd Edition,

- pp. 799-832, Elsevier, London (2012).
201. B. Mishra, J.E. Jackson, A.N. Lasseigne and D. Olson, "Materials Science and Engineering for the next Generation", *Advances in Manufacturing Technology*, Ed. B. Raj, et al., Universities Press, ISBN. 978 81 7371 755 0, pp. 415-426, [2012]
 202. N. Gubel, B. Olson, B. Mishra, J. Jackson, A. Lasseigne, J. Morrell, and K. Johnson, "Nuclear Materials Compatibility Data Mining, Assessment, Storage, and Identification of Research Needs," Sept. 13-15, 2011, ISBN 978-0-9858137-0-3, PP 1-191, Y-12 National Security Complex, Oak Ridge, TN, (2012).
 203. T. Gopinath, S. Kundu, B. Mishra and S. Chatterjee, 'Effect of bonding temperature on interfacial reaction and mechanical properties of diffusion bonded joint between Ti-6Al-4V and 304 stainless steel using nickel as an intermediate material', *Metallurgical and Materials Transactions A*, DOI: 10.1007/s11661-013-1940-3, (2013).
 204. S Kundu, B Mishra, D Olson, S Chatterjee, 'Interfacial reactions and strength properties of diffusion bonded joints of Ti64 alloy and 17-4PH stainless steel using nickel alloy interlayer', *Materials & Design*, Vol. (5), pp. 714-722, (2013).
 205. K. Hammond, B. Mishra, B. Apelian and B. Blanpain, 'CR3 Communication: Red Mud: A Resource or Waste?', *JOM*, Vol 65(3), pp. 34-342, (2013).
 206. K. Binnemans, P.T. Jones, K. Van Acker, B. Blanpain, B. Mishra and B. Apelian, 'Rare-Earth Economics: The Balance Problem', *JOM*, Vol 65(7), 846-848, (2013).
 207. J.W. Darcy, H.M.B. Bandara, B. Mishra, B. Blanpain, B. Apelian and M.H. Emmert, 'Challenges in Recycling End-of-Life Rare Earth Magnets', *JOM*, Vol 65(11), pp. 1381-1383, (2013).
 208. L.A. Jain, C. Williamson, J.R. Spear, D. Olson, B. Mishra and R.B. Kane "Microbiologically Influenced Corrosion of Linepipe Steels in Ethanol and Acetic Acid Solutions', *Proc. NACE Annual Conf.*, Paper # 2250, pp. 1-24, [2013]
 209. A. Bajvani, B. Mishra and D. Olson, 'Corrosion Rate Measurement of a Downhole Tubular Steel at Different CO₂ Partial Pressures and Temperatures and Calculation of the Activation Energy of the Corrosion Process', *Proc. NACE Annual Conf.*, Paper # 2298, pp.1-13, [2013]
 210. A. Bajvani, B. Mishra and D. Olson, 'Stress Corrosion Cracking Evolution of Low Alloy Downhole Tubular Steel in CO₂ Containing Environment at 175 °C', *Proc. NACE Annual Conf.*, Paper # 2418, pp. 1-14, [2013]
 211. R.S. Akpanbayev, B. Mishra, A.O. Baikonurova, G.A. Ussoltseva and A.P. Kurbatov, 'Features of The Electrolytic Copper Powder Deposition in the Presence of Polyols', *Int. J. Electrochem. Sci.*, 8, pp. 340-349, (2013).
 212. F.M. Al Abbas, J.R. Spear, A. Kakpovbia, N. M. Balhareth, D. Olson and B. Mishra, "Bacterial attachment to metal substrate and its effects on microbiologically-influenced corrosion in transporting hydrocarbon pipelines', *Journal of Pipeline Engineering*, Vol 11(1), pp. 63-72, (2013).
 213. F.M. Al Abbas, A. Kakpovbia, D. Olson, B. Mishra and J.R. Spear, 'The Role of Bacterial Attachment to Metal Substrate and Its Effects on Microbiologically Influenced Corrosion (MIC) in Transporting Hydrocarbon Pipelines', *Biomaterials Science: Processing, Properties and Applications II: Ceramic Transactions*, Vol. 237 (eds. R. Narayan, S. Bose and A. Bandyopadhyay), doi: 10.1002/9781118511466.ch14.
 214. F. M. Al Abbas, C. Williamson, S.M. Bhola, J.R. Spear, D. Olson, B. Mishra and A. Kakpovbia, 'Microbial Corrosion in Linepipe Steel under the influence of Sulfate reducing bacterial consortium isolated from an oil field', *J. of Materials Engineering and Performance*, Vol 22(7), DOI :10.1007/s11665-013-0627-7, (2013).
 215. F.M. AlAbbas, C. Williamson, J.R. Spear, A. Kakpovbia, B.Olson and B. Mishra,

- "Characterization of Microbial Communities Associated With Crude Oil Pipelines Corrosion Products," Environmental Science and Technology, Vol 2, (eds. George Sorial and Jihua Hong), pp. 229-235, ISBN: 9780976885344, (2013).
216. Faisal M. AlAbbas, John R. Spear, Anthony Kakpovbia, David L Olson, and B. Mishra, "Iron Reducing Bacteria Influence on the Corrosion of API 5LX52 Linepipe Steel Environmental Science and Technology, Vol 2, (eds. George Sorial and Jihua Hong), pp. 235-142, ISBN: 9780976885344, (2013).
 217. M.S. Markametova, B. Mishra, A.O. Baikonurova, S.B. Nurzhanova and Y.V. Ermolaev, 'Study of the formation of the layered structure of vanadium xerogel', J. of Nanomaterials, Vol. 2014, Article ID: 507129, [2014].
 218. B. Mishra and G. Mustoe, "Temperatures Reached in Asbestos-containing Refractory Materials During Ingot Casting of Steels", Intl. J. of Engrng. Res. & Industrial Appls., Vol. 7(3), pp. 35-50, (2014).
 219. B.R. Palmer, B. Abdeen, W. Khalfaoui, N. Al-Jassem, B. Mishra, E. Lee and D. Olson, "Successes in the Development of an Arabian Gulf Materials Program", Recent Developments in Materials Science & Corrosion Engineering Education, IGI Global Publication, [2014].
 220. S. Bhola, S. Kundu, B. Mishra and S. Chatterjee, "Electrochemical Study of Diffusion Bonded Joints between Microduplex Stainless Steel and Ti6Al4V Alloys", Materials Science Forum, Vol. 783-786, pp. 2250-2259, [2014].
 221. D. Apelian, H. Yu, B. Mishra and B. Blanpain, "An Integrated Mini-mill to Produce Aluminum from Scrap", JOM, Vol. 66(3), pp. 357-358, [2014].
 222. T. Seutens, K. Van Acker, B. Blanpain, B. Mishra and B. Apelian, "Moving Towards Better Recycling Options for Electric Arc Furnace Dust", JOM, Vol. 66(7), pp. 786-788, [2014].
 223. F.M. Al-Abbas, A.E. Kakpovbia, J.R. Spear, B. Mishra, and D.L. Olson, "Utilization of 454 Pyrosequencing of 16S rRNA for Biodiversity Investigations of Crude Oil Systems." Paper No. 3827, CORROSION 2014, pp. 1-17, (2014).
 224. Al-Abbas, Faisal M., Anthony E. Kakpovbia, John R. Spear, B. Mishra, and David L. Olson. "Magnetic Fields Effects on Microbiologically Influenced Corrosion." Paper No. 3817, CORROSION 2014, pp. 1-19, (2014).
 225. A. U. Chaudhry, R. Bhola, V. Mittal and B. Mishra, "Ni_{0.5}Zn_{0.5}Fe₂O₄ as a potential corrosion inhibitor for API 5L X80 Steel in acidic environments", Int. Journal of Electrochemical Science, Vol. 9(2), pp. 4478-4492 [2014]
 226. F.M. Al-Abbas and B. Mishra. "Microbiologically Influenced Corrosion of Pipelines in the Oil & Gas Industry." In PRICM: 8 Pacific Rim International Congress on Advanced Materials and Processing, pp. 3441-3448. (2014).
 227. B. Mishra, "Investigation of Iron Recovery from Bauxite Residue", Journal of Metals, Vol. 8(112), pp. 23-29, [2014].
 228. B. Apelian and B. Mishra, "Energy Efficient Materials Manufacturing from Secondary Resources", Proc. Energy Materials 2014, Chinese Society for Metals (CSM) and The Minerals, Metals & Materials Society (TMS), pp. 71-79 [2014]
 229. B. Mishra and B. Apelian, "Corrosion of Advanced Steels: Challenges in the Oil & Gas Industry", Proc. Energy Materials 2014, Chinese Society for Metals (CSM) and The Minerals, Metals & Materials Society (TMS), pp. 13-22 [2014]
 230. R. Bhola, S. Kundu, F.M. Al-Abbas, C. Chandra, B. Mishra and D.L. Olson, "Corrosion Response of Ti6Al4V and Ti15Mo Dental Implant Alloys in the Presence of Listerine Oral Rinse", Vol. (2013), International Journal of Corrosion Article ID 739841, (2014).
 231. S. Kundu, S. Sam, B. Mishra and S. Chatterjee, "Diffusion Bonding of Microduplex stainless steel and Ti alloy with and without interlayer: Interface microstructure and

- strength properties", Metallurgical and Materials Transactions A, Vol. 45(1), pp. 371-383, (2014).
232. S. Chatterjee, S. Kundu, S. Sam and B. Mishra. Diffusion Bonding of Duplex stainless steel and Ti alloy with and without interlayer, Materials Science and Forum, Vol. 783, pp. 9-14, (2014).
 233. G Thirunavukarasu, S Kundu, B Mishra, S Chatterjee, Effect of Bonding Temperature on Interfacial Reaction and Mechanical Properties of Diffusion-Bonded Joint Between Ti-6Al-4V and 304 Stainless Steel Using Nickel as an Intermediate Material, Metallurgical and Materials Transactions A 2014, 45 (4), 2067-2077.
 234. G Thirunavukarasu, S Kundu, B Mishra, S Chatterjee, Effect of Bonding Time on Interfacial Reaction and Mechanical Properties of Diffusion-Bonded Joint Between Ti-6Al-4V and 304 Stainless Steel Using Nickel as an Intermediate Material, Metallurgical and Materials Transactions A, 2014, 45 (4), 2078-2089.
 235. C.H.B. Williamson, L.A. Jain, B. Mishra, D. Olson and J.R. Spear, "Microbiologically Influenced Corrosion Communities Associated with Fuel-grade Ethanol Environments", Applied Microbiology and Biotechnology, Vol. 99(16), pp. 6945-6957, (2015).
 236. F.M. Al-Abbas, F.A. Al-Hindas, D.L. Olson and B. Mishra, "The State of the Atomic Lattice of Structure Materials: Pre-NDE Indication Assessments", Manufacturing Science and Technology, Vol. 3(5), pp. 229-235, (2015).
 237. B. Mishra, "Investigation of Commercial Products Conversion from Bauxite Residue", Proc. Intl. Conf. of Low-Grade Ores & Urban Mining, Natl. Met. Lab. Jamshedpur, India, (2015).
 238. A. Elramady, B. Mishra, D. Olson, A. Seibi and A.H. Alshawaf, "Susceptibility of Cold-worked Medium Carbon Steel to Stress Corrosion Cracking in Synthetic Formation Water and CO₂ Environment Using the Slow Strain Rate Method", NACE 2015-5785, pp. 1-15, (2015).
 239. B. Mishra, "Global Sustainability of Critical Materials", Proc. Intl. Conf. of Low-Grade Ores & Urban Mining, Natl. Met. Lab. Jamshedpur, India, (2015).
 240. L.A. Jain, C. Williamson, J.R. Spear, B. Mishra, D. Olson & R.B. Kane, "Mechanistic MIC Evaluation of Linepipe in Ethanol and Acetic Acid Solutions, NACE 2015-5708, pp. 1-15, (2015).
 241. B. Mishra & A. Anderson, "Extraction & Recovery of Rare-Earth Metals: Challenges in Processing", Proc. ERES 2014, Milos, Greece, European Community's Seventh Framework Program, pp. 19-26, (2014).
 242. O.S. Baigenzhenov, V.A. Kozlov, V.A. Luganov, B. Mishra and R.A. Shayametova, 'Complex Processing of Wastes generated in Chrysotile Asbestos Production', J. Min. Proc. & Ext. Metallurgy, Vol. 36(4), pp. [2015].
 243. T. A. Chepustanova, V.A. Luganov, B. Mishra, V.N. Ermolayev and G.B. Gyseinova, 'Investigation of the Magnetic and Flotation Properties of Synthesized Hexagonal Pyrrhotites', J. Min. Proc. & Ext. Metallurgy, Vol. 36(4), pp. [2015].
 244. B. Mishra and E.U. Lee, "Corrosion Characterization of Advanced High Interstitial Stainless Steels", Proc. Advanced Materials and Reservoir Engineering for Extreme Oil & Gas Environments II, TMS Publication, (2015).
 245. A.U. Chaudhry, V. Mittal and B. Mishra, "Nano nickel ferrite (NiFe₂O₄) as anti-corrosion pigment for API 5L X-80 steel: An Electrochemical study in acidic and saline media", J. Dyes & Pigments, DYPI-D-14-00922R1, [2015].
 246. A.U. Chaudhry, V. Mittal and B. Mishra, "Effect of graphene oxide nanoplatelets on electrochemical properties of steel substrate in saline media", J. Materials Chemistry & Physics, Vol. 163, pp. 130-137, (2015).
 247. F. M. Al-Abbas, B. Mishra and B. L. Olson, "Characterizations and Measurements on

- Biogenic sludge produced by Field SRB”, NACE 2015-5489, pp. 1-13, (2015).
248. Anderson & B. Mishra, “Investigation of the Carbochlorination Process for Conversion of Cerium and Neodymium Oxides into Their Chlorides”, *J. Sustain. Metall.*, DOI 10.1007/s40831-015-0023-7, Vol. 1(3), pp. 189-198, [2015].
 249. D. Marinos and B. Mishra, “An Approach to Processing of Lithium-Ion Batteries for the Zero-Waste Recovery of Materials”, DOI 10.1007/s40831-015-0024-6, *J. Sustain. Metall.*, Vol. 1(4), pp. [2015].
 250. P. Eduafo, M. Strauss and B. Mishra, “Experimental Investigation of Recycling Rare Earth Metals from Waste, Fluorescent Lamp Phosphors”, *Proc. 2015 TMS Annual Meeting*, [2015].
 251. B. Mishra, “Global Sustainability of Rare Earth Metals and Compounds”, *Proc. 2015 TMS Annual Meeting*, [2015].
 252. A.U. Chaudhry, V. Mittal, & B. Mishra, “Inhibition and promotion of electrochemical reactions by graphene in organic coatings”, DOI: 10.1039/x0xx00000x, *J. Royal Chemistry Society*, Issue 98, [2015].
 253. M. Jung and B. Mishra, “Investigation of Leaching Kinetics in Aluminum Recovery from the Aluminum Smelter Baghouse Dust”, *J. Sustain. Metall.*, Vol. 2(1), pp. 37-43, ISSN: 2199-3823, [2016].
 254. G.Z. Moldabayeva, S.K. Akilbekova, K.K. Mamyrbayeva and B. Mishra, “Electrosmelting of Lead-containing Dusts from Copper Smelters”, *J. Sustain. Metall.*, Vol. 1(4), pp. [2015].
 255. A. Makhanbetov, A. Zharmenov, A. Bayeshov, B. Mishra and O. Baigenzhenov, “Production of Electrolytic Manganese from Sulfate Solutions”, *Russian J. of Non-ferrous Metals*, Vol. 56(6), pp. 606-610, [2015].
 256. AU Chaudhry, V Mittal, B Mishra, “Impedance response of nanocomposite coatings comprising of polyvinyl butyral and Haydale’s plasma processed graphene”, *Progress in Organic Coatings*, 110, 97-103 [2017].
 257. B Mishra, A Chaudhry, V Mittal, “Development of Polymer-Based Composite Coatings for the Gas Exploration Industry: Polyoxometalate Doped Conducting Polymer Based Self-Healing Pigment for Polymer Coatings”, *Materials Science Forum*, Vol. 879, pp. 60-65 [2017].
 258. V.A. Luganov, B. Mishra, S.B. Baimakhanova, “Chemical Enrichment of Nickel Sulfide”, *Intl. J. of Non-ferrous Metallurgy*, Vol. 5(1), pp. 1-8, [2015].
 259. B. Mishra, “The Role of Critical Materials Recycling in Energy Sustainability”, *Proc. of the Sustainable Industrial Processing Summit*, Antalya, Turkey, (2015).
 260. B. Mishra and S. Gostu, “Opportunities for High Volume Commercial Products Conversion from Bauxite Residue”, *Proc. of Bauxite Residue Valorization 2015*, (2015).
 261. S. Kundu, T. Gopinath, S. Chatterjee and B. Mishra, “Effect of bonding temperature on phase transformation of diffusion bonded joints of duplex stainless steel and Ti-6Al-4V using nickel and copper as composite intermediate-metals”, *Met. Trans. A.*, Vol. 46(12), pp. 5756-5771, (2015).
 262. B. Palmer, B. Abdeen, W. Khalfaoui, N. Al-Jassem, B. Mishra, E. Lee and D. Olson, “Successes in the Development of an Arabian Gulf Materials Program” EB. Lim, H. L. (2015). *Handbook of Research on Recent Developments in Materials Science and Corrosion Engineering Education* (pp. 1-493). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8183-5.
 263. J.-B. Caprace, B. Mishra, F. Pires, F. Roland and I. Schipperren, “Materials and Fabrication Technology”, *Comm. V.3 Report*, ISSC 2015, CRC Press, pp. 618-668, [2015].
 264. E. Lee, J. Ryu, S. Jeon, B. Mishra and B.R. Palmer, “Mechanical and Corrosion Properties of Fe-Cr-Mn-C-N Austenitic Stainless Steels for drill Collars”, *Metall. & Materials*

- Transactions A, Vol. 47(6), pp. 2550-2554, [2016].
265. A.U. Chaudhry, V. Mittal and B. Mishra, "Evaluation of Iron Nickel Oxide Nanopowder as Corrosion Inhibitor: Effect of Metallic Cations on Carbon Steel in Aqueous Sodium Chloride", *Corrosion Science & Technology*, Vol. 15(1), pp. 13-17, [2016].
 266. D. Marinos and B. Mishra, "Processing of Lithium-Ion Batteries for Zero-Waste Materials Recovery" in *Sustainability in the Mineral and Energy Sectors*, Edited by Devasahayam, Dowling and Mahapatra, CRC Press, Boca Raton, FL, pp. 127-156, September 2016 [eBook ISBN: 978-1-4987-3306-9].
 267. E. Lee, B. Mishra and B. Palmer, "Effect of Heat Treatment on Wear Resistance of Fe-Cr-Mn-C-N High Interstitial Stainless Steel", *Wear*, Vol. 368-369, pp. 70-74, [2016].
 268. B. Mishra and E. Lee, "Development and Characterization of High Strength Austenitic Stainless Steel for Sour Environment", *Proc. ASME*. 49958; Volume 4: Materials Technology, OMAE2016-55084, doi: 10.1115/OMAE2016-55084, [2016].
 269. E. Lee, W. Khalfaoui, B. Mishra and B. Palmer, "Fe-Cr-Mn-C-N steels for Down-Hole Application in Sour Environments: Statistical Analysis of Mechanical Properties", *J. of Testing and Evaluation*, Vol 45(5), pp. 1879-1885, [2017].
 270. A.B. Baeshov, B.E. Myrzabekov, A.B. Makhanbetov, B. Mishra, O.S. Baigenzhenov, "Electrochemical method of producing valuable sulfur compounds from its waste", *Intl. Journal of Non-ferrous Metallurgy*, Vol. 6(2), pp. 17-26, [2017].
 271. A.B. Baeshov, B.E. Myrzabekov, A.B. Makhanbetov, B. Mishra and, O.S. Baigenzhenov, "Dissolution of Platinum in Hydrochloric Acid under Industrial-Scale Alternating Current Polarization", *Met. Trans. B*, pp. 1-6, [2017].
 272. A.U. Chaudhry, V. Mittal, M.I. Hasmi and B. Mishra, "Evaluation of Ni_{0.5}Zn_{0.5}Fe₂O₄ nanoparticles as anti-corrosion pigment in organic coatings for carbon steel", *J. of Anti-Corrosion Methods and Materials*, Vol. 64(6), pp. 644-653, [2017].
 273. B. Mishra and M. Jung, "Mineral Processing and Extractive Metallurgy Methods for Recycling Applications", *Mineral Processing & Extractive Metallurgy Handbook*, Soc. of Mining & Exploration Engineers, in publication, CRC Press, [2017]
 274. S. Gostu and B. Mishra, "Materials Sustainability for Environment: red-mud Treatment", *J. of Frontiers in Chemical Science & Engineering*, Vol. 11(3), pp. 291-292, [2017].
 275. E. Lee and B. Mishra, "Statistical analyses: Effect of cooling rate on the mechanical properties of AA365 in T4, T5, and T6", *Intl. Journal of Metal Castings*, Vol. 12(3), pp. 449-456, [2017].
 276. E. Lee and B. Mishra, "Effect of Solidification Cooling Rate on Mechanical Properties and Microstructure of Al-Si-Mn-Mg Alloy", *Matls. Transactions*, Vol. 58(11), pp. 1624-1627, [2017].
 277. M Jung and B Mishra, "Kinetic and Thermodynamic Study of Aluminum Recovery from the Aluminum Smelter Baghouse Dust", *Journal of Sustainable Metallurgy*, 2 (3), pp. 257-264 [2016].
 278. M. Jung and B. Mishra, "Characterization of fly ash from a power plant and vanadium recovery by a roast-leach process" *J. of Sustainable metallurgy*, *submitted for publication*, March 2017.
 279. S. Gostu, B. Mishra and G.P. Martins, "Low Temperature Reduction of Hematite in Red-Mud to Magnetite", *LIGHT METALS 2017*, Ed. A.P. Ratvik, DOI 10.1007/978-3-319-51541-0_10, TMS Publication, pp. 67-72, [2017]
 280. M.L. Strauss, B. Mishra and G.P. Martins, "Selective Reduction and Separation of Europium from Mixed Rare-Earth Oxides from Waste Fluorescent Lamp Phosphors", *RARE METALS 2017*, Ed. H. Kim, et.al., DOI 10.1007/978-3-319-51085-9, TMS Publication, pp. 31-36, (2017)

281. M. Jung and B. Mishra, "Vanadium Recovery from Oil Fly Ash by Carbon Removal and Roast-Leach Process", JOM, Vol. 70(2), pp. 168-172, (2018).
282. S. Kundu, A. Chakraborty and B. Mishra, "Interfacial reaction and microstructure study of DSS/Cu/Ti64 diffusion welded couple", Welding in the World, Vol. 62(1), pp. 152-167, (2018).
283. J. Kraikaew and B. Mishra, "Investigation of Copper Anode Treatment", Intl. Scientific Journal of Engineering and Technology, Vol. 1(2), pp. 1-12, [2017].
284. H. Lee and B. Mishra, "Selective Recovery and Separation of Copper and Iron from Fine Materials of Electronic Waste Processing", Minerals Engineering, Vol. 123, pp.1-7, [2018]
285. H. Lee, E. Molstad and B. Mishra, "Recovery of Gold and Silver from Secondary Sources of Electronic Waste Processing by Thiourea Leaching", JOM, Vol. 70(8), pp. 1616-1621, [2018].
286. E. Lee, C. Walde and B. Mishra, "Effects of Cooling Rate on Precipitate Evolution and Residual Stresses in Al-Si-Mn-Mg Casting Alloy, Metals and Materials International, pp. 1-8, [2018], <https://link.springer.com/article/10.1007%2Fs12540-018-0094-7>
287. B. Mishra and M. Jung, "Recovery and Recycling of Valuable Metals from Fine Industrial Waste Materials", Intl. Journal of the Society of Materials Engr. for Resources, Special Issue, Vol. 23(1), pp. 105-108, [2018]
288. S. Gostu and B. Mishra, "An Economically Viable Process to Recover High-Value Products from Red Mud", Chem. Engineering Progress (AIChE), p. 12, February 2018.
289. B. Surimbayev, L. Bolotova, B. Mishra and A. Baikonurova, "Intensive Cyanidation of Gold from Gravity Concentrates in a Drum-type Apparatus", UDC 669.213.6, Almaty, Kazakhstan, pp. 1-8, June 2018.
290. I. Y. Motovilov, V. A. Luganov, B. Mishra and T. A. Chepushtanova, "Oxide Powders Production from Iron Chloride", UDC 621.1:669.07.01 DOI: <http://dx.doi.org/10.17580/cisisr.2018.01.06>, CIS Iron and Steel Review, Vol. 15, pp. 28-32, [2018]
291. L. Josefson, B. Mishra, et al., Materials and Fabrication Technology – V.3", Proceedings of the 20th Intl. Ship and Offshore Structures Congress, Vol. (2), Kaminski and Rigo (Eds.), doi:10.3233/978-1-61499-864-8-143, July, [2018].
292. M. Jung and B. Mishra, "Recovery of gibbsite from secondary aluminum production dust by a two-step process", Minerals Engineering, Vol. 127, pp. 122-124, [2018].
293. M. Jung and B. Mishra, "Recovery of Aluminum from the Aluminum Smelter Baghouse Dust", Proc. REWAS 2016, Springer (TMS), Editors: Kirchain et al., pp. 255-260 [2016].
294. S. Gostu, B. Mishra, "Pyrometallurgical and Hydrometallurgical methods to extract Hematite in Red-mud as Magnetite", Proc. Bauxite Residue Valorization and Best Practices Conference, Athens (2018).
295. S. Kundu, G. Thirunavukarasu, and B. Mishra, "High strength diffusion welded joints 17-4 stainless steel and Ti64 alloy with nickel and copper bilayers", *communicated to Metallurgical and Materials Transition A*, (2017).
296. S. Kundu, G. Thirunavukarasu, and B. Mishra, "Effect of bonding time on Interfacial reaction of diffusion bonded joints of stainless steel and Ti64 alloy with nickel and copper composite interlayers", *communicated to WELDING JOURNAL*, (2017).
297. E. Lee, W. Khalfaoui, B. Mishra, "Materials development for life extension in severe corrosion environments experienced in the oil & gas industry", accepted for publication in NACE Handbook on Corrosion Management for a Sustainable Future, [2018].
298. B. Mishra and H.J. Lee, Flue Dust Recovery Research at CR3: Advances E-Waste Disposal Solutions, Recycling Today, <http://www.recyclingtoday.com/article/worcester-polytechnic-cr3-escrap-recycling-metals-research/> [2018]

299. H. Lee and B. Mishra, "Recovery of Copper from Flue Dust Generated in e-Waste Processing Using Physicochemical Methods", *Journal of Sustainable Metallurgy*, Vol. 4 (2), pp 260-264, [2018].
300. P. M. Eduafo and B. Mishra, "Leaching Kinetics of Yttrium and Europium Oxides from Waste Phosphor Powder", *Journal of Sustainable Metallurgy*, Vol. 4, pp. 437-442, [2018]. <https://doi.org/10.1007/s40831-018-0189-x>
301. Lee, E., Ahn, C., Lee, H., Lee, Y., Cho, S. and Mishra, B., "Development of High Interstitial Interstitial Stainless Steel and Evaluation of Its NaCl Corrosion Resistance", *Met. Mater. Int.*, pp. 1-5, <https://doi.org/10.1007/s12540-019-00505-x>, [2020].
302. H. Lee, M. Bae, E. Lee and B. Mishra, "Copper Extraction from Flue Dust of Electronic Waste by Electrowinning and Ion Exchange Process", *Journal of Metals*, Vol. 71(7), pp. 2360-2367, [2019].
303. H. Lee and B. Mishra, "Recovery of Copper and Precious Metals and Separation of Lead from Flue Dust of Electronic Waste Processing", *Mineral Processing and Extractive Metallurgy Review*, DOI: [10.1080/08827508.2019.1575827](https://doi.org/10.1080/08827508.2019.1575827), Vol. 41(3), pp. 153-161, [2020].
304. C.W. Reese, A. Gladstein, J.M. Fedors, V. De Andrade, B. Mishra, A.J. Shahani and A.I. Taub, "In Situ Al-TiC Composites Fabricated by Self-Propagating High-Temperature Reaction: Insights on Reaction Pathways and their Microstructural Signatures", *Metallurgical & Materials Transactions A*, Vol. 51, pp. 3587-3600, [2020].
305. P. Eduafo, M. Strauss and B. Mishra, "GMPR-2019-0175 - Process for Extraction of Rare Earth Metals from Waste Fluorescent Lamp Powder", *J. Mineral Proc. & Extractive Met. Review*, *accepted for publication*, [2021].
306. A. Esayah, M. Kelley, A. Howell, S. Shulder, B. Mishra, D. Olson and J. Porter, "Flow Accelerated Corrosion of Carbon Steels with Droplet Impingement Using a Modified Rotating Cylinder Electrode Experiment", *Corrosion Journal*, Vol. 76(2), pp. 206-209, [2020].
307. A. Esayah, A. Howell, S. Shulder, B. Mishra and D.L. Olson, "Experimental Setup and Testing for Corrosion in Air-Cooled Condensers Treated with Ammonium Hydroxide", *Corrosion J.*, *submitted for publication*, [2023]
308. K. Sundberg, Y. Wang, B. Mishra, A. Carl, R. Grimm, A. Te, L. Lozeau, R. Sisson and D. Cote "The Effect of Corrosion on Conventional and Nanomaterial Copper Cold Spray Surfaces for Antimicrobial Applications", *Biomedical J. of Scientific & Technical Research*, DoI: [10.26717/BJSTR.2019.22.003768](https://doi.org/10.26717/BJSTR.2019.22.003768), pp. 16753-763, [2019].
309. H. Jin and B. Mishra, "Minimization of Copper Contamination in Steel Scrap", *Energy Technology 2020: Recycling, Carbon Dioxide Management, and Other Technologies*, Ed. X. Chen et.al., TMS Proceedings, https://doi.org/10.1007/978-3-030-36830-2_34, [2020].
310. H. Lee, M. Jung, M. Bae, S. Kim, H. Jin and B. Mishra, "Recovery of Iron from Ferrous Grinding Swarf of Automobile Industry by Aqueous Washing Process", *Waste Management*, Vol. 111, pp. 51-57, [2020].
311. E. Lee, C. Ahn, I. Jo, C. Ji, S. Choo and B. Mishra, "Creep behavior of high-pressure die-cast AlSi10MnMg aluminum alloy", *J. Materials Characterization*, pp. 1-20, <https://doi.org/10.1016/j.matchar.2020.110495>, [2020]
312. F. Alabdallah, A.U. Chaudhary and B. Mishra, "Evaluation of Corrosion Resistance Properties of Hexagonal Boron Nitride based Polymer Composite Coatings for Carbon Steel in a Saline Environment", *Corrosion Engr. Science & Technology*, *submitted for publication*, [2022]
313. O. Baigenzhenov, A. Khabiyev, B. Mishra, M.D. Turan, M. Akbarov and T. Chepushtanova, "Uranium (VI) Recovery from Black Shale Leaching Solutions Using Ion Exchange: Kinetics

- and Equilibrium Studies”, *J. Minerals*, Vol. 10, pp. 689-699, [2020]
314. H. Lee, C. Ahn, W. Khalfaoui, B. Mishra, I. Jo and E. Lee, “Effects of Iron Oxidation State and Chromium Distribution on the Corrosion Resistance of High Interstitial Stainless Steel for Down-Hole Application”, *Metals* 2020, 10, 1302; doi:10.3390/met10101302 [2020]
 315. A. Te, B.C. Sousa, B. Mishra, and D.L. Cote, “Subsurface Microstructural Evolution of High-Pressure Diecast A365: From Cast to Cold-Sprayed and Heat-Treated Conditions”, *Metals*, (2021), 11, 432. <https://doi.org/10.3390/met11030432>
 316. H. Tanvar and B. Mishra, “Hydrometallurgical Recycling of Red Mud to Produce Materials for Industrial Applications: Alkali Separation, Iron Leaching and Extraction”, *Materials Transaction B*, DOI: 10.1007/s11663-021-02285-5, [2021].
 317. T. Chepustanova, Y. Merkitabeyev, B. Mishra and Y.I. Kuldeyev, “Processing of the Zinc-Lead- Bearing Flotation Middling by sulfidizing roasting with pyrrhotites production by predicted properties”, *J. Non-Ferrous Metals*, Vol. 2, pp. 15-24, [2022].
 318. J.B. Habinshuti, J.P. Munganyinka, A.R. Adetunji, B. Mishra, H. Tanvar, J. Mukiza, G. Ofori-Sarpong, A.P. Onwualu, “Caustic potash assisted roasting of the Nigerian ferro-columbite concentrate and guanidine carbonate-induced precipitation: A novel technique for extraction of Nb-Ta mixed-oxides”. *Results in Eng.* 14,100415 (2022). <https://www.sciencedirect.com/science/article/pii/S2590123022000858>
 319. J.B. Habinshuti, J.P. Munganyinka, A.R. Adetunji, B. Mishra, G. Ofori-Sarpong, G.C. Komadja, H. Tanvar, J. Mukiza, A.P. Onwualu, “Mineralogical and physical studies of low-grade tantalum-tin ores from selected areas of Rwanda”. *Results in Eng.* 11, 100.P.248, (2021). <https://www.sciencedirect.com/science/article/pii/S2590123021000499>
 320. J.P.Munganyinka, J.B. Habinshuti, J.C.Ndayishimiye, L. Mweene, G. Ofori-Sarpong, B. Mishra, A.R. Adetunji and H. Tanvar, “Potential Uses of Artisanal Gold Mine Tailings, with an Emphasis on the Role of Centrifugal Separation Technique”, *J. Sustainability*, Vol. 13(14), pp. 1-14, <https://doi.org/10.3390/su14138130>, (2022)
 321. O. Baigenzhenov, A. Khabiyev, B. Mishra , I. Aimbetova , S. Yulusov , I. Temirgali, Y. Kuldeyev and Z. Korganbayeva, “Asbestos Waste Treatment—An Effective Process to Selectively Recover Gold and Other Nonferrous Metals”, *J. Recycling*, Vol. 7(85), pp. 1-12, <https://doi.org/10.3390/recycling7060085> (2022)
 322. J.P.Munganyinka, J.B. Habinshuti, G.C. Komadja, P. Uwamungu, H. Tanvar, G. Ofori-Sarpong, B. Mishra, A.P. Onwualu and S. Shuey, “Optimization of Gold Dissolution Parameters in Acidified Thiourea Leaching Solution with Hydrogen Peroxide as an Oxidant: Implications of Roasting Pretreatment Technology”, *J. Metals*, Vol. 12(1567), pp. 1-15, <https://doi.org/10.3390/met12101567> (2022).
 323. Alino Te, Bryer C. Sousa, Brajendra Mishra and Danielle L. Cote, “ Subsurface Microstructural Evolution of High-Pressure Diecast A365: From Cast to Cold-Sprayed and Heat-Treated Conditions”, *J. Metals*, Vol. 11 (432), <https://doi.org/10.3390/met11030432> (2022)
 324. A. Berkinbayeva, L. Amanzholova, B. Mishra, B. Abdikerim, B. Kenzhaliyev, T. Surkova and D. Yessimova, “Modification of Natural Minerals with Technogenic Raw Materials”, *J.Metals*, Vol 12(1907), <https://doi.org/10.3390/met12111907> (2022)
 325. Y. Xu, B. Mishra and S.P. Narra, “Experimental investigation of in-situ microstructural transformations in wire arc additively manufactured maraging 250-grade steel”, *J. Materials Characterization*, [Volume 190](https://doi.org/10.1016/j.matchar.2022.112065), 112065, (2022)
 326. H. Tanvar and B. Mishra, “Comprehensive utilization of bauxite residue for simultaneous recovery of base metals and critical elements”, *J. Sustainable Materials & Technology*, PII: S2214-9937(22)00080-X DOI: [https://doi.org/10.1016/](https://doi.org/10.1016/j.susmat.2022.112065) SUSMAT 466, (2022).
 - 327.H. Tanvar, M.K. Sinha, J.B. Habinshuti and B. Mishra, “Extraction of niobium and

- tantalum oxides from columbite concentrate using microwave processing and solvent extraction”, *Metallurgical & Materials Transaction B.*, <https://doi.org/10.1007/s11663-022-02713-0> [2023].
328. A.M. Horn, B. Mishra, et.al., “Subsea Technology”, Proceedings of the 21st International Ship and Offshore Structures Congress (ISSC 2022) – X. Wang and N. Pegg (Eds.), Vancouver, Canada, pp. 1-72, July 2022.
 329. B. Mishra, M. Strauss and M.K. Sinha, “RECOVERY OF RARE EARTH METALS FROM WASTE FLUORESCENT LIGHTS”, Chapter 18, in *Rare Earth Industry Status and Prospect*, Ed. Y. Murthy, Springer Publication, NY, pp. 1-9, *in-press*, [2023]
 330. M.K. Sinha, H. Tanvar, S.K. Sahu, B. Mishra, “A Review on Recovery of Terbium from Primary and Secondary Resources: Current State and Future Perspective”, *Mineral Proc. & Extrativemet. Review*, : <https://doi.org/10.1080/08827508.2023.2253490>, pp. 1-24, [2023].
 331. A. Gupta and B. Mishra, “Recycling of tantalum coated steel bi-metallic composite using high temperature oxidation”, *J. of Sustainable Metallurgy*, *submitted for publication*, [2023].
 332. A.M. Horn, T. R. Ilson, P. Menglan Duan, Z. Kang, M. Rye Andersen Y. Konno, C. Shim, A. Teixeira, S. Oterkus, B. Thornton and B. Mishra, “Subsea Technology”, Proceedings of the 21st Intl. Ship and Offshore Structures Congress (ISSC 2022) – Xiaozhi Wang and Neil Pegg (Eds.), pp. 504-569; [2022].
 333. C. A. Chinwego; D. M. Sehar; E.MacGregor; S. Tate; K. Savage; T. Zuber; B. Sseruwagi; D. Dietrich; E. O. Opoku; D. Smith; R.Garcia; A.C. Powell and B. Mishra, “A Commercialization Study of Rare Earth Magnet Scrap Recycling”, *Journal of Innovation and Entrepreneurship*, *submitted for publication*, *JIAE-D-23-00062*, [2023].
 334. Q. Ding, H. Das, P. Upadhya, B. Sousa, K. Karayagiz, A. Powell and B. Mishra, “Microstructural, Corrosion, and Mechanical Characterization of Friction Stir Welded Al 6022-to-ZEK100 Mg Joints”, *Corros. Mater. Degrad.* 2023, vol. 4, pp. .142–157. <https://doi.org/10.3390/cmd4010009>. [2023].
 335. Q. Ding, H. Das, P. Upadhyay, A.C. Powell and B. Mishra, “Microstructural and mechanical characterization of friction-stir-welded aluminum and magnesium alloys”, *J. Science & Technology of Welding & Joining*, *submitted for publication*, *238247895*, [2023].
 336. H. Tanvar, K. Merino and B. Mishra, “Extraction of high purity magnetite from bauxite residue”, *J. Minerals Engineering*, Vol. 199, pp. 1-8, DOI: <https://doi.org/10.1016/j.mineng.2023.108131>. [2023].
 337. S. Yang, Y. Wang, Z. Liu, B. Mishra and Y. Zhong, “Ab Initio Modeling on The Thermodynamic and Temperature-Dependent Elastic Properties of Subsystems of The FCC FeNiCoCr Medium Entropy Alloys (MEAs)”, *Acta Materialia*, Vol. 260, <https://doi.org/10.1016/j.actamat.2023.119341>. [2023].
 338. J. P. Habinshuti, J.P. Munganyinka, H. Tanvar, A.R. Adetunji, B. Mishra, J. Mukiza, G. Ofori-Sarpong, A.P. Onwualu, “Fluoride-free, simple, and environmentally friendly extraction of mixed oxides of niobium and tantalum from the Nigerian and Rwandan columbite-tantalite concentrates”, *J. of Minerals Engineering*, Vol. 201, <https://doi.org/10.1016/j.mineng.2023.108201>, [2023].
 339. H. Tanvar and B. Mishra, “Extraction of Titanium, Aluminum, and Rare Earth Values from Upgraded Bauxite Residue” *J. of Sustainable Metallurgy*, <https://doi.org/10.1007/s40831-023-00678-1>. [2023].
 340. M. Sinha, B. Mishra, J. Hiscocks, B. Davis, S.K. Das, T. Grosko and J. Pickens, “Removal of Metallic Impurities from Aluminum Alloy Using Gravity Sedimentation Technique”, *Symposium: Melt Processing, Casting and Recycling, LIGHT Metals TMS Annual Meeting 2024*, Orlando, March 2024.

Refereed Publications in Conference Proceedings:

1. D. Olson, B. Mishra and W.A. Averill, "Application of molten salts in pyrochemical processing of reactive metals", Proc. of 8th Intl. Symp. on Molten Salts, EB. Gale et al., Electrochemical Society, p 184-203, Pennington, NJ, [1992].
2. B. Mishra, D.L. Olson, J.J. Moore and W.A. Averill, "Production of oxygen by electro-reduction of lunar ores", Proc. SPACE 92, Ed. W.Z. Sadeh, pp. 666-677, ASCE, New York, [1992].
3. B. Mishra and D.L. Olson, "Application of molten salts in reactive metals processing", Proc. Engineering Foundation Conf. on Engineering Separation Technologies for Metals and Fuels, Ed. V.I. Lakshmanan et al., pp. 317-328, TMS, Warrendale, PA, [1993].
4. B. Mishra, J.J. Moore and A.M. Murray, "Pyrochemical processing of molten salts for actinide recovery", Proc. Intl. Symp. on Molten Salt Chemistry & Technology 1993, Ed. M.L. Saboungi and H. Kojima, Electrochemical Society, pp. 210-219, Pennington, NJ, [1993].
5. B. Mishra, D.L. Olson and W.A. Averill, "Electrolytic recovery of calcium from molten CaO-CaCl₂ salt-mix", Proc. Intl. Symp. on Environmental Aspects of Electrochemistry & Photoelectrochemistry, Ed. M. Tomkiewicz et al., Electrochemical Society, pp. 191-202, Pennington, NJ, [1993].
6. B. Mishra, D.L. Olson and M.M. Salama, "Prediction of microstructural effect on corrosion of linepipe steels in CO₂-brine solution, Oil and gas Symposium, Proc. 12th Intl. Congress on Metallic Corrosion, Vol 4, pp. 2840-2853, NACE, Houston, TX, [1993].
7. S. Govindarajan, K. Monroe, J.J. Moore, B. Mishra and D.L. Olson, "The application of combustion synthesis in the production of MoSi₂ and MoSi₂-composites", Processing & Fabrication of Advanced Materials III, Ed. Ravi, Srivatsan & Moore, pp. 161-180, TMS Publication, Warrendale, PA, [1994].
8. B. Mishra and D.L. Olson, "Synthesis of Al-Cu-Be alloy by molten salt electrolysis", Processing & Fabrication of Advanced Materials III, Ed. Ravi, Srivatsan & Moore, pp. 239-258, TMS Publication, Warrendale, PA, [1994].
9. B. Mishra, P.D. Ferro and D.L. Olson, "Diffusion coefficient of oxygen in molten calcium chloride" Proc. 9th Intl. Symp. on Molten Salts, Ed. Hussey et al., pp. 697-704, Electrochem. Soc., Pennington, NJ, [1994].
10. B. Mishra and W.A. Averill, "Role of chromium in oxygen sparging of contaminated molten salts", Proc. 9th Intl. Symp. on Molten Salts, Ed. Hussey et al., pp. 689-696, Electrochem. Soc., Pennington, NJ, [1994].
11. B. Mishra, S. Al-Hassan and D.L. Olson, "Effect of heat treatment on the corrosion resistance of linepipe steels in CO₂ atmosphere", Proc. Corrosion Asia 1994, Vol 1, Ed. NACE, Houston, TX, 1061/1-14, [1994].
12. S. Govindarajan, J.J. Moore, B. Mishra and D.L. Olson, "Development of a high temperature oxidation resistant coating system for molybdenum," Elevated Temperature Coatings: Science & Technology I, Ed. N.B. Dahotre et al., TMS Publication, Warrendale, PA, pp. 291-302, [1995].
13. B. Mishra, D.L. Olson and J.J. Moore, "Remediation of radioactively contaminated salt wastes by pyrometallurgical processing" Pyrometallurgy 95, Ed. A.E. Wraith, pp. 23-34, Inst. Mining & Metallurgy, Cambridge, UK, [1995].
14. B. Mishra and W.A. Averill, "Separation of radioactive components in nuclear waste processing", Emerging Separation Tech. for Metals II, Ed. R.G. Bautista, pp. 189-202, TMS Publication, Warrendale, PA, [1996].

15. J.D. Olivas, D.L. Olson and B. Mishra, "Estimation of bond integrity of solid state bonded dissimilar metals", Proc. on Processing & Fabrication of Advanced Materials V, pp. 313-333, TMS Publication, Warrendale, PA, [1996].
16. A.M. Peters, J.J. Moore and B. Mishra, "Compositional tailoring of Cr-N thin Films on soft substrates for wear resistant and forming Applications, Hard Coatings Based on Borides, Carbides, and Nitrides –Synthesis, Characterization and Applications, A. Kumar, Y. Chung and R. Chia eds. TMS Publications, Warrendale, PA, pp. 211-217, [1998].
17. D.L. Olson, B. Mishra and C. Lensing, "The influence of weld microstructural features on corrosion behavior, Proc. of the IIIrd Pacific Rim Intl., Conf. on Advanced Materials and Processing-PRICM 3, ed M.A. Imam, et al., TMS Publications, Warrendale, PA, pp. 2303-2308, [1998].
18. B. Mishra, M. Slavik and D. Kirkpatrick, "Realistic Assessment of the Recovery of Value-added Products from Red-Mud, REWAS 99, San Sebastian, Spain, TMS Publication, Warrendale, pp. 723-31, [1999].
19. W.J. Engelhard, D.L. Olson and B. Mishra, "Dissolution of Gaseous Hydrogen in High Strength Steels at Elevated Temperatures, Joining of Advanced & Specialty Materials, Ed. Singh, Indocochea and Hauser, pp. 133-141, ASM International, Materials Park, OH, [1998]
20. A.M. Peters, J.J. Moore and B. Mishra, "The Relationships between Critical Load (Adhesion), Hardness and Stoichiometry of Cr-N Thin Films Deposited by Cathodic Arc Evaporation, Proc. 12th Intl. Surface Modification Technologies Conf., ASM Publications, Materials Park, OH, [1998].
21. D.L. Olson, B. Mishra, R.D. Smith, S. Niyomsoan, P. Termsuksawad, Y.D. Park, V.I. Kaydanov, Z. Gavra and R.B. Goldfarb, "Advancements in Weld Hydrogen Sensors", Intl. Conf. on Joining of Advanced & Specialty Materials –IV, 2001 ASM Materials Solution Conference, November 2001, Indianapolis, IN.
22. Z. Gavra, D. Smith, S. Niyomsoan, P. Termsuksawad, Y. Park, R. Goldfarb, B. Mishra, and D.L. Olson, "Advanced Electronic, Optical, and Magnetic Analytical Practices to Assess the Effect of Hydrogen in Welds", Intl. Conf. on Joining of Advanced & Specialty Materials –IV, 2001 ASM Materials Solution Conference, November 2001, Indianapolis, IN.
23. E.J. Young, E. Mateeva, J.J. Moore and B. Mishra, "Low Pressure Plasma Spray Coatings: A Model for Determining Dielectric Strength", Intl. Conf. on Metall. Coatings & Thin Films ICMCTF 2001, San Diego, CA, April 2001.
24. S. Carrera, K. Kearns, B. Mishra, G. Mustoe, M. Peters, A. Woolverton and J.J. Moore, "The Design and Development of Advanced Coatings for Metal and Materials Processing Dies, MRS Annual Meeting, Boston, Dec. 2001.
25. B. Mishra, "Recovery and Utilization of Reactive Metals by Molten Salt Electrochemistry, Proc. 4th International Conf. on Materials for Resources -ICMR. Akita, Japan, vol. 1, pp. [2001].
26. B. Mishra, "Application of Molten Salt Electrochemistry in Metal Processing", Proc. IMAPP, IIT, Kharagpur, India, pp. 12-18, [2002].
27. B. Mishra, J. Zhou and F. Kustas, "Development of High Toughness Ceramic-Metal Composite Thin Films", Proc. IMAPP, IIT, Kharagpur, India, pp. 96-104, [2002].
28. B. Mishra, J. Zhou, and F. Kustas, "Development of Cermet Thin Film Coatings", Surface Engineering: Science & Technology II: Advances in Coatings Technologies, 2002 TMS Annual Meeting, Seattle, WA, [2002].
29. J.W. Goldsmith, B. Mishra, E. Sutter, J.J. Moore, M. Crowder and R. Turner, "Tribological and Structural Studies of Diamond-Like-Carbon and Fluorocarbon Thin Films", Surface Engineering: Science & Technology II: Advances in Coatings Technologies, 2002 TMS Annual Meeting, Seattle, WA, [2002]

30. P. Termsuksawad, S. Niyomsoan, B. Mishra, D.L. Olson, Z. Gavra, R.B. Goldfarb, "Measurement of Hydrogen by Magnetic and Electronic Techniques in Metallic Materials", Fundamentals of Advanced Materials for Energy Conversion: Batteries, EPD Congress, 2002 TMS Annual Meeting, Seattle, WA, Feb 2002.
31. B. Mishra, A. Staley and D. Kirkpatrick, "Recovery & Utilization of Iron from Red Mud, Bauxite Treatment Residues: Products and Processes 2001 TMS Annual Meeting, Feb. 11-16, 2001, New Orleans, LA.
32. B. Mishra, D. Kirkpatrick and A. Staley, "Mineral processing of red mud, 2001 SME Annual Meeting & Exhibit, Feb. 26-28, 2001, Denver, CO. (also accepted for journal publication)
33. F. Kustas, B. Mishra & J. Zhou, "High Temperature Coatings based on Mo-SiC System, "High temperature Coatings-X, 2001 TMS Annual Meeting, Feb. 11-16, 2001, New Orleans, LA.
34. J. Hager and B. Mishra, "TMS and the EPD: A Forum for Interaction Among Professionals", Proc. Intl. Jt. Workshop on Recycling and Sustainable Development, Can- Met, pp. 41-56, Montreal, Canada, [2001].
35. B. Mishra and D.L. Olson, "Production of Reactive Metals by Molten Salt Processing", Proc. 15th Intl. Symp. on Molten Salt Technology, Electrochem. Soc., Philadelphia, PA, [2002].
36. B. Mishra, I. Maroef and D. Hebditch, "Separation of Uranium and Magnesium by Molten Salt Electrorefining", Proc. 15th Intl. Symp. on Molten Salt Technology, Electrochem. Soc., Philadelphia, PA, [2002].
37. P. Termsuksawad, S. Niyomsoan, B. Mishra, R.B. Goldfarb and D.L. Olson, "Measurement of Hydrogen by Magnetic and Electronic Techniques in Metallic Materials", Proc. Symp. Advanced Energy Storage Materials, Electrochem. Soc., Philadelphia, PA, [2002].
38. B. Mishra and F.M. Kustas, "Metal-Ceramic Composite Coatings for High Toughness Applications", 2002 ASM-TMS Materials Week, Surface Engineering Symposium: Tribological Coatings, Columbus, OH, October 2002.
39. J.J. Moore, B. Mishra, D. Zhong and S. Carrera, "Development of Surface Engineered Coatings for Glass Molding, Pressure Die-Casting and Metal Stamping Dies", Proc. SECA 2002, New Castle upon Tyne, UK, Sept. 2002.
40. C. Muratore, S. Carrera, B. Mishra and J.J. Moore, "The Influence of Particle Energy Distributions on Reactively Sputtered Oxide and Nitride Thin Films", Thermec 2003, Madrid, Spain, July 2003.
41. O. Salas, S. Carrera, K. Kearns, D. Zhong, B. Mishra, G. Mustoe, P. Reid and J.J. Moore, "The Development of a Surface Engineered Coating System for Aluminum Pressure Die Casting Dies: Wettability & Tribological Properties of the Working Layer", Proc. NADCA Annual Surface Engineering Conference, Chicago. IL, October 2002.
42. A.W. Stewart, G.G. Mustoe, B. Mishra and J.J. Moore, "Analysis of Indentation Fracture of a Compliant Coating on a Hard Substrate", Paper # F1/E3-1-8, ICMCTF 2004: Mechanical Properties & Adhesion, San Diego, CA, April 2004.
43. E. Sutter, J. Goldsmith, J.J. Moore, B. Mishra and M. Crowder, "Microstructure of Amorphous Diamond-like Carbon Thin Films and Changes during Wear, Paper # E4-1- 3, ICMCTF 2004: Tribology of Diamond, Diamond-like and Related Carbon Coatings/Thin Films, San Diego, CA, April 2004.
44. F. Kustas, J. Sinchak and B. Mishra, "TiC and Graphite Co-deposited Thin Films, Paper # BP-25, ICMCTF 2004: Symp. B: Poster Session, San Diego, CA, April 2004.
45. J.M. Anton, B. Mishra and F. Kustas, "Mechanical Properties of Functionally Graded Titanium Carbide Thin Films, Paper # B7-2-6, ICMCTF 2004: Properties & Characterization of Hard Coatings and Surfaces, San Diego, CA, April 2004.
46. D. Zhong, I. Park, A. Kunrath, B. Mishra, K-H Kim, A.A. Voevodin, E.A. Levashov, J.J.

- Moore, Nano composites Ti-B-C-N Thin Films produced by closed field unbalanced magnetron sputtering (CFUBMS) From Composite targets, Proc. Intl. Conf. Surfaces, Coatings and Nanostructure Materials, Moscow, Russia, November 2004.
47. J.L. Lin, S. Myers, O. Salas, S. Carrera, B. Mishra & J.J. Moore, "Degradation Mechanisms of Die Coatings used in Aluminum Pressure Die Casting", 2005 TMS Annual Meeting, San Francisco, CA, March 2005.
 48. B. Mishra and D. Olson, "Application of Molten Salts in Reactive Metals Processing", Proc. 7th Molten salts Conference, Toulouse, France, pp. 117-126, Vol. II, [2005].
 49. J.J. Moore, B. Mishra, I.W. Park, J. Anton, J. Lin, "Development of Multi-Component, Nanostructured, Nanocomposite Coatings For Tribological Applications," Materials Science & Technology-2005, Pittsburgh, PA, October 2005.
 50. J.E. Jackson, Y.D. Park, A.N. Lasseigne, C. sangphagdee, D.L. Olson, B. Mishra and V. Kaydanov, "Characterization of Engineering Materials Utilizing Thermoelectric Power Measurements", 2006 TMS Annual Meeting, San Antonio, TX, March 2006.
 51. J.E. Jackson, D.L. Olson, B. Mishra and I.M. Solomon, " Deposition of Al-Si Metallic Precursor on Mo-Si-B Turbine Materials", 2006 TMS Annual Meeting, San Antonio, TX, March 2006.
 52. A.N. Lasseigne, M.A. Imam, Y.D. Park, V. Kaydanov, B. Mishra and D.L. Olson, "Characterization of Hydrogen Storage Capabilities of the Two-Phase Region of LaNi₅", 2006 TMS Annual Meeting, San Antonio, TX, March 2006.
 53. A.N. Lasseigne, M.A. Imam, R. Goldfarb, V. Kaydanov, B. Mishra and D.L. Olson, "Characterization of Hydrogenation Behavior of NaAlH₄ Utilizing Thermoelectric Power and Magnetic Analyses", 2006 TMS Annual Meeting, San Antonio, TX, March 2006.
 54. J. Lin, S. Myers, B. Mishra and J.J. Moore, "Design of Optimized Die Coatings: The Case for Aluminum Pressure Die-Casting", Proc. ICAMMP, Ed. Chatterjee and Dhindaw, Cygnus, Kolkata, pp. 1-13, [2006]
 55. A.N. Lasseigne, B. Mishra and D.L. Olson," Characterization of Hydrogen Storage Capability in Advanced Battery Materials" Proc. ICAMMP, Ed. Chatterjee and Dhindaw, Cygnus, Kolkata, pp. 937-947, [2006]
 56. J.M. Anton, B.Mishra and J.J. Moore, "Investigation of Processing Parameters for Pulsed Closed-field Unbalanced Magnetron Sputtered Titanium Carbide Thin Films", Proc. ICAMMP, Ed. Chatterjee and Dhindaw, Cygnus, Kolkata, pp. 611-617, [2006]
 57. I-W. Park, J. M. Anton, W.C. Moerbe, B. Mishra, K.H. Kim, A. Voevodin, E.A. Levashov & J.J. Moore, "Nanostructured, Multifunctional Coatings for Aerospace Applications", Proc. ICAMMP, Ed. Chatterjee and Dhindaw, Cygnus, Kolkata, [2006]
 58. J. Lin, B. Mishra and J.J. Moore," Effects of Substrate to Target Distance and the Unbalanced Magnetron Sputtering [P-CFUBMS], 2006 ICMCTF, San Diego, CA May 2006.
 59. J. Lin, B. Mishra and J.J. Moore," Microstructure, Mechanical & Tribological Properties of Cr_{1-x}Al_xN Films deposited by Pulsed Closed Field Unbalanced Magnetron Sputtering [P-CFUBMS], 2006 ICMCTF, San Diego, CA May 2006.
 60. S. Meyers, J. Lin, P. Reid, B. Mishra and J.J. Moore, "Evaluation of Coatings Used in Al Pressure Die-Casting", 2006 ICMCTF, San Diego, CA May 2006.
 61. J.M. Anton, B. Mishra and J.J. Moore, "Investigation of processing Parameters for Pulsed Close-Field Unbalanced Magnetron Co-sputtered Titanium Carbide Thin Films, 2006 ICMCTF, San Diego, CA May 2006.
 62. B. Mishra, A. N. Lasseigne, and D. L. Olson, "Development of Sensors for Reversible Battery Hydrogen Storage Materials", Proc. of International Congress on Innovative Solutions for the Advancement of the Transport Industry –TRANSFAC 2006", October 2006, San Sebastian, Spain (2006).

63. B. Mishra, A. N. Lasseigne, and D. L. Olson, "Development of High Interstitial Stainless Steels with increased Mechanical Properties and Corrosion Resistance", Proc. Of International Congress on Innovative Solutions for the Advancement of the Transport Industry –TRANSFAC 2006, October 2006, San Sebastian, Spain (2006).
64. J.J. Moore and B. Mishra, "Nanostructured Multifunctional Coatings for Aerospace Applications", Proc. Of International Congress on Innovative Solutions for the Advancement of the Transport Industry –TRANSFAC 2006, October 2006, San Sebastian, Spain (2006).
65. J. Lin, S. Bhattacharyya, S. Myers, B. Mishra, and J.J. Moore, "The Development of Surface Engineered Coating Systems for Aluminum Pressure Die Casting Dies: Optimization of the Cr-Al-N Intermediate Layer towards a "Smart" Die Coating", 110th Metalcasting Congress, NADCA, Columbus, OH, (2006).
66. J. Lin, A.O. Kunrath, D. Zhong, S. Myers, B. Mishra, and J.J. Moore, "Development of Multi-layered and Graded Die Coatings for Materials processing Applications", 11th International Conferences on Modern Materials and Technologies (CIMTEC 2006), Acireale, Sicily, Italy, June 4 to 9, (2006)
67. J. Lin, J.M. Anton, J.J. Moore, B. Mishra, W.D. Sproul and J.A. Rees, "Effect of Pulsing the Magnetron on the Plasma and the Resulting Structure and Properties of Cr-Al-N and TiC Thin Films Produced in a Closed Field Configuration", Proc. 10th Intl. Conf. Plasma Surface Engineering [PSE 2006], Garmisch, Germany, Sept. 2006.
68. S. Thuanboon, D. Tordonato, W. Navidi, D.L. Olson, B. Mishra and G. Wang, " A Statistical Analysis of Corrosion Wastage or Transverse Members in Single Hull Tankers", Proc. Of OMAE 2006, @5th Intl. Conf. on Offshore Mechanics and Arctic Engineering, Hamburg Germany, Paper OMAE2006-92665, pp. 1-7, June 2006.
69. J. E. Jackson, A. N. Lasseigne-Jackson, F. J. Sanchez, D. L. Olson and B. Mishra, " The Influence of Magnetization on Corrosion in Pipeline Steels", Paper #IPC2006-10615, Proc.of IPC 2006, 6th International Pipeline Conference, pp., Calgary, Alberta, Canada, ASME, NY, Sept. 2006.
70. J. E. Jackson, D. L. Olson, A. N. Lasseigne-Jackson, B. Mishra and T. A. Siewert, "Correlating the Influence of Magnetic Field on Solute Content in Metals Using the Thermodynamic Auxiliary Work Functions", Proc. Of the 16th Symposium on Thermophysical Properties, pp. 1-9, Boulder Colorado August 2006.
71. B. Mishra, A. Lasseigne and D. L. Olson, "Role of Solidification on Nitrogen-Strengthened Austenitic Stainless Steel Weldments", Proc. International Conference on Solidification Science and Processing- Emerging Trends: ICSSP III, Jaipur, India. Nov. 2006.
72. A.N. Lasseigne-Jackson, K. Moline, J. Scott, J. Rawers, J. E. Jackson, D. L. Olson, and B. Mishra, "Synergistic Interstitial Control of Sensitization and Pitting in Stainless Steel Weldments", Proc. Stainless Steel World 2006, pp. 1-8, Houston, TX, Nov. 2006.
73. Brajendra Mishra, Edgar E. Vidal, and Donald J. Kaczynski, "Review of Beryllium Extractive Processes", in Session: Processing and Performance of Beryllium, MS&T 2006, October 16, 2006, Cincinnati, OH.
74. Edgar E. Vidal and Brajendra Mishra, "Review of Corrosion of Beryllium and Beryllium Alloys", in Session: Processing and Performance of Beryllium, MS&T 2006, October 16, 2006, Cincinnati, OH
75. B. Mishra, "The Future of Metals and Materials Industries in the United States, Diamond Jubilee Celebrations, The Indian Institute of Metals, Unleashing India's Potential in Metals & Minerals, New Delhi, India, September 11, 2006
76. J. Lin, B. Mishra, S. Myers, S. Bhattacharyya, J.J. Moore and P. Ried, "Development of Thin Film Coatings for Dies Used in Aluminum Pressure Die-Casting of Automotive Components", Material Science & Technology 2007 Conference and Exhibition (MS&T)

- (2007).
77. J. Lin, J.J. Moore, B. Mishra, M. Pinkas, W.D. Sproul, J.A. Rees, P.J. Hatton, "Closed Field Unbalanced Magnetron Sputtering of Chromium Aluminum Nitride Coatings and the Correlation of Pulsing Parameters, Plasma properties and Film Quality", Innovations on Thin Films Processing and Characterization (ITFPC), Nov 20-23, (2007), Nancy (France)
 78. J. Lin, B. Mishra, J.J. Moore, W.D. Sproul, and J.A. Rees, "Effect of Pulsing Parameters on the Pulsed Closed Field Unbalanced Magnetron Sputtering of Chromium Aluminum Nitride Coatings", The 9th International Symposium on Sputtering & Plasma Processes, (2007), Kanazawa, Japan.
 79. J. Lin, S. Myers, S. Bhattacharyya, B. Mishra, and J.J. Moore, "Optimization of a graded, multilayer die coating system for use in Al pressure die casting", 111th Metalcasting Congress, NADCA, Houston, Texas, May 15-18, (2007).
 80. J. Lin, J.J. Moore, and B. Mishra, "Oxidation Behavior of Chromium Nitride and Chromium Aluminum Nitride Thin Films by DSC and TG Analysis", Paper # A1-2-11, ICMCTF 2007, San Diego, CA, April 23-27, [2007].
 81. I.W. Park, J.J. Moore, B. Mishra, A.A. Voevodin, K.H. Kim, E.A. Levashov, "Comparative Study of Nanocomposite Ti-B-C, Ti-B-C-N and Ti-B-C-N-Si Films Deposited by Unbalanced Magnetron Sputtering", Paper # B6-1-10, ICMCTF 2007, San Diego, CA, April 23-27, [2007].
 82. S. Myers, J. Lin, P. Reid, B. Mishra, and J.J. Moore, "Evaluation of PVD Coatings used in Aluminum Die Casting", Paper # E2-2-6, ICMCTF 2007, San Diego, CA, April 23-27, [2007].
 83. J. Lin, J.J. Moore, B. Mishra, W.D. Sproul, J.A. Rees, M. Pinkas, "The Effect of Pulsed DC Discharges and Pulse Energy on Structure and Properties of Cr-Al-N Coatings Deposited by Pulsed Closed Field Unbalanced Magnetron Sputtering [p-CFUBMS]", Paper # B6-3-4, ICMCTF 2007, San Diego, CA, April 23-27, [2007].
 84. W. Moerbe, J.J. Moore and B. Mishra, "Microstructure and Mechanical Properties of Cr- B-N and Cr-B-Al-N Coatings by Unbalanced Magnetron Sputtering", Paper # B6-3-6, ICMCTF 2007, San Diego, CA, April 23-27, [2007].
 85. J.E. Jackson, D.L. Olson, B. Mishra, and A.N. Lasseigne-Jackson, "Development of Advanced Thermal Barrier Coatings for Mo-Si-B Materials", Accepted for publication in the Proc. of the "8th Global Innovations Symposium: Trends in Materials and Manufacturing Technologies for Energy Production", Orlando, Fl., February 26-28, 2007.
 86. A.N. Lasseigne-Jackson, B. Mishra, D.L. Olson, and J.E. Jackson, "Reversible Hydrogen Storage Battery Materials: Non-Destructive Sensor Development", Proceedings of the National Hydrogen Association, San Antonio, TX, March 19-22, 2007.
 87. J.E. Jackson, D.L. Olson, A.N. Lasseigne-Jackson, B. Mishra, and T.A. Siewert, "Using the Thermodynamic Auxiliary Work Functions to Correlate the Magnetic Field Influence on Solute Content in Metals", Proc. International Journal of Thermophysics (2007)
 88. J.E. Jackson, B. Mishra and D.L. Olson, "The Future of Microstructural Characterization: An Electron Metallography Laboratory", Proc. QNDE 2007, Golden Colorado (2007).
 89. L. Lasseigne-Jackson, J. M Anton and T. A. Siewert, D.L. Olson, B. Mishra and J.E Jackson, "Advanced Nondestructive Measurement Schemes to Actively Monitor Hydrogen Content in Steel Pipeline", Proc. QNDE 2007, Golden Colorado (2007).
 90. S. Niyomosoan, P. Termsuksawad, R. Goldfarb, D.L. Olson, B. Mishra, Hydrogenization of Intermetallic Compounds Characterized by Magnetic Susceptibility and Thermoelectric Power Measurement, Proc. QNDE 2007, Golden Colorado (2007).
 91. J.E. Jackson, A.N. Lasseigne-Jackson, D.L. Olson, B. Mishra, M.S. Heilig, and J.K. Collins, "The effect of Magnetic Fields on Corrosion In Pipeline Steel," Proceedings of the Offshore Mechanics and Arctic Engineering Conference, OMAE 2007-29560 (2007).
 92. J.E. Jackson, D.L. Olson, B. Mishra, and A.N. Lasseigne-Jackson, "Development of

- Advanced Thermal Barrier Coatings for Mo-Si-B materials”, proceedings of TMS 2007 Conference, Orlando, FL, February 27-March 1, 2007.
93. Y.D. Park, A.N. Lasseigne-Jackson, J.E. Jackson, B. Mishra, D.L. Olson, and T. Koenig, “Characterization of Weldments Using Thermoelectric Power Measurements”, Proceeding of Korean Intl. Welding Conf. 2007, Seoul, Korea (2007).
 94. A.N. Lasseigne –Jackson, B. Mishra, D.L. Olson and J.E. Jackson, “Reversible Hydrogen Storage Battery Materials: Non-Destructive Sensor Development”, Proc. of NHA Annual Hydrogen Conference 2007, Paper #3535, San Antonio, TX., March 18-22 (2007).
 95. A.N. Lasseigne-Jackson, J.E. Jackson, D.L. Olson, B. Mishra, “Non-Destructive Hydrogen Storage Material Fuel Gauge and Diagnostic Tool,” Proceedings of 2007 Commercial Vehicle Engineering Congress and Exhibition, Paper 2007-01-4272, pp 1-6, SAE International.
 96. D.L. Olson, J.E. Jackson, A.N. Lasseigne-Jackson, B. Mishra, T. Koenig, Y.D. Park, and A. Landau, “Weld Assessment by Thermoelectric Power Measurements”, Proceedings of the International Conference of Welding and Joining of Materials, Cusco, Perú 16–18 April 2007.
 97. J.E. Jackson, A.N. Lasseigne-Jackson, T. Koenig, D.L. Olson, and B. Mishra, “Development of Graded-Architecture Mullite Thermal Barrier Coating on Mo-Si-B Turbine Materials”, presented at ASME Turbo Expo 2007 November, ASME GT2007- 29740 (2007).
 98. A.N. Lasseigne, D. Olson, B. Mishra and J. Jackson, “Development of Non-Destructive Techniques for Materials characterization of Advanced Hydrogen Storage Materials”, 8th Global Innovations Symposium: Metal Powders for Energy Production and Storage Applications: Session I in Conjunction with the Symposium on Materials for Clean Power systems –Hydrogen Storage, TMS 2007, February 28, 2007, Orlando, FL.
 99. J.E. Jackson, D.L. Olson, B. Mishra and A.N. Lasseigne, “Development of Advanced Thermal Barrier Coatings for Mo-Si-B Materials”, 8th Global Innovations Symposium: Trends in materials and Manufacturing for Energy Production: Session I, TMS 2007, February 28, 2007, Orlando, FL.
 100. J. Lin, B. Mishra, J.J. Moore, M. Pinkas and W.D. Sproul, “Structure and Properties of Ti -B-C-N Nanocomposite Coatings Prepared by Pulsed Colsed Field Unbalanced Magnetron Sputtering (P-CFUBMS)”, 35th ICMCTF 2008, San Diego, Paper # B6-3-3, April 8-May 2, 2008.
 101. I.-W. Park, B. Mishra, J.J. Moore, A.A. Voevodin, K.H. Kim and E.A. Levashov, “Microstructure and Oxidation Resistance of Ti-B-C, Ti-B-C-N and Ti-B-C-N-Si Films Deposited by Unbalanced Magnetron Sputtering (P-CFUBMS)”, 35th ICMCTF 2008, San Diego, Paper # B6-3-5, April 8-May 2, 2008.
 102. W.C. Moerbe, J.J. Moore and B. Mishra, “Microstructure and Mechanical Properties of Cr-B-N and Cr-B-Al-N Coatings deposited by Unbalanced Magnetron Sputtering (P-CFUBMS)”, 35th ICMCTF 2008, San Diego, Paper # B6-3-6, April 8-May 2, 2008.
 103. S. Myers, J.J. Moore and B. Mishra, “Evaluation of PVD Coatings and Surface Treated Dies Used in Aluminum Pressure Die Casting”, 35th ICMCTF 2008, San Diego, Paper #E2-2-5, April 8-May 2, 2008.
 104. B. Mishra, J. Lin, M. Pinkas, W.D. Sproul and J.J. Moore, “Pulsed Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS) of nc:TiC/a:C Nanocomposite Thin Films”, 35th ICMCTF 2008, San Diego, Paper # D3-2-9, April 8-May 2, 2008.
 105. B. Mishra, “Nanocomposite Coating”, Plenary Presentation & Publication, NANOTECHNOLOGY, International Workshop for Council of Industrial & Scientific Research, Govt. of India, National metallurgical Laboratory, Jamshedpur, March 29-31, 2008.
 106. J. Lin, F. Wang, S. Myers, B. Mishra, J.J. Moore, and P. Ried, “A Examination of Coating

- Architecture in the Development of an Optimized Die Coating System for Aluminum Die Casting”, 112th Metalcasting Congress, NADCA, Atlanta, Georgia, May 17-20, (2008).
107. B. Mishra, J. Lin, J.J. Moore, W.D. Sproul, R. Chistyakov and B. Abraham, “The use of Modulated Pulse Power during High Power Pulse Magnetron Sputtering”, Proc. ICTF 14 and RSD 2008, Ghent, Belgium, p. 36-37, 2008.
 108. K. Walsh, E.N.C. Dalder, A. Goldberg, B. Mishra, D.L. Olson, E. Vidal, “Beryllium Chemistry and Processing”, pp.1-561, ASM Intl., Materials Park, OH, (2009).
 109. R. Bhola, S.M. Bhola, B. Mishra, D.L. Olson, R. Ayers and T. Ohno, “Electrochemical Behavior of Titanium and its Alloys” MPMD, Materials and Processes 2009 Conf., August 10-12, 2009, Minneapolis, Minn., ASM Intl., Materials Park, OH. (2009).
 110. M. Heilig, D. Zander, D. Olson, B. Mishra, N. Hort, G. Klaus, A. Buchrig-Polaczek, J. Grobner, R. Schmid- Fetzer,” Stress Corrosion of AZ91D Alloyed with Small Additions of Rare Earth (Ce) Elements”, DGM-Magnesium 2009, Weinar, Germany (2009).
 111. K. Koenig, A.N. Lasseigne, J.W. Cisler, B. Mishra, and D.L. Olson, “Non-Contact Non-Destructive Hydrogen and Microstructural Assessment of Steel Welds,” Proc. EPRI Welding Conference, Ft. Myers, FL (2009). EPRI, Palo Alto, CA (2009).
 112. J. E. Jackson, B. Mishra, and D.L. Olson, ”Mullite-based Graded-architecture thermal Barrier Coating for MO-Si-B Turbine Materials”, in Proc. TMS2009. San Francisco, CA.
 113. David L. Olson and Brajendra Mishra, “Materials Science for the Next Generation,” Keynote Presentation TMS 2010, Seattle, WA (2010).
 114. S. M. Bhola, B. Mishra and D. L. Olson, “Electrochemical Testing of Steel in Ethanolic Solutions”, Proc. DOT PHSMA Annual Review Meeting, Columbus, OH (2009).
 115. J. Lin, B. Mishra, J.J. Moore, W.D. Sproul, “Chromium Nitride/Aluminum Nitride Superlattice Coatings Deposited Using Pulsed Closed Field Unbalanced Magnetron Sputtering (P-CFUBMS), submitted to Surface Coatings and Technology, (ICMCTF 2009).
 116. J. Lin, J.J. Moore, W.D. Sproul, B.Mishra, R. Chistyakov. B. Abraham, “Modulated Pulse Power Sputtered Chromium and Chromium Nitride Coatings”, submitted to Thin Solid Films, (ICMCTF 2009).
 117. J. Lin, F. Wang, S. Bhattacharyya, M. Hasheminasari, S. Myers, B. Mishra, J.J. Moore, “Development of a “Smart” Die Coating for Al Pressure Die Casting”, Proc. 113th Metalcasting Congress, NADCA, Las Vegas, Nevada, April 7-10, (2009).
 118. B. Mishra, “Pipeline Steels for Ethanol-Fuel Blend Transport”, Proc. Intl. Symp. On Steels for Infrastructure, Ed. Zhang & Mishra, Beijing, China, November 12, 2009, pp. 1-5, (2009) [Keynote]
 119. B. Mishra, “Advances in Magnetron Sputtering for Superior Surface Engineering”, Proc. Emerging Challenges for Metals & Materials: Engineering & Technology, Ed. Mishra & Bhattacharya, Kolkata, India, November 15, 2009, pp. 153-162, (2009). ISBN: 978-81-8424-524-0, Allied Publishers. [Invited].
 120. B. Mishra, “Materials Recycling for Sustainability”, Plenary Lecture, Proc. Intl. Conf. on Materials Engineering for Resources, Ed. Fujihara, Akita, Japan, October 22, 2009, pp. 1-6, (2009)
 121. R. Bhola, S.M. Bhola, R. Ayers, B. Mishra, D.L. Olson, T. Ohno, “Electrochemical Characteristics of Titanium and its Alloys as Implants in Phosphate Buffer Saline”, Medical Device Materials V, Proc. from the Materials & Processes for Medical Devices Conference, ASM International, August 10-12, (2009).
 122. R. Bhola, S.M. Bhola, B. Mishra, D.L. Olson, “-Titanium Alloys as Implants in Ringers Lactate Solution, Review of Progress in Quantitative Nondestructive Evaluation, eds. D. O. Thompson and D. E. Chimenti, AIP, Melville, New York, 2010; 29B:1381-1386.
 123. M. Heilig, B. Mishra, M. Marya, D. L. Olson, “Casting Practice for High-Carbon Nitrogen-

- Alloyed Chromium-Manganese Austenitic Stainless Steels”, *Materials Processing and Properties*, Volume 1, TMS (2010), Warrendale, PA, pp. 695-702. (2010)
124. A.B. Gavanluei, S. M. Bhola, B. Mishra, D. L. Olson, “Evaluation of Stress Corrosion Cracking Susceptibility of Drill Pipe Steels in CO₂ Saturated Aqueous Solution”, *Materials Processing and Properties*, Volume 1, TMS (2010), Warrendale, PA, pp. 651-658. (2010)
 125. M. Heilig, D. Zander, D. L. Olson, B. Mishra, N. Hort, G. Klaus, A. Buehrig-Polaczek, J. Gröbner, R. Schmid-Fetzer, “Influence of Cerium on Stress Corrosion Cracking in AZ91D”, *Magnesium Technology*, TMS (2010), Warrendale, PA, pp. 305-309. (2010).
 126. H. Almahamedh, C. Williamson, J. Spear, S. Bhola, B. Mishra and D. L. Olson, “Characterization of Microbes Influenced Corrosion of Oil Linepipe Steels Using rRNA Gene Sequencing”, *Proc. Symposium: Corrosion and Corrosion Protection of Materials in Oil and Gas Industry*, Mat. Sci. and Tech. Houston, TX, pp.1-12 (2010).
 127. R. Bhola, S. M. Bhola, B. Mishra and D. L. Olson, “Electrochemical Impedance Analysis of -Titanium Alloys as Implants in Ringers Lactate Solution”, *Proc. QNDE Conf.*, Kingston, RI, July (2009).
 128. S. Mier, D. L. Olson, B. Mishra, S. Liu, A. N. Lasseigne, K. Coleman, and R. Hellner, “A Method for Nondestructive Evaluation of Microstructure Evolution in Power Plant Steel Grades”, *Proc. Sixth International Conference on Advances in Materials Technology*, August 31-Sept. (20-10, 2010), Santa Fe, NM (2010).
 129. D. L. Olson, B. Mishra, “Materials Science for the Next Generation”, *Materials Processing and Properties*, Volume 1, TMS (2010), Warrendale, PA, pp. 609-619, (2010).
 130. J.A. Roubidoux, J.E. Jackson, A.N. Lasseigne, K. Koenig, B. Mishra, D. L. Olson, “Nonlinear Analytical Practices for Interfacial Phenomenon and Nano-Size Microstructural Properties and Behavior”, *Materials Processing and Properties*, Volume 1, TMS (2010), Warrendale, PA , pp. 635-642. (2010).
 131. S. Meir, D.L. Olson, B. Mishra, S. Liu, K. Coleman and R. Hellner, “Assessment of Steel Microstructure Evolution During Thermal Treatment by Magnetic and Electronic Techniques”, *QNDE 2010*, San Diego, CA.
 132. E.A. Pfeif, A.N. Lasseigne, K. Koenig, K. Krzywosz, E. V. Mader, S. Yagnik, B. Mishra, and D.L. Olson, “Submerged Eddy Current Method of Hydrogen Content Evaluation of Zircaloy-4 Fuel Cladding”, *QNDE 2010*, San Diego, CA.
 133. R. Bhola, S. M. Bhola, B. Mishra and D. L. Olson, “Electrochemical Characterization of a Low Modulus TNZT Titanium Alloy in a Simulated Body Fluid Using EIS for Biomedical Applications”, *QNDE 2010*, San Diego, CA.
 134. K. Koenig, A. N. Lasseigne, D. L. Olson, J. E. Jackson, J. D. McColskey, R. H. King and B, Mishra, “Development of A Non-Contact Hydrogen Sensor for Coated Pipeline Steel Weldments”, *Proc. IPC2010, 8th Intn. Pipeline Conference*, Paper # IPC2010-31283, Sept. 27-Oct. 1, 2010, Calgary, Alberta, Canada (2010).
 135. K. Koenig, A. Lasseigne, J. E. Jackson, D. L. Olson, B. Mishra, “A Fundamental Analysis of Low Frequency Impedance Phenomenon: Application to Hydrogen Content Assessment of Coated Linepipe Steel Weldments”, *QNDE 2010*, San Diego, CA.
 136. P. Kiattisaksri, J. Poncelo, S. Meir, J.C. Madeni, S. Liu, B. Mishra and D.L. Olson, “Assessment of Microstructure in Grade T22 Alloy Steel by the Combination of Two Nondestructive Tools and Practice Simultaneously”, *QNDE 2010*, San Diego, CA.
 137. T. Koenig, S. Lawrence, A. Martin, C. Mejia, J. Fletcher, L. Gerstenberger, J. King, B. Mishra, D. L. Olson, M. Meyer, R. Kennedy, J. Cole, Lin-Wen Hu, G. Kohse, “Advanced Non-Destructive Assessment Technology to Determine the Aging of Silicon Containing Materials for Generation IV Nuclear Reactor”, *QNDE 2010*, San Diego, CA.
 138. T. Reyes, S. Bhola, D. L. Olson, B. Mishra, ”Assessment of Corrosion Under Alternating

- Current on Supermartensitic Stainless Steel in Artificial Sea Water”, QNDE 2010, San Diego, CA.
139. T. Reyes, S. Bhola, D. L. Olson and B. Mishra, “Understanding the Role of Alternating Current on Corrosion of Pipeline Steels under Sacrificial Anode Cathodic Protection”, 1st Annual PI Partner Research Workshop, pp 276-279, Abu Dhabi, UAE, January 6-7 (2010).
 140. A.B. Gavanluei, B. Mishra and D. L. Olson, “SCC Susceptibility of High Strength Low Alloy Steels in CO₂ – Containing Corrosive Oil and Gas Well Environments”, 1st Annual PI Partner Research Workshop, pp 267-270, Abu Dhabi, UAE, January 6-7 (2010).
 141. D.L. Olson, B. Mishra, J.R. Spear, S. M. Bhola, L. Jain, C. Williamson, “Investigation of Microbiological Influenced Corrosion (MIC) in Ethanol Fuel Environments”, 1st Annual PI Partner Research Workshop, pp 271-274, Abu Dhabi, UAE, January 6-7 (2010).
 142. D.L. Olson and B. Mishra, “Development of High Interstitial Stainless Steel for use in Downhole Drilling Applications”, 1st Annual PI Partner Research Workshop, pp 263-266, Abu Dhabi, UAE, January 6-7 (2010).
 143. C A. Van Horn, D. L. Olson, T. W. Koenig, B. Mishra and K. Evans, “Quantitative Non-Destructive Evaluation of Residual Stress in Machined Uranium”, Proc. Depleted Uranium Conf., pp 1-12, Oak Ridge, TN, NNSA, Oak Ridge TN, April (2010).
 144. J. A. Poncelow, T. W. Koenig, D. L. Olson, B. Mishra and J. Morrell, “The Use of Ultrasound to Develop Microstructural Awareness in the Uranium-Carbon System”, Proc. Depleted Uranium Conf., pp. , Oak Ridge, TN, NNSA, Oak Ridge TN April (2010).
 145. D L. Olson, B. Mishra, J. E. Jackson, J. C. Madeni, “In Situ Electronic-Elastic Magnetic Wave Analytical Metallurgical Laboratory”, ICWJM 20109, Conf. III Soldadura y Union de Materiales, Proc. ICWJM 2010, Conf. III., 9-11 August 2010, PUC, Lima, Peru.
 146. L. Jain, C. Williamson, S. M. Bhola, J. R. Spear, B. Mishra, D. L. Olson and R. Kane, “Microbiological and Electrochemical Evaluation of Corrosion and Microbiologically Influenced corrosion of Steel in Ethanol Fuel Environments”, NACE 2010, paper 10070, p1-11 (2010).
 147. T. Reyes, S. Bhola, D.L. Olson and B. Mishra, “Study of Corrosion of Super Martensitic Stainless Steel under Alternating Current in Artificial Seawater”, 2011 Annual NACE Conf. – CORROSION 2011, Paper # 11341, pp. 1-12, Houston, TX [2011].
 148. Hani S. Alhabeeb, B. Mishra and D. L. Olson. “Water Quality Effects during Hydrostatic –Testing on Corrosion Behavior of AISI 316L Austenitic Stainless Steel Piping”, NACE 2011, Conf. Paper # 19421, NACE, Houston, TX, (2011).
 149. H. H. Almahamedh, C. Williamson, J. R. Spear, B. Mishra, and D. L. Olson, “Identification of Microorganisms and their Effects on Corrosion of Carbon Steel Pipelines”, NACE2011 Conf. paper # 18965, NACE, Houston, TX, (2011).
 150. H. H. Almahamedh, C. Williamson, J. R. Spear, B. Mishra, and D. L. Olson, “Sulfate Reducing Bacteria Influenced Corrosion of Carbon Steel-Nutrient Effects”, NACE 2011 Conf. Paper # 11232, NACE, Houston, TX, (2011).
 151. T. Reyes, B. Mishra, and D.L. Olson, “Corrosion of Super Martensitic Stainless Steel due to Alternating Current in Artificial Seawater: DC Response”, Proc. MEGARUST 2011 Conf., Norfolk, VA, [2011].
 152. R. Bhola, S. M. Bhola, B. Mishra and D. L. Olson, “Electrochemical Characterization of a Low Modulus TNZT Titanium Alloy in Phosphate Buffer Saline Solution using EIS for Biomedical Implant Applications”, Conf. Paper # 19260, NACE 2011, Houston, TX, (2011).
 153. T. Reyes, B. Misha, D. L. Olson, “Corrosion of Super Martensitic Stainless Steel due to Alternating Current in Artificial Sea Water: DC Response”, Proc. MEGARUST 2011 Conf., Norfolk, VA, [2011].

154. T. Reyes, D.L. Olson and B. Mishra, "Corrosion of 13Cr Super Martensitic Stainless Steel in Artificial Seawater under Alternating Current and Alternating Magnetic Fields", Proc. 2011 DoD Corrosion Conference, La Quinta, CA, [2011].
155. K. Koenig, A. Lasseigne, J. E. Jackson, D. L. Olson, B. Mishra, "A Fundamental Analysis of Low Frequency Impedance Phenomenon: Application to Hydrogen Content Assessment of Coated Linepipe Steel Weldments", Proc. QNDE, Vol. 30B, AIP, Melville, NY, (2011).
156. S. Meir, D.L. Olson, B. Mishra, S. Liu, K. Coleman and R. Hellner, "Assessment of Steel Microstructure Evolution During Thermal Treatment by Magnetic and Electronic Techniques", Proc. QNDE, Vol. 30B, pp 1120-1127, AIP, Melville, NY. (2011).
157. R. Bhola, S. M. Bhola, B. Mishra and D. L. Olson, "Electrochemical Characterization of a Low Modulus Ti-35.5Nb-7.3Zr-5.7Ta Alloy in a Simulated Body Fluid Using EIS for Biomedical Applications", Proc. QNDE, Vol. 30B, pp 1184-1191, AIP, Melville, NY. (2011).
158. P. Kiattisaksri, J. Poncelow, S. Meir, J.C. Madeni, S. Liu, B. Mishra and D.L. Olson, "Assessment of Microstructure in Grade T22 Alloy Steel by Nondestructive Tools", Proc. QNDE, Vol. 30B, pp. 1112-1119, AIP, Melville, NY. (2011).
159. T. Reyes, S. Bhola, D. L. Olson, B. Mishra, "Study of Corrosion of Supermartensitic Stainless Steel under Alternating Current in Artificial Sea Water with Electrochemical Impedance Spectroscopy", Proc. QNDE . Vol. 30B, pp 1241-1248, AIP, Melville, NY. (2011).
160. E.A. Pfeif, Z. Jones, A. N. Lasseigne, K. Koenig, K.L. Krzywosz, E. V. Mader, S. Yagnik, B.Mishra, and D. L. Olson, "Submerged Eddy Current Method of Hydrogen Content Evaluation of Zircaloy-4 Fuel Cladding", Proc. QNDE. Vol. 30B, pp 1168-1175, AIP, Melville, NY. (2011).
161. T. W. Koenig, D. l. Olson, B. Mishra, J. C. King, J.Fletcher, L. Gerstenberger, S. Lawrence, Martin, C. Mejia, M.K Meyer, R. Kennedy, L. Hu, G. Kohse, and J. Terry, "Advanced Non-Destructive Assessment Technology to Determine the Aging of Silicon Containing Materials for Generation IV Reactors", Proc. QNDE . Vol. 30B, pp 1200-1207, AIP, Melville, NY. (2011).
162. R. Bhola, B. Mishra, S.M. Bhola & D.L. Olson, "Electrochemical Characterization of a Low Modulus Ti-Nb Beta Alloy in Phosphate Buffer Saline Solution using EIS for Biomedical Implant Applications", NACE Research in Progress Symp., Ed. Birblilis & Taylor, NACE 2011, Houston, TX, pp. 45-49, (2011).
163. R. Kennedy, T. Koenig, B. Mishra, J. Fletcher, A. Martin, J. Terry, G. Kohse, M.K. Meyer, S.K. Lawrence, D.L. Olson, J.C. King, L. Gerstenberger, C. Mejia, and L. Hu, "Advanced Nondestructive Assessment Technology to Determine the Aging of Silicon Containing Materials for Generation IV Nuclear Reactors", NACE Research in Progress Symp., Ed. Birblilis & Taylor, NACE 2011, Houston, TX, pp. 136-139, (2011).
164. C. Howard, E. Pfeif, J.Porter, B. Mishra, D.L. Olson, "Quantitative Assessment of Thermal Diffusion Using NDE". AIP Conference Proceedings, Review of Progress in Quantitative Nondestructive Evaluation, Vol. 31A. Welding Research 2012: Proceedings of the 9th International Conference. [2012].
165. F.M. Al-Abbas, J. R. Spear, A. B. Gavanluei, B. Mishra, and D. Olson, "Effects of Sulfate Reducing Bacteria on the Corrosion of X-65 Carbon steel pipeline" paper # C2012-0001140, NACE 2012, March, (2012).
166. A. Bajvani Gavanluei, F. Al-Abbas, B. Mishra and D.L. Olson, "Effects of Carbon Dioxide Partial Pressure and Strain Rate on the Susceptibility of Low Alloy Martensitic Tubular Steels used in Downhole Environments", NACE 2012, paper # ,March, (2012).
167. S. M. Bhola, R. Bhola, B. Mishra, and D. L. Olson, "Characterization of ASTM F 136, Ti-Al-V Alloy to Enhance its Biological Performance using Non Destructive Tools", Prog. QNDE Vol.31, AIP, (2012).
168. H. H. Almahamedh, D. Meegan, B. Mishra, D. L. Olson and J. R. Spear, "High Frequency

- Ultrasonic Mitigation of Microbial Corrosion”, Rev. QNDE, Vol. 31, AIP (2012).
169. F. Al-Abbas, D.L. Olson, B. Mishra and J.R. Spear, “Utilization of Nondestructive Electrochemical Techniques in Characterizing Microbiologically Influenced Corrosion (MIC) of API-51 X65 Carbon Linepipe Steel”, Rev. QNDE Vol. 31, AIP (2012).
 170. F.M. AlAbbas, C. Williamson, J.R. Spear, D.L. Olson, B.Mishra and A.Kakpovbia, “Characterization Of Microbial Communities Of Corrosion Products From Sour And Sweet Crude Oil”, The Sixth International Conference on Environmental Science and Technology, June 2012 ,Houston, Texas, USA
 171. F.M. Al Abbas, Charles Williamson, John R. Spear, David L Olson, Brajendra Mishra and Anthony E. Kakpovbia, “Iron Reducing Bacteria Influence on the Corrosion of API 55L X52 Linepipe Steel”, Proc. 6th Intl. Conf. on Environmental Science and Technology, June, 2012, Houston, Texas, USA
 172. F.M. Al Abbas, J.R. Spear, D.L. Olson, B. Mishra and A. Kakpovbia, “Could Non-Destructive Methodologies Enhance the Microbiologically Influenced Corrosion (MIC) In Pipeline Systems”, Proceeding Review of Progress in Quantitative NDE, Denver, Colorado, July 15 – 20, 2012
 173. A.B. Gavanluei, F. Al-Abbas, A. Elramady, B. Mishra, D.L. Olson, “Electrochemical Investigation of the Evolution of Interfacial Electrode Processes for Downhole Tubular Steels In CO2 Saturated Environments”, NACE 2012, Proceedings.
 174. B. Mishra, “Materials Recycling for Sustainable Mining & Metallurgy”, Proc. Mining & Metallurgy in Kazakhstan: Status And Prospects, Almaty, pp. 4-8, [2012]
 175. B. Mishra, “Corrosion Characterization of Advanced Steels for Use in Oil & Gas Industry”, Proc. Simpro, 12, 3rd Intl. Conf. on Thermo-mechanical Simulation and Processing of Steels, December 2012, Ranchi, India, pp 521-535, [2012].
 176. F.M. Al-Abbas, A.E. Kakpovbia, T.A. Al-Ghamdi, D. L. Olson, B. Mishra and J.R. Spear, “Effects of Sulfate Reducing Bacteria (SRB) on the Corrosion of Carbon Steel Pipeline” 14th Middle East Corrosion Conference and Exhibition, Bahrain, (2012).
 177. F. Al-Abbas, J.R. Spear, A.T. Kakpovbia, N.M. Balhareth, B. Mishra, and D.L. Olson “Bacterial Attachment to Metal Substrate and Its Effects On Microbiologically Influenced Corrosion (MIC) In Hydrocarbon Transporting Pipelines” Proc. of Practice in Pipeline Operations & Integrity Management Conference, Bahrain, Oil and Gas Journal, March 2012, Clarion Technical Conf., pp. 3-15, (2012).
 178. Faisal M. Alabbas and Brajendra Mishra, ‘Microbiologically Influenced Corrosion of Pipelines in the Oil & Gas Industry’, Proc. PRICM -8, TMS Publ., pp. 3441-3449, [2013].
 179. B. Mishra, ‘Corrosion Characterization of Drillpipe Steels Used in the Petroleum Industry’, Proc. PRICM-8, TMS Publ., pp. 3187-3195, [2013].
 180. Faisal M. AlAbbas, , C. Williamson, J.R. Spear, D.L. Olson, B. Mishra and A. Kakpovbia, “Corrosion of Linepipe Carbon Steel (API 5l X52) Influenced by A SRB Consortium Isolated From A Sour Oil Well”, CORROSION/ 2013, Paper #C2013-0002275, (NACE, Houston, TX,2013)
 181. Faisal M. AlAbbas, C. Williamson, J.R. Spear, D.L. Olson, B. Mishra and A. Kakpovbia, “Microbial Community Associated With Corrosion Products Collected From Sour Oil Crude and Sea Water Injection Pipelines”, CORROSION/2013 , Paper # C2013-0002248, (NACE, Houston, TX,2013)
 182. W. Alharbi, G. D. Meegan, B. Mishra, and D.l. Olson, “Utilization of Computational Modeling in Enhance NDE Experimental Assessment of High Temperature Corrosion Damage of Surface and Near Surface Furnace//Reactor Structural Materials”, Ann. Rev. QNDE 2012, AIP #. 1511, Vol. 32B, pp. 1258-1263, AIP, Melville, NY (2013).
 183. T. W. Koenig, L. Meshi, Z. Foxman, J. L. Riesterer, J. R. Kennedy, A. Landau, B.Mishra and

- D. L. Olson, "Microscopy Evaluation of Microstructural Damage and Alteration of Polytypes to Determine the Aging of Silicon Carbide", Ann. Rev. QNDE 2012, AIP #1511, Vol. 32B, pp. 1188-1195, AIP Melville NY, (2013).
184. F. Al-Abbas, A. Kakpovbia, B. Mishra, D. L. Olson and J.H. Spear, "Could Non-destructive Methodologies Enhance the Microbiologically Influenced Corrosion (MIC) in Pipeline Systems" Ann. Rev. QNDE 2012, AIP # 1511, Vol. 32B, pp. 1270-1277, AIP, Melville, NY (2013).
 185. C. T. Howard, E. A. Pfeif, J. Porter, B. Mishra, and D. L. Olson, "Quantitative Assessment of Thermal Diffusion Using NDE", Ann. Rev. QNDE 2012, AIP # 1511, Vol. 32B, pp. 1143- 1149, AIP, Melville, NY, (2013).
 186. E.A. Pfeif, C. Howard, S. Tate, S. Liu, B. Mishra, and D.L. Olson "Use of Segregation as a Weld Design Opportunity" to be published in Trends in Welding Research Proceedings of the 9th international conference, ASM, Materials Park, (2013).
 187. R. D. Mariani, D. L. Porter, V. S. Blackwood, Z. S Jones, D. L. Olson, B. Mishra, J. R. Kennedy, S. L. Hayes, "New Fuel Alloys Seeking Optimal Solidus and Phase Behavior for High Burnup and TRU Burning", Review Paper, in Proc. French Nuclear Fuel Conf. (2013).
 188. B. Mishra, 'How Critical is Recycling for Critical Materials' Sustainability?', 2014 TMS Annual Mtg., 2014 EPD Distinguished Lecture, San Diego, CA, Feb 17, 2014.
 189. Bhola SM, Alabbas FM, Bhola R, Spear JR, Mishra B, Olson DL, Kakpovbia, "Azardirachtin an Eco-friendly Corrosion Inhibitor for SRB Influenced Corrosion of X80 Linepipe Steel," Submitted to CORROSION/ 2014, (NACE, Houston, TX, 2014)
 190. Alyaa Elramady, Faisal M. AlAbbas, David L Olson, Brajendra Mishra, "The Effect of Plastic Deformations on the Corrosion susceptibility of Casing and Tubing Steels in Synthetic Formation Water and Sweet Environments," CORROSION/2014, (NACE, Houston, TX, 2014.
 191. F. M. AlAbbas, D.L Olson, B. Mishra, "The Corrosivity of Linepipe Mild Steel in an Environment Containing Microbes Cultivated from an Oil Reservoir," TMS 2014, San Diego, CA, Feb. 16-19, 2014.
 192. B. Mishra, "Sustainability of Rare Earth Metals and Compounds in the United States", Engineering Solutions for Sustainability: Materials & Resources-II, TMS 2015, Orlando, FL, Mar. 16-19, 2015.
 193. B. Mishra, "Factors Influencing Rare-Earth Metals Sustainability", Integrative Materials Design-II – Performance & Sustainability, TMS 2015, Orlando, FL, Mar. 16-19, 2015.
 194. B. Mishra and S. Gostu, "MATERIALS SUSTAINABILITY FOR ENVIRONMENT: HANDLING THE RED-MUD", Proc. of Symp. on Frontiers of Chemical Science and Engineering: Environment and Sustainable Development, China Academy of Sciences, Beijing, China, February 2016.
 195. B. Mishra and D. Apelian," The Role of Materials Science and Engineering for Sustainable Development in the 21st Century – Opportunities and Challenges", Proc. Pacific Rim Intl. Con. on Materials (PRICM 2016), Kyoto, Japan, August 2016.
 196. B. Mishra, "RECYCLING OF ENERGY MATERIALS FOR ENVIRONMENTAL MANAGEMENT", Proc. Pacific Rim Intl. Con. on Materials (PRICM 2016), Materials for Energy & Environment, Kyoto, Japan, August 2016.
 197. B. Mishra, A. Chaudhry & V. Mittal," Development of Polymer-Based Composite Coatings for the gas Exploration Industry: Polyoxometalate doped Conducting Polymer based Self-Healing Pigment for polymer coatings", Proc. Thermec 2016, Graz, Austria, May 2016.
 198. B. Mishra, "MATERIAL SUSTAINABILITY THROUGH VALUE-ADDED PRODUCTS CONVERSION FROM BAUXITE RESIDUE", Proc. Sustainable Industrial Processes Summit (SIPS 2016), Yalong Bay, Hainan, China, November 2016.

199. M. Jung and B. Mishra, "Recovery of Aluminum from the Aluminum Smelter Baghouse Dust", Proc. REWAS 2016, TMS Publication, Warrendale, PA, February 2016.
200. B. Mishra, "Improvement in Resource Productivity by Life Extension through Corrosion Control: An Educational Perspective", Proc. REWAS 2016, Springer (TMS), Eds.: Kirchain, R., Blanpain, B., Meskers, C., Olivetti, E., Apelian, D., Howarter, J., Kvithyld, A., Mishra, B., Neelameggham, N., Spangenberg, J., pp. 255-260 [2016].
201. B. Mishra and P. Eduafo, "Rare Earth Metals Recycling from Spent CFLs and Permanent Magnets", Proc. REWAS 2016, TMS Publication, Warrendale, PA, February 2016.
202. E. Lee and B. Mishra, "Effect of Heat Treatment Conditions on Microstructure, Mechanical Properties and Residual Stress in a Die-cast Al-Si Alloy", Proc. Materials Science and Technology (MS&T), TMS, October 2017.
203. K. Sundberg, R. Monroe, Y. Wang, J. Liang, D. Apelian, R. Sisson, B. Mishra, J. Yu, B. McWilliams, "From Waste Steel to Material: Agile Production Enabled by Additive Manufacturing", Scrap Supplements and Alternative Ironmaking. TMS, March 2020.
204. M. Shahabuddin, A. Powell, Y. Wang, N. Kazantzis and B. Mishra, "Cost Modeling and Life Cycle Analysis of Low-Emissions Iron Production" Symp. Advances in Ferrous Metallurgy, MS&T 2021, Columbus, OH, October 2021.
205. Wang W, Yang Z, Ge X, Sisson RD, Mishra B, Varde A, Liang J, "Machine learning tools to predict mechanical properties of steel alloys based on compositions, heat treatments and microstructures", MS&T, Columbus, Ohio. Oct. 2021.
206. M.K. Sinha, B. Mishra J. Hiscocks, B. Davis, S.K. Das, T. Grosko, "Removal of Fe and Mn impurities from molten aluminum" Circular Economy Tech Summit & Conference, Washington, DC, March 2023.

Non-refereed Publications:

1. B. Mishra and J.M. Sivertsen, "Electromigration of hydrogen and deuterium in tantalum: Isotope effect", Paper No. A83-4, TMS-AIME, Warrendale, PA, pp. 1-14, [1983].
2. B. Mishra, J.J. Moore and A.K. Sinha, "Heat treatment effect on mechanical properties and microstructure of Inconel X-750", Paper No. A84-44, TMS-AIME, Warrendale, PA, pp. 1-13, [1984].
3. B. Mishra and J.J. Moore, "Effect of sulfur and heat treatment on the stress corrosion cracking of Inconel X-750 under simulated PWR condition", Paper No. A86-40, TMS- AIME, Warrendale, PA, pp. 1-22, [1986].
4. P. Ferro, B. Mishra and W.A. Averill, "Electroreduction of calcium oxide", LIGHT METALS 91, Ed. E. Rooy, p 1197-1206, TMS Publication, Warrendale, PA, [1991].
5. B. Mishra, P.D. Ferro, D.L. Olson, J.J. Moore and W.A. Averill, "Electrowinning of calcium for in-situ direct reduction of metal oxides", Proc. 180th Meeting of the Electrochemical Society, Phoenix, AZ, p. 284-5, [1991].
6. S. Pritchett, B. Mishra, J.J. Moore, D.L. Olson & A.M. Murray, " Combustion synthesis of calcium and lithium gallides", TMS Reactive Metals Comm., LIGHT METALS 92, p 1287-1294, TMS Publication, Warrendale, PA, [1992]
7. A. Raraz, B. Mishra, D.L. Olson, J.J. Moore & W.A. Averill, " Optimization of process efficiency in cerium electrorefining", Rare Earths: Resources, Science, Technology and Applications, Ed. R.G. Bautista & N. Jackson, p 337-350, TMS Light Metals Division, EMPMD and AIMM, Warrendale, PA, [1992].
8. P. Ferro, B. Mishra, D.L. Olson, J.J. Moore & W.A. Averill, " Recovery of calcium from the effluent of direct oxide reduction process", Residues and Effluent: Processing & Environmental Considerations, Ed. Reddy et al., p 539-550, TMS Extraction and Processing Division, Warrendale, PA, [1992].

9. B. Mishra, D.L. Olson and W.A. Averill, "Processing of effluent salt from the direct oxide reduction process", Proc. Intl. Waste Processing and Recycling in Mining and Metallurgical Industries, Ed. Rao et al., p 279-291, Can Inst. Metals, Montreal, Quebec, [1992].
10. B. Mishra, D.L. Olson and C.E. Cross, "Selection of resilient constituent parameters for achieving composite properties", Proc. Intl. Conf. on Advanced Synthesis of Engineered Structural Material, Ed. J.J. Moore et al., pp 125-32, ASM Intl., Materials Park, OH, [1992].
11. S. Pritchett, B. Mishra, J.J. Moore and A.M. Murray, "Salt scrub alloys for Actinide recovery", EPD CONGRESS 1993, Ed. J.P. Hager, pp. 1019-1034, Joint LMD Aluminum Committee/EPD Recycling Committee, TMS, Warrendale, PA, [1993].
12. A. Raraz, B. Mishra and W.A. Averill, "Application of surrogate materials in process study of actinides", LIGHT METALS 1993, Ed. S.K. Das, pp. 1119-1125, LMD Reactive Metals Committee, TMS, Warrendale, PA [1993].
13. P.D. Ferro, B. Mishra, D.L. Olson and W.A. Averill, "Process optimization for electrowinning of calcium", LIGHT METALS 1993, Ed. S.K. Das, pp. 1129-1136, LMD Reactive Metals Committee, TMS, Warrendale, PA, [1993].
14. D.L. Olson, G.R. Edwards and B. Mishra, "The chemical constitution of welding consumables", Proc. Jt. Intl. Conf. on Health and Safety in Welding and Related Processes, Crown Mines, South Africa, pp. 1-23, March 22-24, 1993.
15. B. Mishra and J.J. Moore, "Application of Ca-Ga intermetallic in actinide recovery process", Proc. Intl. Symp. Developments and Appl. of Ceramics & New Metal Alloys, Ed. R.A.L. Drew & H. Mostaghaci, Canadian Inst. Metals, pp.447-458, Montreal, Quebec, [1993].
16. B. Mishra and J.J. Moore, "Combustion synthesis of LiAl intermetallic", Proc. Intl. Symp. Developments and Appl. of Ceramics & New Metal Alloys, Ed. R.A.L. Drew & H. Mostaghaci, Canadian Inst. Metals, pp.423-435, Montreal, Quebec, [1993].
17. S. Govindarajan, K. Monroe, J.J. Moore, B. Mishra and D. Olson, "Combustion Synthesis of MoSi₂ and MoSi₂-Composites", Proc. Symp. on High Temperature Silicides and Refractory Alloys, Ed. C.L. Briant et al., MRS Publication- Vol. 322, Boston, MA, pp. 113- 118, [1993].
18. B. Mishra and W.A. Averill, "Verification of the behavior of RCRA constituents in pyrochemical processes", Actinides Processing: Methods & Materials, Ed. B. Mishra & W.A. Averill, p. 187-198, TMS Publication, Warrendale, PA, [1994].
19. B. Mishra, D.L. Olson and P.D. Ferro, "Application of ceramic membranes in molten salt processing of radioactive wastes", Actinides Processing: Methods & Materials, Ed. B. Mishra & W.A. Averill, p. 233-248, TMS Publication, Warrendale, PA, [1994]
20. B. Mishra and J.J. Moore, "Actinide recovery from waste processing salts", Extraction and Processing for the Treatment and Minimization of Wastes, Ed. Hager et al., p. 895-912, TMS Publication, Warrendale, PA, [1994].
21. B. Mishra, D.L. Olson and W.A. Averill, "Pyrochemical treatment of radioactively contaminated salt wastes", Proc. Intl. Symp. on Resource Conservation & Environmental Technologies in Metallurgical Industries, Ed. P. Mahant, C. Pickles and W.-K. Lu, pp. 143-156, Montreal, Quebec, [1994].
22. B. Mishra, D.L. Olson and J.J. Moore, "Pyrochemical processing of waste salts", Metallurgical Processes for the Early 21st Century: Vol 1. Basic principles, H.Y. Sohn ed., TMS Publications, Warrendale, PA, 563-582, [1994].
23. B. Mishra and J.J. Moore, "Recovery of reactive metals from process effluent", Metals & Materials Waste Reduction, Recovery and Remediation, Liddell, Orth and Bautista, eds., TMS Publication, Warrendale, PA, pp. 31-45, [1994].
24. B. Mishra, A. Raraz, D.L. Olson and W.A. Averill, "Optimization of plutonium electrorefining through modeling and model materials", Trace & Reactive Metals: Processing & Technology,

- Reddy and Mishra, eds., TMS Publication, Warrendale, PA, pp. 153-172, [1995].
25. B. Mishra, D.L. Olson and J.J. Moore, "Molten salt processing of radioactive waste", Proc. New Remediation Technology in the Changing Environmental Arena" Ed. Reddy, et al., SME Publication, Denver, CO, pp. 185-190, Chapter 26, [1995].
 26. B. Mishra, S. Charoenvilaisiri and J.J. Moore, "Development of glass reinforced high strength steel composite", Advanced Structural Fiber Composites, Advances in Science & Technology, Vol 7, Ed. P. Vincenzini, pp. 337-344, Techna SRL, Florence, Italy, [1995].
 27. B. Mishra, S. Govindarajan, K. Monroe, J.J. Moore and D.L. Olson, "Oxidation resistant coatings for high temperature applications of molybdenum", Advances in Inorganic Films & Coatings, Advances in Science & Technology, Vol 5, Ed. P. Vincenzini, pp. 345- 352, Techna SRL, Florence, Italy, [1995]
 28. S. Govindarajan, J.J. Moore, E.A. Levashov, B. Mishra and D.L. Olson, "Composite thin films produced using physical vapor deposition of composite targets", Processing & Fabrication of Advanced Materials IV, Ed. T.S. Srivatsan and J.J. Moore, pp. 275- 286, TMS Publication, Warrendale, PA, [1996].
 29. S. Thavornnun, B. Mishra, J.J. Moore and D.L. Olson, "Development of stainless steel clad alloy steel bars", Processing & Fabrication of Advanced Materials IV, Ed. T.S. Srivatsan and J.J. Moore, pp. 79-96, TMS Publication, Warrendale, PA, [1996].
 30. S. Charoenvilaisiri, B. Mishra, J.J. Moore and D.L. Olson, "Glass fiber reinforced formable steel composites", Processing & Fabrication of Advanced Materials IV, Ed. T.S. Srivatsan and J.J. Moore, pp. 479-490, TMS Publication, Warrendale, PA, [1996].
 31. S. Govindarajan, H.J. Feng, J.J. Moore, B. Mishra, D.L. Olson and E.A. Levashov, "Reactive synthesis of composite targets used in physical vapor deposition of thin films", Processing & Fabrication of Advanced Materials IV, Ed. T.S. Srivatsan and J.J. Moore, pp. 795-802, TMS Publication, Warrendale, PA, [1996].
 32. C. Lensing, D.L. Olson, B. Mishra and J.Selle, "Evaluation of Erbium as molten plutonium containment material", LIGHT METALS 1996, ed. Hale, TMS Publication, Warrendale, PA, pp. 1203-1209, [1996].
 33. C. Lensing, D.L. Olson and B.Mishra, "Kinetics of erbium oxide corrosion in molten cerium, Materials Processing Fundamentals, LIGHT METALS 1997, Huglen, Ed., TMS Publications, Warrendale, PA, pp. 1220-1225, [1997].
 34. A.M. Peters, J.J. Moore and B. Mishra, "A Comprehensive examination of the Cr-N system processed by cathodic arc evaporation", Symp. on Hard Coatings and Vapor Deposition Technology, ICMCTF 97, April 1997, San Diego, CA.
 35. J.D. Olivas, D.L. Olson and B. Mishra, "Prediction of bond strength in solid state bonding processes", Recent Advances in Metallurgical Processes, Ed. Sastry, Dwarakadas, Iyengar and Subramanian, pp. 1025-1034, New Age Intl Publishers, New Delhi, India, [1997].
 36. D.L. Olson and B. Mishra, "Review of liquid lithium corrosion of ferrous containment materials, Symp. on Lithium, LIGHT METALS 1998, ed. B. Welch, TMS Publications, Warrendale, PA, pp. 1309-317, [1998].
 37. B. Mishra, D.L. Olson and C.S. Eberle, "Corrosion of Non-ferrous Materials in liquid lithium and lithium chloride, LIGHT METALS 1998, ed. B. Welch, TMS Publications, Warrendale, PA, pp. 1349-358, [1998].
 38. A.M. Peters, J.J. Moore and B. Mishra, "Tribological Properties of Graded Cr-N Coatings Deposited by Cathodic arc Evaporation, Symp. on Hard Coatings and Vapor Deposition Technology, ICMCTF 98, April 1998, San Diego, CA.
 39. B. Mishra, D.L. Olson and A. Raraz, "Modeling Studies in Molten Salt Electrorefining of Plutonium, Milton Blander Symp. on Thermodynamic predictions and Applications, 1999 TMS Annual Meeting, San Diego, CA, March 1-4, 1999.

40. B. Mishra, D.L. Olson and D. Fazzina, "Development of Hardfacing Consumable Material from Iron Carbide, Inaugural Symp. for Surface Engineering, 1999 TMS Annual Meeting, San Diego, CA, March 1-4, 1999.
41. F.M. Kustas, B. Mishra and J. Zhou, "Metal/Carbide Co-sputtered Wear Coatings, Symp. on Wear Resistance of ceramic, Metallic and Composite Coatings, ICMCTF 99, San Diego, CA, April 1999.
42. W.A. Grant and B. Mishra, "Corrosion Characterization of Decorative Coatings Deposited by Cathodic Arc Evaporation, Symp. No. F-4, ICMCTF 99, San Diego, CA, April 1999.
43. B. Mishra and D.L. Olson, "Processing of Inorganic Salt Wastes for Stabilization of Radioactive Components, Ann. Meeting of the Amer. Ceramic Society, San Diego, CA, March 1998.
44. A.M. Peters, J.J. Moore, I. Reimanis and B. Mishra, "Cathodic Arc Evaporation of Functionally Graded Chromium Nitride Thin Films for Wear Resistant and forming Operations, Proc. 5th Intl. Symp. on Functionally Graded Materials, Dresden, Germany, July 1998.
45. B. Mishra, "Red-Mud: Products, Processes and Possibilities, Key-note Lecture at the Intl. Conference on Metallurgical Technologies, Banaras Hindu University, PJC-BHUMET, Varanasi, India, December 11, [1998].
46. B. Mishra and D.L. Olson, "Review of Beryllium Metallurgy, Symp. on Review of Extraction, Processing and Applications of Reactive Metals, 1999 TMS Annual Meeting, San Diego, CA, March 1-4, 1999. TMS On-line publication.
47. B. Mishra and S. Benjamin, "Review of Calcium Metallurgy, Symp. on Review of Extraction, Processing and Applications of Reactive Metals, 1999 TMS Annual Meeting, San Diego, CA, March 1-4, 1999. TMS On-line publication.
48. B. Mishra and P. termsuksawad, "Review of Niobium Metallurgy, Symp. on Review of Extraction, Processing and Applications of Reactive Metals, 1999 TMS Annual Meeting, San Diego, CA, March 1-4, 1999. TMS On-line publication.
49. B. Mishra and D.L. Olson, Corrosion of Refractory Metals and Ferrous Alloys in Molten Metals and Salt Media, 14th Intl. Corrosion Institute Congress, Cape Town, South Africa, Oct 1999.
50. F.M. Kustas, B. Mishra and J. Zhou, "Co-sputtered Titanium Carbide-Tungsten Wear Coatings", Progress in Surface Engineering, Materials Solution -ASM, Cincinnati, OH, November 1999.
51. D.L. Olson and B. Mishra, "A Review of the Welding Metallurgy of Refractory Metals and Alloys, Intl. Conf. on Refractory and Reactive Metals – ICRM 99, BARC, Bombay, India, July 1999.
52. B. Mishra and D.L. Olson, "Corrosion of Refractory Metal Alloys in Molten Metals and Salt Media, Intl. Conf. on Refractory and Reactive Metals – ICRM 99, BARC, Bombay, India, July 1999.
53. J. Jenkins and B. Mishra, "Deep Water Corrosion Fundamentals, Intl. Workshop on Corrosion Control for Marine Structures and Pipelines, Galveston, TX, February 1999.
54. A.M. Peters, J.J. Moore and B. Mishra, "The Relationships between critical load (adhesion), hardness and stoichiometry of Cr-N thin films deposited by cathodic arc evaporation, Proc. 12th Intl. Surface Modification Technologies Conf., ASM Publications, Materials Park, OH, [1998].
55. B. Mishra and M. Slavik, "Application of processed red-mud in blast furnaces, 2nd Intl. Conf. On Recent Advances in Mineral and Materials Resources RAMM 99, Penang, Malaysia, May 1999.
56. F. Kustas, B. Mishra & J. Zhou, "Performance comparisons between carbide & metal co-

- sputtered coatings, Surface Engineering in Materials Science-I, Ed. Seal, Dahotre, Mishra & Moore, pp. 433-444, TMS Publication, Warrendale, PA, [2000].
57. B. Mishra, D. Kirkpatrick & M. Slavik, "Pyrometallurgical extraction of alumina and iron from red mud, EPD Congress 2000, Ed. P.R. Taylor, TMS Publication, Warrendale, PA, pp. 369-381, [2000].
 58. B. Mishra, I. Maroef and D.J. Hebditch, "Magnesium Decladding of Uranium by Molten Salt Electrorefining", Intl. Conf. on Molten Salts and Fluxes-2000, Sweden-Finland, June 2000. CD-ROM Pub.
 59. F.M. Kustas, B. Mishra and J. Zhou, "Multifunctional Co-sputtered Cermet Coatings", Symp. No. F-4, ICMCTF 2000, San Diego, CA, April 2000.
 60. F.M. Kustas, B. Mishra and J. Zhou, "Performance Comparison between Various Carbide & Metal Co-sputtered Coatings", Surface Engineering in Materials Science: Coating/Films Properties Evaluation, 2000 TMS Annual Meeting, Nashville, TN, March 2000.
 61. J.J. Moore, E. Mateeva, B. Mishra and M. Loch, "Characterization of Low Pressure Plasma Spray Coatings", ITSC Conference, Montreal, Canada, July 2000.
 62. E.J. Young, E. Mateeva, B. Mishra, J.J. Moore and M. Loch, "Low Pressure Plasma Spray Coatings", Symp. H4-11, ICMCTF 2000, San Diego, CA, April 2000.
 63. W. Grant and B. Mishra, "Corrosion Characterization of Decorative Coatings Deposited by Cathodic Arc Evaporation, Symp. No. F-4, ICMCTF 2000, San Diego, CA, April 2000.
 64. S. Carrera, K. Kearns, B. Mishra, G. Mustoe, P. Reid and J.J. Moore, "The Development of a surface Engineered Coating System for Aluminum Pressure Die Casting Dies, DOE- NADCA Conference, 2001.
 65. S. Carrera, G.G.W. Mustoe, B. Mishra and J.J. Moore, "Finite Element Modeling of Coating Architectures for Aluminum Die Casting", presented at Surface Engineering: Science and Technology II, TMS, (2002)
 66. K. Kearns, B. Mishra, P. Ried, J. Moore, "Determining Wettability and Interfacial Reactions Between Liquid Aluminum Alloys and Selected Die Coatings", Surface Engineering: Science and Technology II, published by TMS, (2002)
 67. J. Goldsmith, E. Sutter, J. Moore, B. Mishra, M. Crowder, "Relative Nanomechanical and Raman Studies of Diamond-Like Carbon Thin Films", Surface Engineering: Science and Technology II, published by TMS, (2002).
 68. B. Mishra, "Application of Molten Salts in Metals Production", Proc. Intl. Yazawa Symp, 2003 TMS Annual Meeting, San Diego, CA, March 2003, [Key-note].
 69. C. Muratore, J.A. Rees, B. Mishra and J.J. Moore, "The Influence of Pulsing and Helium Additions on Particle Energy Distributions on the Structure and Properties of Reactively Sputtered Titanium Oxide and Titanium Nitride Thin Films", Surface Engineering in Materials Science - II, 2003 TMS Annual Meeting, San Diego, CA, March 2003.
 70. D. Zhong, S. Carrera, A.M. Peters, O. Salas, B. Mishra and J.J. Moore, "Development of Surface Engineered Coatings for Dies Used in Material Processing", Surface Engineering in Materials Science - II, 2003 TMS Annual Meeting, San Diego, CA, March 2003.
 71. F. Kustas, B. Mishra and J. Sinchak, "Tribological Performance of Titanium Carbide & Cr Co-Deposited Thin Films", Surface Engineering in Materials Science - II, 2003 TMS Annual Meeting, San Diego, CA, March 2003.
 72. D.L. Olson, A.N. Lasseigne, M. Marya and B. Mishra, "Fundamental Models for Corrosion in Fusion Welds-Emphasis on Interfacial And Gradient Effects", Proc. Intl. Conf. Joining of Advanced & Specialty Materials-V, ASM Materials Solutions Conference, Columbus, H, October 2002.
 73. J. Sinchak, B. Mishra, Z. Zhou and F.M. Kustas, "Tribological Applications Development of Enhanced Tribological Properties in TiC-W Cermet Thin Film Coatings", Surface

- Engineering Congress – 2004, ASM International, Orlando, FL, [2004].
74. B.R. Anton and B. Mishra, “Processes Performance of Decorative PVD ZrN on Hexavalent and Trivalent Chromium Electrodeposits”, Surface Engineering Congress – 2004, ASM International, Orlando, FL, [2004].
 75. D. Zhong, J.J. Moore, B. Mishra, E. Ievashov and K.H. Kim, “PVD: Tribological Applications Invited: Nano-engineered, Nanocomposite PVD Coatings for Superior Tribological Properties,” Surface Engineering Congress – 2004, ASM International, Orlando, FL, [2004].
 76. Y. D. Park, A. N. Lasseigne-Jackson, J. E. Jackson, B. Mishra, D. L. Olson, and T.Koenig, “Characterization of Weldments Using Thermoelectric Power Measurements”, Proceeding of Korean Intl. Welding Conf. 2007, Seoul, Korea (2007).
 77. J. Jackson, D.L. Olson, B. Mishra, A. Lasseigne, “Development of Advanced Thermal Barrier Coatings for Mo-Si-B Materials”, 8th Global Innovations Symposium: Trends in Materials and Manufacturing Technologies for Energy Production, TMS Publications, Warrendale, PA, Orlando, FL, Feb. 2007.
 78. A. Lasseigne, D.L. Olson, B. Mishra, J. Jackson, “Development of Non-Destructive Techniques for Material Characterization of Advanced Hydrogen Storage Materials”, 8th Global Innovations Symposium: Metal Powders for Energy Production and Storage Applications and Symp. On Materials for Clean Power Systems II: Hydrogen Storage, TMS Publications, Warrendale, PA, Orlando, FL, Feb. 2007.
 79. C. Sangphagdee, D. L. Olson and B. Mishra, “Torsional Fatigued Specimens Simulating Aging of Neutron Irradiated Type 316 Stainless Steel Assessed by Thermoelectric Power Probe, Thermal Analysis and Transmission Electron Microscopy Techniques”, in preparation for publication, (2007).
 80. J. Lin, J.J. Moore, B. Mishra, M. Pinkas, W.D. Sproul, J.A. Rees, “Effect of Pulsing Parameters on the Pulsed Closed Field Unbalanced Magnetron Sputtering of Chromium Aluminum Nitride Coatings”, International Symposium on Sputtering and Plasma Process, June, 2007, Kanazawa, Japan.
 81. J. Lin, B. Mishra, M. Pinkas, W.D. Sproul, J.A. Rees, J. J. Moore, “Structure and Properties in Pulsed Closed Field Unbalanced Magnetron Sputtering Deposited Titanium Carbide-Carbon Thin Films”, the 6th Pacific Rim International Conference on Advanced Materials and Processing, Nov, 2007, Jeju, Korea.
 82. D.L Olson, B. Mishra, S. Liu, A.N. Lasseigne-Jackson, J.E. Jackson, K. M.-S. Koenig, J.A. Roubidoux and R.H Hellner, “Advanced Quantitative Non-Destructive Assessment of Heat Treated 91 and 92 Steel Boiler Tubes, in Proc of Grade 91/92 Steel Workshop on grade 91/92 Boiler Steel,” Clearwater, Florida, April 7-9 2008, Electric Power Research Institute, EPRI, Charlotte, N.C. (2008)
 83. D.L. Olson, T.W. Koenig, S. Liu, B. Mishra, J. Scott and K. Moline, “ Development of Advanced Welding Consumables for Nuclear Reactor Construction Repair Based on Today's Knowledge of Radiation Material Interaction,” in Proc. EPRI Welding Conference, Ft. Myers, Florida, June, 2008, EPRI, Charlotte, N.C. (2008).
 84. M.S. Heilig, B. Mishra, M. Marya, D.L. Olson, Development of High Interstitial Stainless Steels for Down-Hole Drilling Applications, Proceedings of the Third International Conference on Processing Materials for Properties, TMS, Warrendale, PA, Proceedings of TMS PMP-III Conference, pp 1- 7, Bangkok, Thailand, December 2008.
 85. A. Bajvani, F. Al-Abbas, B. Mishra and D.L. Olson, “Stress Corrosion Cracking Observation in API G-105 Grade Drill Pipe Steel at 125-175C in CO₂ Containing Environment”, Symp. On Environmentally Assisted Cracking of Materials, MS&T 2011, pp. 1209-1217, Columbus, OH, October 2011.
 86. F. Al-Abbas, A. Bajvani, D. Olson, B. Mishra, A. Kakpovbia, J. Spear and T. Al-Ghamdi,

- "The Influence of Sulfate Reducing Bacterial Metabolic Reactions on the Corrosion Behavior of API-5L X65 Carbon Steel Pipeline", Symp. on Localized Corrosion- Measurement, Mechanisms and Mitigation: Assorted Effects", MS&T 2011, pp. 1334- 1345, Columbus, OH, October 2011.
87. H. Almahamedh, D. Meegan, B. Mishra and D. Olson, "Mitigation of Microbiologically Influenced Corrosion Using High Frequency Ultrasonic Techniques", Symp. on Localized Corrosion – Measurement, Mechanisms and Mitigation: Assorted Effects", MS&T 2011, Columbus, OH, October 2011.
 88. F. Al-Abbas, A. Bajvani, D. Olson, B. Mishra, J. Spear, and A. Kakpovbia, "The Role of Bacterial Attachment to Metal Substrate and its Effect on Microbiologically Influenced Corrosion (MIC) in Transporting Hydrocarbon Pipelines, "Symp. on Surface Properties of Biomaterials: Antimicrobial Coatings and Surface Analysis, MS&T 2011, Columbus, OH, October 2011.
 89. R. Bhola, R. Ayers, B. Mishra, D. Olson, and T Ohno, "XPS and Cellular Characterization of Surface Anodized Titanium Alloys for Dental Implant Applications", Symp. on Surface Properties of Biomaterials: Antimicrobial Coatings and Surface Analysis, MS&T 2011, Columbus, OH, October 2011.
 90. S. Walid, B. Palmer and B, Mishra, 'Development and characterization of high strength steel for down-hole application in sour environment with superior corrosion and wear resistance', Qatar Foundation Annual Research Conference, Paper # QF-ARC-D-13- 01047, Doha, Qatar, December 2013.
 91. B. Mishra, 'Critical Materials Recycling for Resource Sustainability', Presented at Amer. Inst. of Chem. Engineers Ann. Mtg., San Francisco, Nov. 3-6, 2013.
 92. B. Mishra, 'Opportunities for Recycling of Critical Materials for Sustainability', Presented at the Third EU-US-Japan Trilateral Conference on Critical Materials: Towards New Models in Efficient Management of Critical Materials, Brussels, Belgium, May 29-30, 2013.
 93. B. Mishra, 'Materials Manufacturing from Secondary Resources', 3rd Annual International Conference on Materials Science, Metal & Manufacturing (M3 2013), Bangkok, Thailand, September 9-10, 2013.
 94. B. Mishra, 'Corrosion overview: Advanced Steels in the Oil & Gas Industry', Symp. On Advanced Materials and Reservoir Engineering for Extreme Oil & Gas Environments, 2013 TMS Annual Mtg., San Antonio, TX, March 11-15, 2013.
 95. Faisal M. AlAbbas, Anthony E. Kakpovbia, John R. Spear, David L Olson, Brajendra Mishra, "Enhancement of Sulfate Reducing Bacteria (SRB) Influenced Corrosion in Presence of Static Magnetic Fields," Proc. 15th Middle East Corrosion Conference 2013, Bahrain, [2013]
 96. Faisal M. AlAbbas, Anthony E. Kakpovbia, John R. Spear, David L Olson, Brajendra Mishra, "Biodiversity Associated with Sweet Crude and Seawater Injection Systems: Implication for Microbiologically Influenced Corrosion," Proc. 15th Middle East Corrosion Conference 2013, Bahrain, [2013].
 97. Y. Wang, K. Sundberg, J. Liang, D. Apelian, B. Mishra, R. Sisson, J. Yu, B. McWilliams, "From Waste Steel to Material: Agile production enabled by additive manufacturing", SERDP and ESTPC Symposium. Dec. 2020 (virtual)
 98. Y. Xu; B. Mishra and S. Narra, "Effects of interlayer dwell time on microstructure of maraging steel 250 thin walls fabricated via wire arc additive manufacturing", Annual TMS Meeting, Anaheim, CA, March 2022.
 99. Q. Ding, B. Mishra, A.C. Powell and K. Karayagiz, "Cycling Corrosion Testing of Al-Mg Friction Stir Welded Bimetallic Joints," 2021 TMS Annual Meeting (Virtual), March 2021.
 100. Q. Ding, K. Karayagiz, B. Mishra, A.C. Powell and D. Leonard, "Corrosion and Mechanical Characterization of Friction Stir Welded Joints between Aluminum and Magnesium Alloys",

2022 TMS Annual Meeting, Anaheim, CA, March 2022.

Presentations (with published abstracts in Conf./Symp.):

1. B. Mishra, A.K. Sinha and J.J. Moore, "Influence of age-treated fine-scale microstructure on the fracture behaviour of Inconel X-750", VI Intl. Conf. on Fracture, New Delhi, India, December 1984.
2. B. Mishra, "Inconel X-750: Selection of heat treatment for PWR Applications, "Seminar on Advances in Metal Sciences, Calcutta, India, September 1988.
3. S. Govindarajan, Amit Chatterji and B. Mishra, "Physical and mathematical Modelling: experiences at Tata Steel" SCANHEAT, Lulea, Sweden, September 1988.
4. B. Mishra, R. Jha and S.K. Singh, "Development of marine corrosion resistant structural steel under Indian conditions", 42nd IIM Annual Meeting, New Delhi, India, November 1988.
5. B. Mishra, R. Jha and N. Gope, "Extra-deep drawing quality steel: Establishment of process parameters", 42nd IIM Annual Meeting, New Delhi, India, November 1988.
6. R. Dutta and B. Mishra, "Mathematical modelling of Corex Process: Relevance under Indian condition" 43rd IIM Annual Meeting, Calcutta, India, November 1989.
7. D.L. Olson, B. Mishra, J.J. Moore and W.A. Averill, "Optimization of process parameters for the electro-winning of calcium", 10th Pyrochemical Workshop, Charleston, SC, January 1991.
8. B. Mishra, D.L. Olson, J.J. Moore and C.A. Nannie, "Optimization of process parameters for the electro-refining of cerium", 10th Pyrochemical Workshop, Charleston, SC, January 1991.
9. J.J. Moore, B. Mishra, D.L. Olson, and A.M. Murray, "Combustion synthesis of intermetallic and ceramic materials and its application to the synthesis of gallium salt scrub reduction alloys", 10th Pyrochemical Workshop, Charleston, SC, January 1991.
10. W.A. Averill, D.L. Olson and B. Mishra, "Solubility studies of the calcium-calcium oxide/calcium chloride system", Molten Salt Chemical Technology Conference, France, July 1991.
11. B. Mishra, D.L. Olson, J.J. Moore and C.A. Nannie, " Optimization of parameters in electrorefining of cerium", 30th Annual Conference of Metallurgists and 21st Annual Hydrometallurgical Meeting of CIM, Ottawa, Ontario, Canada, August 1991.
12. J.J. Moore, B. Mishra, D.L. Olson, and A.M. Murray, "Synthesis of gallium salt scrub reduction alloys", 30th Annual Conference of Metallurgists and 21st Annual Hydrometallurgical Meeting of CIM, Ottawa, Ontario, Canada, August 1991.
13. P. Ferro, D.L. Olson and B. Mishra, "Electrowinning of calcium from the effluent of direct oxide reduction of plutonium", 11th Pyrochemical Workshop: Direct Oxide Reduction, Chicago, IL, November 1991.
14. A.D. Raraz, B. Mishra and D.L. Olson, "Justification of cerium as a surrogate for electrorefining studies of plutonium", 11th Pyrochemical Workshop: Electrorefining, Chicago, IL, November 1991.
15. S. Pritchett, J.J. Moore and B. Mishra, "Synthesis of alloys for salt scrub reduction process", 11th Pyrochemical Workshop: Molten Salt Extraction, Chicago, IL, November 1991.
16. B. Mishra, D.L. Olson, J.J. Moore and W.A. Averill, "Value of the use of surrogate materials for process modifications", Waste Minimization Division's Waste Reduction Conference VIII, Department of Energy, Albuquerque, NM, March 1992.
17. S. Pritchett, B. Mishra and J.J. Moore, "Combustion synthesis of alloys for pyrochemical processing of plutonium", 94th Annual Meeting of the American Ceramic Society, Minneapolis, MN, April 11-16, [1992].

18. A.D. Raraz, B. Mishra and W.A. Averill, "Cerium as a surrogate for electrorefining studies of plutonium, 16th Annual Actinide Separation Conf., Estes Park, CO, May 11-14, [1992].
19. B. Mishra, S. Pritchett and W.A. Averill, "Chlorination of cerium dioxide for study of pyrochemical processes", 16th Annual Actinide Separation Conf., Estes Park, CO, May 11-14, [1992].
20. S. Pritchett, B. Mishra and J.J. Moore, "Combustion synthesis of LiAl intermetallic", AEROMAT 92, Anaheim, CA, May 18-21, [1992].
21. B. Mishra, R. Jha and K.C. Bannerjee, " Corrosion problems in coke ovens and by-products plants at Tata Steel", 1992 NACE South Central Region Conference, Denver, CO, September 1992.
22. B. Mishra, "Stress corrosion cracking of Inconel X-750 under pressurized water reactor conditions", 1992 NACE South Central Region Conference, Denver, CO, September 1992.
23. B. Mishra, S.Z. Al Hassan, M. Salama and D.L. Olson, " CO2 corrosion of steel", 1992 NACE South Central Region Conference, Denver, CO, September 1992.
24. A.G. Raraz, B. Mishra and W.A. Averill, "Application of surrogates in waste minimization", Waste Minimization, Decommissioning, Decontamination and Regulatory Compliance, 12th Annual Pyro-chemical Workshop, Oak Ridge, TN, October 26-29, 1992.
25. S.R. Pritchett, B. Mishra, J.J. Moore and A.M. Murray, "Salt scrub reduction by calcium-gallium alloy", Waste Minimization, Decommissioning, Decontamination and Regulatory Compliance, 12th Annual Pyrochemical Workshop, Oak Ridge, TN, October 26-29, 1992.
26. S. Pritchett, B. Mishra and J.J. Moore, "Synthesis of salt scrub intermetallic alloys", Proc. of Processing, Microstructure and Property Relationships in Advanced PM Processes and materials, ASM Materials Week 1992, Chicago, IL, Nov. 2-5, [1992].
27. B. Mishra, S.J. Al-Hassan and D.L. Olson, "A predictive model for corrosion of linepipe steels in CO₂-brine solution", Proc. 3rd National Congress on Corrosion, Bombay, India, December 10-11, 1992.
28. B. Mishra, "CO₂ corrosion of linepipe steel", Annual Corrosion Short Course, Rocky Mountain NACE Section, Colorado Springs, CO, Jan. 28-29, [1993].
29. B. Mishra, J.J. Moore and S. Charoenvilaisiri, "High strength glass fiber reinforced steel composite", Annual Review Meeting of the Colorado Advanced Materials Institute, Fort Collins, CO, May 6, [1993].
30. B. Mishra, "Application of Ceramic Porous Sheaths in Calcium Metal Production by Electrowinning", Poster-presentation, Gordon Research Conference on Molten salts and Liquid Metals, Wolfeboro, NH, August 15-20, 1993.
31. B. Mishra, "Influence of Microstructure on the Corrosion of Linepipe Steels in a Carbon Dioxide Environment", 1993 DOE Corrosion Contractor's Meeting, Colorado School of Mines, Golden, CO, September 15-17, 1993.
32. B. Mishra and W.A. Averill, "Behavior of RCRA Constituents in Waste Salt Treatment Processes", Molten Salt oxidation Processes, 13th Annual Pyrochemical Workshop, Albuquerque, NM, Oct 18-21, 1993.
33. W. Grant, C. Loomis, J.J. Moore, B. Mishra and A.J. Perry, "Arc ion plating of TiN", Intl. Conf. on Metallic Coatings and Thin Films, San Diego, April 1994.
34. K.A. Monroe, S. Govindarajan, J.J. Moore, B. Mishra and D.L. Olson, "Combustion synthesis of MoSi₂-SiC oxidation resistant coatings", 1994 Amer. Cer. Soc. Ann. Meeting, Indianapolis, IN, April 25-28, 1994.
35. S. Govindarajan, W. Grant, J.J. Moore, B. Mishra and D.L. Olson, "Physical Vapor Deposition [PVD] of Thin Films", New Advances in Materials Science and Engineering, AAAS Divisional Meeting, Fort Lewis College, Durango, CO, May 22-26, 1994.
36. W.A. Averill and B. Mishra, "Experimental Verification of the Thermochemical Modeling of

- Oxygen-Sparging Process", 14th Annual Pyrochemical Workshop, Boulder, CO, Oct 31-Nov 3, 1994.
37. W.A. Averill and B. Mishra, "Recent Studies in Electrowinning of calcium and Electrorefining of Cerium", Pyrochemical Processes, 14th Annual Pyrochemical Workshop, Boulder, CO, Oct 31-Nov 3, 1994.
 38. B. Mishra, D.L. Olson and S.A. David, "Electrotransport of hydrogen as postweld treatment", 1995 Annual AWS Meeting, Cleveland, Ohio, April 2-5, 1995.
 39. B. Mishra, "Determination of Hydrogen Induced Stress Cracking Susceptibility by Slow Strain Rate Tensile Testing", Hydrogen Embrittlement of Fasteners: Problems and Solutions, 1st Intl. Technology Transfer Conf., Denver, CO, May 17-19, 1995.
 40. B. Mishra, G. DePinto, S. Dunnigan and K. Schwechel, "Effect of Aluminum Sputtering Process Parameters on the Step-coverage in Micro-electronic Device Manufacturing", Symp. Advanced Materials in Micro-electronics, 1996 ICMCTF, San Diego, CA, April 1996.
 41. J. Healey, T. Phan, K. Butler and B. Mishra, "The role of reactive ion etching in microchip bond pad corrosion", Yield Enhancement, Microelectronic Manufacturing 96 Symposium, October 1996, Austin, TX.
 42. V. MacNair, T. Muth, K. Shasteen, A. Liby, G. Hradil and B. Mishra, "Advanced technologies for decontamination and conversion of scrap metal", US DOE Contractor's Conference, Federal Energy Technology Center, Morgantown, WV, October 1996.
 43. C.S. Eberle, B. Mishra, A.G. Raraz and D.L. Olson, "Performance of refractory metals and alloys in molten LiCl/Li₂O/Li/Li₃N system at 725°C", Ann. Meeting of the Amer. Physical Soc., November 1997.
 44. B. Mishra and D.L. Olson, "Processing of inorganic salt wastes for stabilization of radioactive components", Ann. Meeting of the Amer. Ceramic Society, San Diego, CA, March 1998.
 45. A.M. Peters, J.J. Moore and B. Mishra, "Tribological properties of graded Cr-N coatings deposited by cathodic arc evaporation", Symp. on Hard Coatings and Vapor Deposition Technology, ICMCTF 98, April 1998, San Diego, CA.
 46. B. Mishra, "Predictive Models for the Corrosion of Linepipe Steels in CO₂ Brine Solution", NACE- Denver Chapter, Invited Lecture, Denver, Colorado, November 19, 1998.
 47. B. Mishra, "Development of Wear-resistant Thin Film Coatings by Physical Vapor deposition", Invited lecture, Indian Institute of Metals, Ranchi Chapter, MECON, Ranchi, India, December 14, 1998.
 48. B. Mishra, "Applications of Molten Salts in Metals Production", Space Resources Roundtable, Colorado School of Mines, Golden Colorado, October 24-26, 2001.
 49. B. Mishra, "Separation of Magnesium and uranium by Molten Salt Electrorefining", GS Ansell Chair Seminar Presentation, Dept. of Metallurgical & Materials Engineering, Colorado School of Mines, Golden, Colorado, October 29, 2001.
 50. B. Mishra & J.J. Moore, "The Effect of Pulsed Plasma Processing in Controlling the Nanostructure and Properties of Thin Films and Coatings, Pulsed Plasma Processing, University of Salford, UK, September 17, 2003.
 51. B. Mishra, D.L. Olson and Y.D. park, "Electronic And Magnetic Assessment Of Reversible Hydrogen Storage In Intermetallic Materials", Hydrogen Economy: Materials Challenges For Hydrogen Storage Symposium, ASM Materials Solution Conference, Columbus, OH, October 19, 2004.
 52. B. Mishra, "Societal Impacts of Waste Management", Plenary Lecture, REWAS 2008 TMS Conference, Cancun, Mexico, October 15, 2008.
 53. B. Mishra & D.L. Olson, "CO₂ and H₂S Corrosion of Linepipe Steels", Invited Lecture at

- Petroleum Institute, Abu Dhabi, UAE, October 24, 2008.
54. J.E. Jackson, J.A. Roubidoux, B. Mishra and D.L. Olson, "Assessment of Magnetocorrosion and Impedance Measurements", Review of Progress in Quantitative NDE, Univ. of Illinois- Chicago, July 20-25, 2008, Org.: Iowa State Univ., Center for NDE Research, Ames, IA.
 55. A.N. Lasseigne, K. Koenig, D. L. Olson, J. E, Jackson, and B. Mishra, "Real-Time Low Frequency Impedance Measurements for the Determination of Hydrogen Content in Pipeline Steel", Review of Progress in Quantitative NDE, Univ. of Illinois- Chicago, July 20-25, 2008, Org.: Iowa State Univ., Center for NDE Research, Ames, IA.
 56. C.A. VanHorn, D. L. Olson and B. Mishra, Assessing Residual Stress on Machined Uranium Using Nondestructive Induced Impedance and Thermoelectric Power Measurements", Review of Progress in Quantitative NDE, Univ. of Illinois- Chicago, July 20-25, 2008, Org.: Iowa State Univ., Center for NDE Research, Ames, IA.
 57. B. Mishra, "Development of Multifunctional Nanocomposite Coatings using Pulsed Close-Field Unbalanced Magnetron Sputtering", Government Center of Excellence, University of Tokyo, Japan, October 19, 2009.
 58. B. Mishra, Presentations at Posco Steel Works, Pohang, Korea and Dong-IK University, Pusan, Korea, May 10-14, 2009 on: (1) *Magnetization Effect on Hydrogen Induced Corrosion of Pipelines CO₂ / Sour Corrosion Mechanisms and Materials Development*; (2) *Electrochemical Characterization and Mechanistic Interpretation of Microbiologically Influenced Corrosion of Oil Linepipe Steels using rRNA Gene Sequencing*; (3) *Design of Optimized Die Coatings: The Case for Aluminum Pressure Die-casting*.
 59. B. Mishra, "Corrosion Issues in Oil & Gas Transport", ASM Oregon Chapter, December 10, 2009, Portland, OR.
 60. F. Wang, A. Feldman, J. Lin, J.J. Moore and B. Mishra, "Texture Development and Microstructure Characterization of AlN Thin Films Fabricated by Pulsed Closed Field Unbalanced Magnetron Sputtering", Paper No D1-5, ICMCTF 2009, San Diego, CA, Apr 28, 2009.
 61. J.J. Moore, J. Lin, B. Mishra, W.D. Sproul & J.A. Rees, "The Effect of Magnetron Pulsing on the Structure and Properties of Nanostructured Multifunctional Tribological Coatings", Paper No. B6-1-7, ICMCTF 2009, San Diego, CA, Apr 28, 2009.
 62. J. Lin, B. Mishra, M. Pinkas, J.J. Moore & W.D. Sproul," Nano-structured CrN/AlN Sputtering", Paper No. B6-1-9, ICMCTF 2009, San Diego, CA, Apr 30, 2009.
 63. J. Lin, J.J. Moore, W.D. Sproul, B. Mishra & Z.I. Wu, "Modulated Pulse Power Sputtered Chromium and Chromium Nitride Coatings", Paper No. H2-2-1, ICMCTF 2009, San Diego, CA, Apr 28, 2009.
 64. B. Mishra, "Corrosion Issues in Pipeline Steels for Ethanol-Fuel Blend Transport", 7th Intl. Symp. On Fuels and Lubricants, pp. 23-24, India Habitat Center, New Delhi, India, March 9-13, 2010.
 65. B. Mishra, "Materials Recycling for Sustainability", 2010 Earth Day – Health, Safety & Environment, The Petroleum Institute, Abu Dhabi, UAE, April 21, 2010. (Invited)
 66. B. Mishra, "Future Corrosion Issues in Oil & Gas Industry", Invited Lecture, Texas A&M University at Qatar, Doha, Qatar, April 18, 2010.
 67. B. Mishra, Presentations at Sungkyunkwan University, Seoul, KOGAS and Pusan National University, Pusan, Korea, July 18-22, 2010 on: Magnetization Effect on Hydrogen Induced Corrosion of Pipelines Sustainability through Recycling Advanced Coatings for Surface Engineering
 68. P. Kiattisaksri, J. Poncelow, S. Meir, J.C. Madeni, S. Liu, B. Mishra and D.L. Olson, "Assessment of Microstructure in Grade T22 Alloy Steel by Nondestructive Tools", Rev.

- QNDE. Vol. 30, AIP, Melville, NY, (2011). 54
69. T. Koenig, S. Lawrence, A. Martin, C. Mejia, J. Fletcher, L. Gerstenberger, J. King, B. Mishra, D. L. Olson, M. Meyer, R. Kennedy, J. Cole, Lin-Wen Hu, and G. Kohse, "Advanced Non-Destructive Assessment Technology to Determine the Aging of Silicon Containing Materials for Generation IV Nuclear Reactor", Rev. of QNDE, Vol. 30, AIP, Melville, NY, (2011).
 70. J.A. Roubidoux, F.J. Sanchez, B. Mishra and D.L. Olson, "Temperature and Stress Effects on Cathodic Hydrogen Charging of High-Strength Line-Pipe Steel", TMS 2010, Seattle, WA, TMS, Warrendale, PA, (2010).
 71. J. A. Roubidoux, B. Mishra, J. E. Jackson, and D. L. Olson, "Magnetic and Electric Field Effects on Hydrogen Absorption and Mass Transport at the Metal/Electrolyte Interface", pp.1-11, NACE 2010.
 72. R. Bhola, S. M. Bhola. B. Mishra, R. Ayers and D. L. Olson, "Electrochemical Characteristics of Titanium and its Alloy and in Phosphate Buffer Saline", Proc. Mat & Proc. for Medical Devices Conference 2009, pp. 52-59 (2010).
 73. K. Koenig, A. Lasseigne, J. E. Jackson, D. L. Olson, B. Mishra, "A Fundamental Analysis of Low Frequency Impedance Phenomenon: Application to Hydrogen Content Assessment of Coated Linepipe Steel Weldments", Rev. QNDE, Vol. 30., AIP, Melville, NY, (2010).
 74. T. Reyes, S. M. Bhola, D. L. Olson, B. Mishra, "Study of Corrosion of Super Martensitic Steel Under Alternating Current in Artificial Sea Water with Electrochemical Impedance Spectroscopy" Rev. QNDE, Vol. 30, AIP, Melville, NY, (2010).
 75. S. Meir, D.L. Olson, B. Mishra, S. Liu, K. Coleman and R. Hellner, "Assessment of Steel Microstructure Evolution During Thermal Treatment by Magnetic and Electronic Techniques", Rev. QNDE, Vol. 30, AIP, Melville, NY, (2010).
 76. E.A. Pfeif, A.N. Lasseigne, K. Koenig, K. Krzywosz, E. V. Mader, S. Yagnik, B. Mishra, and D.L. Olson, "Submerged Eddy Current Method of Hydrogen Content Evaluation of Zircaloy-4 Fuel Cladding", Rev. QNDE, Vol. 30, AIP, Melville, NY (2010).
 77. R. Bhola, S. M. Bhola, B. Mishra and D. L. Olson, "Electrochemical Characterization of a Low Modulus TNZT Titanium Alloy in a Simulated Body Fluid Using EIS for Biomedical Applications", Rev. QNDE, Vol. 30, AIP, Melville, NY, (2011).
 78. B. Mishra, "Corrosion of Tank & Pipeline Steel during Biofuel Storage & Transport", Distinguished Lecture at Diamond Jubilee Celebrations, National Metallurgical Laboratory, Jamshedpur, India, November 2010.
 79. B. Mishra, "Recycling Opportunities for Critical Materials Users and Producers", Office of Naval Research Workshop, December 13-14, 2011.
 80. B. Mishra, "Corrosion Issues in Oil & Gas Production and Transport", Intl. Symp. On Corrosion & Protection – ISCP-2011, Pusan, S. Korea, January 2011.
 81. B. Mishra, "Corrosion Issues in the Oil & Gas Industry", Invited Seminar at the Texas A&M University at Qatar, Doha, Qatar, December 2011.
 82. B. Mishra, "Advances in Magnetron Sputtering for Superior Surface Engineering", Distinguished Speaker Seminar at the Petroleum, Institute, Abu Dhabi, January 2011.
 83. B. Mishra, "Corrosion Susceptibility of Drillpipe Steels in Sweet & Sour Environments", Invited Seminar at the Texas A&M University at Qatar, Doha, Qatar, February 2011.
 84. B. Mishra, "Engineering Solutions for Sustainability: Materials & Resources: Workshop Overview", Engineers Forum on Sustainability: ICOSE"11, ASME, Tuscon, AZ, Jan.2011.
 85. B. Mishra, "Critical Materials Recycling for Resource Sustainability", Invited Seminar at the Texas A&M University at Qatar, Doha, Qatar, January 2014.
 86. B. Mishra, "Extraction and Recovery of Rare-earth Metals: Challenges in Processing", Workshop on Geology to Metallurgy of Critical Rare-Earths, Camborne School of Mines,

- Falmouth, UK, March 2014.
87. B. Mishra, "Role of Critical Materials in Global Sustainability of Energy & Environment", Intl. Conference on Energy, Environment, Materials and Safety, Cochin University of Science & Technology, Cochin, India, December 11, 2014.
 88. B. Mishra, "The Role of Materials Recycling in Economic Sustainability", Indian Institute of Science, Bangalore, India, December 4, 2014.
 89. B. Mishra, "Critical Materials Recycling & Recovery", Invited lecture in World Resources Forum, Arequipa, Peru, October 22, 2014.
 90. B. Mishra, "Rare Earth Metals: Research Opportunities", Rocky Mountain Chapter: Materials Research Society, Boulder, CO, November 17, 2104.
 91. P. Eduafo, M. Strauss & B. Mishra, "Experimental Investigation of Recycling Rare Earth Metals from Fluorescent Lamp Phosphors ", TMS Poster Session, Orlando, FL, March 2015.
 92. M. Strauss, B. Mishra and G.P. Martins, "SELECTIVE REDUCTION AND SEPARATION OF EUROPIUM FROM MIXED RARE-EARTH OXIDES FROM WASTE FLUORESCENT LAMP PHOSPHORS", Proc. Rare Metal Extraction & Processing, TMS Publication, 2017 Annual Mtg., San Diego, CA, Feb. 2017.
 93. B. Mishra, "COMPOSITE MATERIALS DEVELOPMENT FOR AUTOMOTIVE LIGHTWEIGHTING AND PIPELINE CORROSION RESISTANCE", Presented to Korea Institute of Materials Science (KIMS), Busan, S. Korea, June 19, 2016.
 94. B. Mishra, "ADVANCES IN LIGHTWEIGHT METAL PROCESSING FOR THE AUTOMOTIVE INDUSTRY", Presented to Korea Institute of Industrial Technology (KITECH), Busan, S. Korea, June 21, 2016.
 95. B. Mishra, "RECYCLING OPPORTUNITIES IN CRITICAL METALS SUSTAINABILITY", Presented to Pusan National University, Busan, S. Korea, June 22, 2016.
 96. B. Mishra, "MATERIALS SUSTAINABILITY THROUGH VALUE-ADDED PRODUCTS CONVERSION", Presented to Lawrence Livermore National Laboratory", Livermore, CA, May 2016.
 97. B Mishra and M Jung, "Recovery of Aluminum from the Aluminum Smelter Baghouse Dust", TMS 2016, February 2016.
 98. B Mishra and M Jung, "Recovery and Recycling of Valuable Metals from Fine Industrial Waste Materials", ICMR 2017 Akita, The Eighth International Conference on Materials Engineering for Resources, October 2017.
 99. M Jung and B Mishra, "Recovery of Aluminum from the Secondary Aluminum Production Dust", TMS2017, February 2017.
 100. N. Al-Jassem, E. Sikora, B. Shaw, B. Mishra, B. Palmer and L. Vechot, "Apply Fundamental Studies to Elucidate the Protection Mechanism(s) to Make Intelligent Choice for Coatings in Oil and Gas Applications", NACE 2015, Poster Presentation, [2015].
 101. E. Lee and B. Mishra, "Effect of Heat Treatment Conditions on Microstructure, Mechanical Properties and Residual Stress in a Die-cast Al-Si Alloy", Materials Science and Technology (MS&T), TMS, Pittsburgh, October 2017.
 102. M. DeRousseau, Y. Wang, D. Apelian and B. Mishra, "Electric Vehicle Battery Design for Disassembly in Support of Materials Reuse", TMS 2018 Conference, Pheonix, AZ, [2018].
 103. B Mishra and M Jung, "Recovery and Recycling of Valuable Metals from Fine Industrial Waste Materials", The 8th Intl. Conf. on Materials Resources, Akita, Japan, 2017.
 104. Brajendra Mishra, "Recycling of Critical Metals: A Pathway to Materials Sustainability", Research Forum on the Recycling Technology of Rare-Metals, Nagoya University, Nagoya, Japan, May 25, 2017
 105. Brajendra Mishra, "Recycling of Materials: Pathway to Materials Sustainability", Akita

- University, Akita, Japan, October 25, 2017.
106. Brajendra Mishra and Eunkyung Lee, "Wear and Corrosion Properties of High Interstitial Stainless Steels for Drilling Application in Sour Gas Well Environments", Euromat 2017, Thessaloniki, Greece, September 18 2017.
 107. M. Strauss, B. Mishra & P. Eduafo, "Selective Reduction and Separation of Europium from Mixed Rare-earth Oxides from Waste Fluorescent Lamp Phosphors", Euromat 2017, Thessaloniki, Greece, September 18 2017.
 108. J. Fedors, E. Lee and B. Mishra, "In-situ manufacturing techniques for aluminum matrix nano-composites", MS&T 2017 Pittsburgh, PA, October 11, 2017.
 109. B. Mishra & D. Apelian, "Light Metal Activities in USA", LMT 2017, MS&T, Pittsburgh, PA, October 12, 2017.
 110. B. Mishra, "LIGHTWEIGHT ALUMINUM-BASED MATERIALS FOR STRUCTURAL APPLICATIONS", SkyMat 2017, Trivandrum, India, December 15, 2017.
 111. A.U. Chaudhry & B. Mishra, "DEVELOPMENT OF POLYMER-BASED COMPOSITE COATINGS FOR THE GAS EXPLORATION INDUSTRY", TMS 2017, San Diego, CA, March 2, 2017.
 112. B. Mishra and J. Fedors, "In-situ Manufacturing Techniques for Aluminum Matrix Nanocomposites", Thermec 2018, Paris, France, July 2018.
 113. B. Mishra and D. Apelian, "Advanced Methods and Materials for Casting of Aluminum Alloys", ICSSP 7, Trivandrum, India, November 2018.
 114. B. Mishra, "Corrosion Education for Materials Life Extension: Pathway to Improvement in Resource Productivity", REWAS 2019, TMS, San Antonio, TX, March 2019.
 115. B. Mishra, "The Role of Materials Engineering for Sustainable Development in the 21st Century – Opportunities and Challenges", Symp. on Energy, Environment and Waste Utilization, 2018 ATM of Indian Institute of Metals, Kolkata, India, November 2018.
 116. B. Mishra, "Value Recovery from Effluents in Electronic Wastes Recycling", Symp. on Process metallurgy, 2018 ATM of Indian Institute of Metals, Kolkata, India, November 2018.
 117. B. Mishra, "Achieving Lean Manufacturing through Reuse and Recovery of High-Value Metallic Wastes and Academic Partnerships", Intl. Manufacturing Technology Show - IMTS 2018, Chicago, IL, September 2018.
 118. J. Fedors & B. Mishra, "In-situ Manufacturing Techniques for Aluminum Matrix Nano-composites" Poster presentation in Symposium: Light Metal Technology – Applications for the Transportation Industry, MS&T 2018, Columbus, OH, October 2018.
 119. H. Lee, E. Molstad & B. Mishra, "Recovery and Separation of Valuable Metals from Electronic Waste," Hydrometallurgy 2018 – Environment, Extraction 2018 Conf., Ottawa, Canada, August 2018.
 120. M. Jung, J. Han and B. Mishra, "Reuse Opportunity of Ferrous Grinding Swarf from Automobile Industry", Peter Hayes Symposium on Pyrometallurgical Processing, Extraction 2018 Conf., Ottawa, Canada, August 2018.
 121. S. Gostu and B. Mishra, "Hydrothermal Process to Convert Hematite in Red-Mud to Magnetite", Hydrometallurgy 2018 – Extraction/Processing, Extraction 2018 Conf., Ottawa, Canada, August 2018.
 122. B. Mishra, "Corrosion Education for Materials Life Extension: Pathway to Improvement in Resource Productivity", REWAS 2019, TMS Annual Mtg., San Antonio, TX, Mar 13, 2019.
 123. J. Fedors, B. Mishra and C. Soderhjelm, "Innovations on In-Situ Processes for Production of Aluminum-Matrix Nanocomposites", Cast Expo and Metalcasting Congress, AFS, Atlanta, GA, April 27-30, 2019.
 124. B. Mishra, "Technological Advances in Resource Recovery and Recycling for Materials

- Sustainability”, 11TH World Congress and Expo on Recycling, Edinburgh, Scotland, June 13-14, 2019.
125. B. Mishra, “Recycling Research in an Industry-University Collaborative NSF Center”, Recycling Metals Conference, Heritage Environmental, Indianapolis, IN, June 18-20, 2019.
 126. B. Mishra, “The Role of Materials Science and Engineering for Sustainable Development in the 21st Century – Opportunities and Challenges”, Defense Institute of Advanced Technology, Pune, India, June 27, 2019.
 127. B. Mishra and M. Strauss, “The Recovery of Europium (II) Sulfate as Product of Recycling Waste Fluorescent Lamp Powder”, Renewable Energy materials & Nuclear Materials, PRICM 2019, Xian, China, August 16-19, 2019.
 128. B. Mishra and J. Fedors, “In-Situ Processes for Production of Aluminum-Matrix Nanocomposites”, Light Metals & Alloys – Aluminum, PRICM 2019, Xian, China, August 16-19, 2019.
 129. *B. Mishra, M. Asadikiya, L. Wang, C.M. Lemay, D. Apelian and Y. Zhong*, “Designing High-Entropy Aluminum Alloys (HEA-Al)”, Light Metals & Alloys – Aluminum, PRICM 2019, Xian, China, August 16-19, 2019.
 130. B. Mishra, H. Lee and D. Yue, “Recovery of Valuable Metals from Fines Generated in e-Waste Processing”, CMA 2019, Beijing, China, August 22-24, 2019.
 131. B. Mishra and S. Gostu, “Sub-micron Materials Recovery from Mineral Processing Wastes – A Pathway towards Sustainable Circular Economy”, Circular Economy-Asia Pacific, Singapore, August 29-31, 2019.
 132. B. Mishra and S. Gostu, “Sustainable Technology for Bauxite Residue Processing”, MS&T 2019, Portland, OR, Sept. 29-30, 2019.
 133. K. Sundberg, Y. Wang, J. Liang, D. Apelian, R. Sisson and B. Mishra, “From Waste Steel to Matériel: Additive Manufacturing Enabled Agile Manufacturing”, MS&T 2019, Portland, OR, Sept. 29-30, 2019.
 134. D. Apelian, B. Mishra and Y. Zhong, “Aluminum Alloy Design Strategies for Enhanced Performance”, Light Metals & Alloys-Aluminum, Light Metals Technology Conference 2019, Shanghai, China, Oct. 15-18, 2019.
 135. B. Mishra and J. Fedors, “Manufacturing of Nanoparticle Reinforced Aluminum Matrix Composites”, Light Metals & Alloys-Aluminum, Light Metals Technology Conference 2019, Shanghai, China, Oct. 15-18, 2019.
 136. B. Mishra, “Towards Achieving the Goals of Circular Economy in Materials Manufacturing”, International Symposium on Advanced Materials for Industrial and Societal Applications, NMD-ATM 2019, Thiruvananthapuram, India, November 13, 2019.
 137. K. Karayagiz, A. Powell, B. Mishra and Q. Ding, "Phase Field Modeling of Galvanic Corrosion in Magnesium-aluminum Joints", Symp. Environmentally Assisted Cracking: Theory and Practice, 2020 TMS Annual Meeting, San Diego, CA, Feb. 23-27, 2020.
 138. H. Lee, B. Mishra and H. Jin, "Copper Recovery from Flue Dust Generated in E-Waste Processing by Chemical and Electrical Methods", Recycling of Secondary, Byproduct Materials and Energy - Recycling of E-Waste, 2020 TMS Annual Meeting, San Diego, CA, Feb. 23-27, 2020
 139. Y. Xu, B. Mishra and S. Narra, “Towards Understanding Microstructure Evolution during Wire Arc Additive Manufacturing of Maraging 250 Thin-wall Parts”, MS&T 2021, Columbus, OH, October 2021.
 140. K. Karayagiz, A. Powell, Q. Ding & B. Mishra, “Computational Modeling of Corrosion and Mechanical Failure in Magnesium-Aluminum Vehicle Joints”, Symp. Materials-Environment Interactions, MS&T 2021, Columbus, OH, October 2021.

141. H. Tanvar and B. Mishra, "Acid Washing of Bauxite Residue to Produce Materials for Industrial Applications", International Scientific and Practical Conference, Satbayev Reading -2021, Almaty, Kazakhstan, April 2021.
142. B. Mishra, "Novel Concepts to Expand Iron & Steelmaking Processes", ARPA-DOE Workshop, September 2021, Virtual.
143. Y. Xu; B. Mishra and S. Narra, "In-situ Microstructural Transformations in Wire-arc Additively Manufactured Maraging 250-grade Steel", Intl. Symp. on Solid Freeform Fabrication, Virtual, August 2021.
144. H. Jin, B. Mishra, "Copper Removal from Contaminated Steel Scrap", ISMT2021, Busan, South Korea, 2021.
145. H. Jin, B. Mishra, "Copper Separation from Steel Scrap", TMS 2021, Virtual, 2021
146. H. Jin, B. Mishra, "Decopperization Study for Steel Recycling", TMS 2022, Anaheim, CA, 2022.
147. A. Gupta, B. Mishra, "High-temperature oxidation of explosion welded Tantalum-tungsten alloy on steel substrate as a potential technique for recycling", The Minerals, Metals and Materials society, (2021)
148. A. Gupta, B. Mishra, "Recycling of CrC-Nichrome coated stainless steel by remelting and addition of alloys with validation from mathematical modelling", The Minerals, Metals and Materials society, Anaheim, (2022)
149. Wang W, Yang Z, Ge X, Sisson RD, Mishra B, Varde A, Liang J. Machine learning tools to predict mechanical properties of steel alloys based on compositions, heat treatments and microstructures, 2021 DoD Steels Research Summit, Nov. 2021 (virtual).
150. Wang W, Yang Z, Sisson RD, Mishra B, Apelian D, Liang J. From Waste Steel to Matériel: Additive Manufacturing Enabled Agile Manufacturing. SERDP Symposium. Dec. 2021 (virtual)
151. Q. Ding and B. Mishra, "CORROSION AND MECHANICAL CHARACTERIZATION OF FRICTION-STIR WELDED JOINTS BETWEEN ALUMINUM AND MAGNESIUM ALLOYS", 2023 TMS Annual Meeting, San Diego, CA, March 2023 [Poster].
152. H Tanvar, B Mishra, "Recovery of Value Added Products from Bauxite Residue", Light Metals 2023, Springer Publication, . 2023 TMS Annual Meeting, San Diego, CA, March 2023 [Publication].
153. H. Jin and B. Mishra, "Separation of copper in steel scrap for recycling", P.R. Taylor Honorary Symp. New Directions in Mineral Processing, Extractive Metallurgy, Recycling and Waste Minimization, 2023 TMS Annual Meeting, San Diego, CA, March 2023 [Presentation].
154. A. Gupta, B. Mishra, "Tantalum Recovery Technique for Recycling of Tantalum Coated Composite Materials", TMS Symp. Rare Metal Extraction & Processing, 2023 TMS Annual Meeting, San Diego, CA, March 2023 [Presentation].
155. C. Ruhatiya and B. Mishra, "Machining Fluid Filtration and Particle Count Measurement", Symp. Materials Processing Fundamentals - Session: New Processes and Insights, 2023 TMS Annual Meeting, San Diego, CA, March 2023 [Presentation].
156. Q. Ding, B. Mishra and A. Powell, "Corrosion Behavior of Friction-Stir Welded Al-Mg alloys", Light Metals Technology 2023, Melbourne, Australia, July 2023.
157. B. Mishra, M.K. Sinha and S.K. Das, "Removal of metallic impurities from molten aluminum" Light Metals Technology 2023, Melbourne, Australia, July 2023.
158. H. Tanvar and B. Mishra, "Recycling of bauxite residue (red mud) for recovery of metallic values", 2023 Hydrometallurgy Conference, SME, Phoenix, AZ, August 2023.
159. H. Tanvar and B.Mishra, "Fluoride-free processing of columbite concentrate for selective recovery of niobium and tantalum oxides", 2023 Hydrometallurgy Conference, SME,

Phoenix, AZ, August 2023.

160. B. Mishra, "Optimized Metals Separation for Remanufacturing of Product-Centric Recycled and Reclaimed Scrap", Dong Eui University, Pusan, S. Korea, August 2023.
161. B. Mishra, "Microstructural, Corrosion, and Mechanical Characterization of Friction-Stir Welded Joints between Aluminum and Magnesium Alloys", Korean Maritime and Ocean University, Pusan, S. Korea, August 2023.
162. B. Mishra, "Recycling of bauxite residue (red mud) for recovery of metallic values", Pusan National University, Pusan, S. Korea, August 2023.

Technical Reports:

1. A. De, N. Pitchai and B. Mishra, "OVAKO Modelling for Burden distribution studies in A Blast Furnace of Tata Steel, R&D Division, Tata Steel, December 1986.
2. B. Mishra, R. Jha and N. Gope, "Process parameter optimization for the production of EDD steels in Tata Steel, R&D Division, Tata Steel, April 1987.
3. B. Mishra, R. Jha and S.K. Singh, "Development of corrosion resistant reinforcing bars for marine environment", R&D Division, Tata Steel, March 1988.
4. B. Mishra, R.N. Chattopadhyay, R. Jha and B. Lobo, "Yield improvement of Nb-treated Semi-killed LPG Sheets", R&D Division, Tata Steel, July 1988.
5. B. Mishra and S.K. Ajmani, "Desiliconization of Hot-metal: Choice of reagents", R&D Division, Tata Steel, September 1988.
6. S. Govindarajan, B. Mishra and S.K. Ajmani, "Development of data-base Software for Jamshedpur Blood Bank", R&D Division, Tata Steel, July 1989.
7. B. Mishra, "Thermal and oxygen lancing regimes in open-hearth furnaces at SMS- 3", R&D Division, Tata Steel, September 1989.
8. B. Mishra, K. Dutta and A. Chatterji, "Smelting reduction scenario in India", TIFAC on alternative routes to ironmaking, I.I.T. Madras, February 1990.
9. B. Mishra, "HIC susceptibility of X-60 Line-pipe steel", R&D Division, Tata Steel, March 1990.
10. B. Mishra and K.K. Dutta, "Control of Nitrogen in open-hearth steelmaking by KORF Technology", R&D Division, Tata Steel, April 1990.
11. B. Mishra, A. Chatterji and B.D. Pandey, "Smelting reduction processes", TIFAC on Continuous Steelmaking, CSIR, New Delhi, May 1990.
12. B. Mishra, R. Jha and B. Lobo, "TMT of Rounds", TIFAC on TMCP of steel for desirous properties, RDCIS, Ranchi, June 1990.
13. B. Mishra and D. Chattopadhyay, "Development of high strength steel through controlled rolling and accelerated cooling of leaner chemistry steel", R&D Division, Tata Steel, July 1990.
14. S.K. Singh, R. Jha and B. Mishra, "Development of Ni-free weather resistant steel", R&DDivision, Tata Steel, August 1990.
15. J.J. Moore, B. Mishra and D.L. Olson, "Combustion synthesis of intermetallic and ceramic materials and its application to the synthesis of Gallium Salt Scrub reduction alloys", No. MT/EXT/090/026, submitted to Rocky Flats Plant, December 1990.
16. B. Mishra and D.L. Olson, "Optimization of components and processes for Cerium Electrorefining, submitted to Rocky Flats Plant, May 1991.
17. P. Ferro, B. Mishra, J.J. Moore and D.L. Olson, "Electrowinning of Calcium from CaO-CaCl₂ salt-system, No. MT/EXT/090/025, submitted to Rocky Flats Plant, December 1990.
18. S. Al-Hassan, B. Mishra and D.L. Olson, "Corrosion of steel in an aqueous environment containing carbon di-oxide", No. MT/CWJR/091/12, submitted to Conoco Oil Co., June

- 1991.
19. P. Ferro, B. Mishra, D.L. Olson and J. J. Moore, "Electro-winning of Calcium", No. MT/EXT/092/002, submitted to Rocky Flats Plant, January 1992.
 20. A. Raraz, B. Mishra and D.L. Olson, "Electro-refining of Cerium: Part I: Evaluation of crucible configuration and components", No. MT/EXT/092/001, submitted to Rocky Flats Plant, January 1992.
 21. A. Raraz, B. Mishra, D.L. Olson and J. J. Moore, "Electro-refining of Cerium: Part II: Cerium as a surrogate for plutonium electrorefining studies", No. MT/EXT/092/002, submitted to Rocky Flats Plant, January 1992.
 22. S. Pritchett, J.J. Moore, B. Mishra and D.L. Olson, "Synthesis and Characterization of Salt Scrub Alloys", No. MT/EXT/092/021, submitted to Rocky Flats Plant, July 1992.
 23. D.L. Olson, G.R. Edwards and B. Mishra, "The Chemical Constitution of Welding Consumables", No. MT/CWR/092/040, submitted to Amer. Welding Soc., December 1992.
 24. S. Govindarajan, K.A. Monroe, B. Mishra, J.J. Moore and D.L. Olson, "The Protection of Molybdenum Electrodes against Oxidation/Corrosion in Glass Melting Furnaces - Literature Review", submitted to Schott Glaswerke, Germany, No. T/EXT/092/038, December 1992.
 25. S. Govindarajan, K.A. Monroe, B. Mishra, J.J. Moore and D.L. Olson, "The Protection of Molybdenum Electrodes against Oxidation/Corrosion in Glass Melting Furnaces - Progress Report June 1-December 1, 1992", submitted to Schott Glaswerke, Germany, No. MT/EXT/092/039, December 1992.
 26. B. Mishra, J.J. Moore and D.L. Olson, "Demonstration and Technology Transfer of Salt Scrub Reduction with Synthesized Intermetallic Alloys", submitted to EG&G RFP, Inc., No. MT/EXT/093/008, February 1993.
 27. P.D. Ferro, D.L. Olson, B. Mishra and J.J. Moore, "Application of Porous Diaphragm in a Calcium Electrowinning Cell", submitted to EG&G Rocky Flats, MT/EXT/094/001, January 1994.
 28. B. Mishra, D.L. Olson and J.J. Moore, "Behavior of RCRA Constituents in Pyrochemical Residue Processing", submitted to EG&G Rocky Flats, MT/EXT/094/020, May 1994.
 29. B. Mishra, D.L. Olson and AlCedes Raraz, "Optimization of Plutonium Electrorefining through Modeling and Model Materials", submitted to EG&G Rocky Flats, MT/EXT/094/025, July 1994.
 30. B. Mishra, D.L. Olson and S. J. Al-Hassan, "Environmental and Microstructural Effects on Corrosion of Linepipe Steels in CO₂-containing Solutions", submitted to Conoco, Inc., MT/CWR/094/026, August 1994.
 31. B. Mishra, A. Raraz and D.L. Olson, "Reaction of Leaded-Rubber Gloves with Nitric Acid: Product Identification and Property Measurement", submitted to EG&G RFP, Inc., MT/EXT/094/030, November 1994.
 32. S. Thavornun, B. Mishra and J.J. Moore, "Hot Rolling of Stainless steel-steel Clad System", submitted to Chaparral Steel, MT/EXT/95/006, February 1995.
 33. B. Mishra, D.L. Olson and J.J. Moore, "Advanced Technologies for Reconversion of Radioactively-contaminated Scrap Metals [RCSM] to High-value Intermediate and Final products", submitted to Manufacturing Sciences Corp., MT/EXT/95/008, March 1995.
 34. D. Fazzina, B. Mishra and D.L. Olson, "In-Process Reaction-Formed Hardfacing Materials", submitted to Castolin Societe Anonyme, MT/CWR/95/010, April 1995.
 35. B. Mishra, D.L. Olson and J. Weeder, "Development of hardfacing Consumables", submitted to Castolin Societe Anonyme, MT/CWJCR/095/026, October 1995.
 36. B. Mishra and D.L. Olson, "Survey of Technology to Select Refractory for Melting and

- casting of IN 825 SS 316L", submitted to Manufacturing Sciences Corporation, MT/EXT/095/027, October 1995.
37. D.L. Olson, B. Mishra and J. Weder, "Development of Hardfacing Consumables" , submitted to Castolin Societe Anonyme, MT/CWJCR/096/10, April 1996.
 38. B. Mishra and D.L. Olson, "Advanced Technologies for Reconversion of Radioactively -contaminated Scrap Metals [RCSM] to High-Value Intermediate and Final Products", submitted to Manufacturing Sciences Corporation, MT/EXT/096/015, August 1996.
 39. K.A. Lindahl, D.L. Olson, J.J. Moore and B. Mishra, "Quantitative Investigation of Copper/Indium Multilayer Thin Film Reactions", submitted to Lockheed-Martin Aerospace, MT/CWJCR/096/024, August 1996.
 40. A. Raraz, B. Mishra and D.L. Olson, "Performance of Refractory Metals and Alloys in Molten LiCl/Li₂O/Li/Li₃N System at 725oC, submitted to Argonne National Laboratory-West, MT/EXT/097/012, July 1997.
 41. B. Mishra, D.L. Olson and S. Benjamin, Performance of Refractory Metals and Alloys in Molten LiCl/Li₂O/Li/Li₃N System at 725oC, submitted to Argonne National Laboratory-West, MT/EXT/097/018, August 1997.
 42. B. Mishra and P. Termsuksawad, "The Abatement of Hexafluoroethane (C₂f₆) Gas by Molten Aluminum submitted to Motorola, Inc., MT/ACSEL/098/040, October 1998.
 43. M. Slavik and B. Mishra, "Utilization of Red Mud through Blast Furnace Additions", submitted to Kaiser Aluminum and Chemical Co., March 1998.
 44. B. Mishra, S. Benjamin and D.L. Olson, "on "Advanced Technologies for Reconversion of Radioactively -Contaminated Scrap Metals [RCSM] to High-Value Intermediate and Final Products, submitted to Manufacturing Sciences Corporation, August 1998.
 45. B. Mishra and B. Lanning, "ETAP Project on Anode Thin Film Battery Development", submitted to CAMI, September 1998.
 46. B. Mishra and D.L. Olson, "Final Report on Training Courses to Rocky Flats safe Sites Program", submitted to RFETS, July 1998.
 47. B. Mishra and I. Maroef, "Electrorefining of Mg-clad Uranium by Molten Salt Electrolysis", submitted to BNFL, plc., Report No. CSM/MT/EXT/2000/038, May 2000.
 48. C.A. Lensing, G.W. Mustoe, M. Olinger and B. Mishra, "Design and Testing of an aliquot mould for casting reactive metals", submitted to LANL, CSM/MME/ACSEL/099-26, September, 1999.
 49. C.A. Lensing, G.W. Mustoe, M. Olinger and B. Mishra, "Design and Testing of a flat-sided mould casting of stock-material for the preparation of Hopkinson Bar Samples", submitted to LANL, CSM/MME/ACSEL/099-30, October 1999.
 50. B. Mishra and M.W. Olinger, "Thermocouple Time Response to Heating and Cooling", submitted to LANL, CSM/MME/ACSEL/099-37, November 1999.
 51. B. Mishta, and D.L. Olson, "Magnetic and Corrosion Characterization of Advanced Ni-Mg Battery aterials", Submitted to Ovonic Battery Co., CSM/MME/KIEM/99-040, December 1999.
 52. B. Mishra and I. Maroef, "Electrorefining of Mg-clad Uranium by Molten Salt Electrolysis, submitted to BNFL, plc., Report No. CSM/MT/EXT/2000/038, May 2000.
 53. J. Kraikaew and B. Mishra, "Efficiency Optimization of Copper Anode Treatment", submitted to Coors Brewing Co., Report No. CSM/MT/EXT/2000/052, December 2000.
 54. B. Mishra and I. Maroef, "Atmospheric corrosion susceptibility of automotive parts", submitted to Sud-Chemie, Inc., December 2000.
 55. B. Mishra, I. Maroef and D. Zhong, "Molten Salt Electrodeposition and PVD Sputtering of La-Sr-Cr Thin Films & Development of Fe-Cr-Nb-La Ferritic Stainless Steel Alloy", submitted to Aker Inc., Report No. CSM/MT/ACSEL.003/008, February 2003.

56. F. Sanchez, B. Mishra, D.L. Olson, "An Assessment of Magnetization Effects on Hydrogen Cracking for Thick Walled Pipelines", submitted to MMS, Dept. of Interior and OPS, Dept. of Transportation, Report No. CSM/MT/CWJR/2004/008, April 2004.
57. F. Sanchez, Y.D. Park, A. Lasseigne, B. Mishra, D.L. Olson, "An Assessment of Magnetization Effects on Hydrogen Cracking for Thick Walled Pipelines", submitted to MMS, Dept. of Interior and OPS, Dept. of Transportation, Report No. CSM/MT/CWJR/2004/029, April 2004.
58. A. Lasseigne, B. Mishra, D.L. Olson, "Development of Sensors for Hydrogen Measurement by Non-Destructive Techniques", submitted to MMS, Dept. of Interior and OPS, Dept. of Transportation Report No. CSM/MT/CWJR/2006 Jan, Mar, May, Jul, Sept. & Nov. 2006. Bi-Monthly Reports [Year 2], Final Draft Report Submitted December 2006.
59. D, L. Olson, B. Mishra, and J. H. Kleebe, " Molten Alloy and Salt Deposition Followed by Reaction Synthesis to Produce Advance Mullite and Forsterite Corrosion Barriers for Mo-Si- B Turbine Materials", Year End Report for contract Number: N00014-05-1-0234, submitted to ONR, Arlington, VA, December 2006.
60. Project Reports submitted to: Lockheed Martin Corp [PILOT PROJECT -CCACS], Johnson Space Center [RESOLVE PROJECT - CCACS].
61. J. E. Jackson, A. N. Lasseigne, B. Mishra, and D. L. Olson, "The Influence of High Magnetic and Electric Fields on Hydrogen Content from Aqueous Corrosion Processes in Steel: Possible Mechanistic Interpretations", Research Report # CSM-ACSEL-006-003, Prepared for MMS-OPS NIST Meeting at CSM, January 24, 2006.
62. J.E. Jackson, A. N. Lasseigne, B. Mishra, and D.L. Olson, "The Influence of High Magnetic and Electric Fields on Hydrogen Content from Aqueous Corrosion Processes in Steel: Possible Mechanistic Interpretations", Colorado School of Mines Research Report CSM-ACSEL-006-003, Prepared for MMS-OPS-NIST Pipeline Research Meeting at CSM, Jan. 24, (2006).
63. D. S. Tordonato, D. L. Olson, and B. Mishra, "ABS Database of Corrosion Wastage for Double Hull Tankers", Technical Report, CSM Report # MT-CWJCR-006-004, submitted to ABS, Houston, TX, July, (2006).
64. D. L. Olson, B. Mishra, K. M. Evans (Y-12), D. E. Dooley LANL), A. N. Lasseigne-Jackson, J. E. Jackson, C. Sangphangdee, and C. Van Horn, "TEP Non-destructive Analysis for Nuclear Materials Applications", NNSA Poster, NNSA Future Technologies Conference II: "Technology as a Catalyst for Enterprise Transformation: Trends and Strategies", Washington DC, October 11-13, 2006.
65. C. Salmon, R. King., B. Mishra and D. L. Olson, " Beryllium Air Monitor Research and Development: Year 2005 Report", CSM Report MT-MME-005-008, Submitted to Kaiser-Hill, Rocky Flats Environment Technology Site, Environmental Management, Office of Technical Program Integration, U. S. Dept. of Energy, Germantown, Maryland, December, 2005.
66. F. Sanchez, Y.D. Park, A. Lasseigne, B. Mishra, D.L. Olson, " An Assessment of Magnetization Effects on Hydrogen Cracking for Thick Walled Pipelines", submitted to MMS, Dept. of Interior and OPS, Dept. of Transportation, Report No CSM/MT/CWJR/2005/002, January 2005. [Year 2]
67. F. Sanchez, B. Mishra, D.L. Olson, "An Assessment of Magnetization Effects on Hydrogen Cracking for Thick Walled Pipelines", submitted to MMS, Dept. of Interior and OPS, Dept. of Transportation, Report No. CSM/MT/CWJR/2005/029, December 2005. [Final Report].
68. D, L. Olson, B. Mishra, and J. H. Kleebe, " Molten Alloy and Salt Deposition Followed by Reaction Synthesis to Produce Advance Mullite and Forsterite Corrosion Barriers for Mo-

- Si- B Turbine Materials”, Year End Report for contract Number: N00014-05-1-0234, submitted to ONR, Arlington, VA, December 2005.
69. D.L. Olson, B. Mishra, and A. N. Lasseigne, “Development of a Non-Destructive, Non-Contact Electromagnetic Sensor for Hydrogen Content Determination in Coated Line Pipe Steel”, Progress Report for MMS Contract Number: 1435-01-04-36637, submitted to MMS. Herndon, VA and DOT-OPS, Washington DC, December 2005.
 70. D.L. Olson, B. Mishra, A.N. Lasseigne-Jackson, M.S. Heilig, C. Ellis, C. Nguyen, R. Jones, and G. Garner, “Development of Advanced Austenitic Stainless Steels for Down-hole Applications”, CSM Report # MT-CWJCR-007-001 (2007).
 71. D.L. Olson, B. Mishra, A.N. Lasseigne-Jackson, M.S. Heilig, C. Ellis, C. Nguyen, R. Jones, and G. Garner, “Development of Advanced Austenitic Stainless Steels for Down-hole Applications”, CSM Report # MT-CWJCR-007-002 (2007).
 72. J.E. Jackson, A. N. Lasseigne, B. Mishra, and D.L. Olson, “The Influence of High Magnetic and Electric Fields on Hydrogen Content from Aqueous Corrosion Processes in Steel: Possible Mechanistic Interpretations”, Colorado School of Mines Research Report CSM- ACSEL-007-003, Prepared for MMS-OPS-NIST Pipeline Research Meeting at CSM, Jan. 21, (2007).
 73. D.L. Olson, B. Mishra, A.N. Lasseigne-Jackson, J.E. Jackson, and J.A. Roubidoux, “Measurement of the Effect of Magnetism on Hydrogen Cracking Susceptibility of Pipeline Steels – Joint Industry Project – 1st Biannual Report,” Colorado School of Mines Research Report CSM-CWJCR-007-004, (2007).
 74. D.L. Olson, B. Mishra, A.N. Lasseigne-Jackson, J.E. Jackson, and J.A. Roubidoux, “Measurement of the Effect of Magnetism on Hydrogen Cracking Susceptibility of Pipeline Steels – Joint Industry Project – 2nd Biannual Report,” Colorado School of Mines Research Report CSM-CWJCR-007-004, (2007).
 75. D.L. Olson, B. Mishra, and A.N. Lasseigne-Jackson, “New Methodologies for Measuring and Monitoring Hydrogen for Safety in Advanced High-Strength Line Pipe Steel,” Colorado School of Mines Research Report CSM-CWJCR-007-007 (2007).
 76. J.E. Jackson, A.N. Lasseigne-Jackson, B. Mishra, D.L. Olson, C.M. Jensen, M. Kuba, and S.A. Imam, “Fuel Sensors for Reversible Battery Hydrogen Storage Materials”, Poster: Materials Processing and Manufacture Division at TMS 2007 Conference, February 27, 2007, Orlando, FL.
 77. J.E. Jackson, A. N. Lasseigne, B. Mishra, and D.L. Olson, “The Influence of High Magnetic and Electric Fields on Hydrogen Content from Aqueous Corrosion Processes in Steel: Possible Mechanistic Interpretations”, Colorado School of Mines Quarterly Research Reports prepared for MMS-OPS-NIST Pipeline Research Program (2009).
 78. D.L. Olson, B. Mishra, A.N. Lasseigne-Jackson, J.E. Jackson, and J.A. Roubidoux, “Measurement of the Effect of Magnetism on Hydrogen Cracking Susceptibility of Pipeline Steels – Joint Industry Project – 2nd Biannual Report,” Colorado School of Mines Research Report, [2009].
 79. K. Koenig, A.N. Lasseigne, Joseph Cisler, D.L. Olson and B. Mishra, “In-Situ Hydrogen Analysis in Weldment: Novel NDE for Weld Inspection”, DOT PHMSA, “OPS Accomplishments” <http://primis.phmsa.dot.gov/rd/duccess.html>. (March 2009).
 80. D.L. Olson, B. Mishra, and J.E. Jackson, Molten Alloy and Salt Deposition following by Reaction Synthesis to produce Advanced Mullite and Forsterite Corrosion Barrier for MoSi₂ Turbine Materials”, Annual Report, CSM Report # MT-ACSEL-009-002, submitted to Dr. David Shifler, U. S. Office Naval Research, Arlington, VA, March 12, 2009.
 81. D. L. Olson, B. Mishra, J. A. Roubidoux and T. Reyes, “Measurement of the Effect of Magnetism on Hydrogen Cracking Susceptibility of Pipeline Steel –Joint Industry Project

- “Quarterly Report for contract #0106CT39654, submitted to Michael Else, U. S. DOT-Mineral Management services, November (2009).
82. J. Roubidoux, B. Mishra, and D.L. Olson, “The Influence of High Magnetic and Electric Fields on Hydrogen Content from Aqueous Corrosion Processes in Steel: Possible Mechanistic Interpretations”, Colorado School of Mines Quarterly Research Reports prepared for MMS-OPS-NIST Pipeline Research Program (2010).
 83. J. Roubidoux, B. Mishra and D.L. Olson, “Measurement of the Effect of Magnetization on Hydrogen Cracking Susceptibility of Pipeline Steels”, CSM Report No.: CSM/MT/CWJCR/010/018, submitted to M. Else, U. S MMS, September (2010).
 84. Z.S. Jones, E. Pfeif, A.N. Lasseigne, B. Mishra, D.L. Olson, “Advanced Non-Destructive Hydrogen Sensor for Submerged Zircaloy 4 Alloy Fuel Clads”, Final Report, CSM Report No.: CSM MME-CWJCR-010-006 submitted to K. Krzywosz, EPRI, Palo Alto, CA, December (2010).
 85. J. Poncelow, D. L. Olson, B. Mishra, and J. Morrell, “Determination of Uranium Chemistry and Processing History using Ultrasonic Techniques”, NNSA Poster Session, Washington DC, May (2011).
 86. *Media coverages:* (a) Innovation Couldn’t Wait: How Research Rolled On: WPI Researchers Found Creative Ways to Keep Their Projects Moving Ahead, special Summer issue of the WPI Journal 2021:<https://wp.wpi.edu/journal/articles/innovation-couldnt-wait-how-research-rolled-on/> (b) WPI Website: <https://www.wpi.edu/news/wpi-helps-us-military-optimize-mobile-manufacturing-labs>, (c) Modern Casting, June 2021: <https://www.qgdigitalpublishing.com/publication/?m=55001&i=708682&p=34&ver=html5>.

Books and Book Chapters:

1. Actinide Processing: Methods & Materials, Edited. TMS Publication, 1994
2. Treatment and Minimization of Heavy Metal Containing Wastes, Edited. TMS Pub. 1995
3. Extraction and processing of Trace & Reactive Metals, Edited. TMS Publication, 1995
4. Reactive Metals: Proc. & Applications, Edited. 1996 Chapter, TMS Pub., 1996.
5. EPD Congress 1997, Edited. TMS Publication, 1997.
6. Extraction and Processing of Titanium, Edited, TMS Publication, 1997
7. EPD Congress 1998, Edited, TMS Publication, 1998.
8. EPD Congress 1999, Edited, TMS Publications, 1999.
9. Reactive Metals Review: On-Line TMS Publication, Edited, 2000.
10. Processing Materials for Properties: PMP-2, TMS-MMIJ Publication, Edited, 2000.
11. Rare earths & Actinides: Science, Technology & Application, Edited, TMS Publication, 2000.
12. Surface Engineering in Materials Science: I, Edited, TMS Publication, 2000.
13. REWAS 2004, Edited, Inasmet & TMS, Publication, 2004.
14. Proc. Workshop on COATINGS FOR CORROSION PROTECTION: Offshore Oil & Gas Operations, Ship Structures and Pipelines, NIST Publication, [2004].
15. Recent Advances in Non-Ferrous Metals Processing, Edited. LIGHT METALS 2004 Chapter, TMS Publication, 2004.
16. Proceedings, TRANSFAC 2006, Inasmet & TMS Publication, 2006.
17. REWAS 2008, Edited, TMS Publication, 2008.
18. Processing Materials for Properties –III, Edited, TMS Publication, 2008.
19. Uranium Processing & Properties, Chapter 5, ASM Publication, 2013.
20. THERMEC 2013, Edited, Trans Tech Publication, 2013.
21. ESS: M&R-II, Edited, Springer - TMS Publication, 2015.

22. THERMEC 2016, Edited, Trans Tech Publication, 2016.
23. MDPI Minerals Journal, Special Issue "Remediation and Reusability of Red Mud", Editor, [2024].

Metals Handbook [Desk Edition]:

1. B. Mishra, Chapter on EXTRACTIVE METALLURGY, Metals Handbook, Desk Edition, 1998, pp. 712-726, ASM Publication, Materials Park, OH, [1998].
2. B. Mishra, Chapter on INFLUENCE OF STEEL PROCESSING ON PROPERTIES, Metals Handbook, Desk Edition, 1998, pp. 174-202, ASM Publication, Materials Park, OH, [1998].
3. B. Mishra, "Corrosion of Heat Treating Furnace Equipment", Metals Handbook: Vol 13B–Corrosion, ASM International, Materials Park, OH [2005]
4. B. Mishra, "Corrosion of Plating, Anodizing, and Pickling Equipment", Metals Handbook: Vol 13B – Corrosion, ASM International, Materials Park, OH [2005]
5. B. Mishra and J.J. Pak, "Corrosion in the Mining and Mineral Industry", Metals Handbook: Vol 13B – Corrosion, ASM International, Materials Park, OH [2005]
6. Encyclopedia of Materials: Science & Technology
 - a. B. Mishra, Chapter on NICKEL & COBALT PRODUCTION, Elsevier Publication, Encyclopedia of Science & Technology, Netherlands, 2000, pp. 1288-1295.
 - b. B. Mishra, Chapter on ENVIRONMENTAL CONTROL IN METALS PRODUCTION, Elsevier Publication, Encyclopedia of Science & Technology, Netherlands, 2000., pp. 5486-5492.
 - c. B. Mishra, Chapter on ALKALI METAL PRODUCTION: Li, Na, K, Elsevier Publication, Encyclopedia of Science & Technology, Netherlands, 2002.
7. WEAR MECHANISM OF THIN FILM COATINGS, Published in 2005, (co-author: JJ Moore, A. Kunrath, D. Zhong).
8. TANKER CORROSION, Published in 2005, American Bureau of Shipping, (co-author: DL Olson, S. Saidarasamoot).
9. NANOCOMPOSITE THIN FILMS AND COATINGS-Processing, Properties and Performance, Published in 2007, Imperial College Press, UK, (co-authors: J.J. Moore, I-W. Park, J. Lin and K.H. Kim). Chapter 6.
10. Uranium Processing, Uranium Processing & Properties, (Co-authors: NR Gubel, R. Bhola), Chapter-5, Edited by Morrell JS, Jackson. MJ, 2013, pp. 123-172.

INTL. CONFERENCE ORGANIZATIONS:

- 6 Intl. Conferences for TMS & ASM (1991-98)
- REWAS 99, San Sebastian, Spain, 1999
- Intl. Conf. on Refractory & Reactive Metals, Bombay, India, 1999
- Intl. Conf. on Rare-earths and Actinides, Nashville, TN, 2000
- Intl. Workshop on Corrosion Control for Marine Structures, Galveston, 1999
- Processing Materials for Processes: PMP-2, San Francisco, 2000
- High Temp. Processes for Waste Treatment, Nashville, TN, 2000
- Surface Engineering in Materials Science, Nashville, TN, 2000
- EPD Fall Extraction & Processing Meeting, Lulea, Sweden, June 2002
- Thermec 2003, Madrid, Spain, July 2003
- Surface Engineering Congress, September, Indianapolis, IN, 2003
- Surface Engineering Congress, August, Orlando, FL, 2004
- Intl. Workshop on Coatings for Corrosion Protection, Biloxi, MI, 2004.
- REWAS 2004, Madrid, Spain, September 2004.
- WasteEng 2005, Albi, France, May 2005.
- Thermec 2006, Vancouver, Canada, 2006.
- Sohn International Symposium, San Diego, CA, 2006.
- Innovative Solutions for Transport Industry, San Sebastian, Spain, 2006.

Microalloying 2007, Kolkata, India 2007.
Processing Materials for Properties: PMP-III, Bangkok, Thailand, 2008.
REWAS 2008, Cancun, Mexico, 2008.
Materials for Infrastructure, TMS Annual Conf., New Orleans, 2008.
Transfac 2009, Detroit, MI, 2009.
AIME Jt. Society Conf. On Materials & Resources, Geneva, Switzerland, 2008.
Thermec 2009, Berlin, Germany, 2009.
SimPro'08, Ranchi, India, 2008.
PRICM-7, Cairns, Australia, 2010.
Emerging Challenges for Metals & Materials, Kolkata, 2009
International Symp. on Steels for Infrastructure, Beijing, 2009
Carbon Management Coalition: United Engr. Foundation 2009
Nuclear Energy: Processes & Policies, Seattle, 2010
Proc. Materials for Properties: Seattle, 2010
World Resource Forum 2009, Davos, 2009.
Thermec 2011, Quebec City, Canada, 2011.
Engineering Solutions for Sustainability: M&R, Laussane, Switzerland, 2011.
Carbon & Energy Management Technology Conference, Orlando, FL, 2012
Thermec 2013, Las Vegas, NV, 2013.
REWAS 2013, San Antonio, TMS Annual Meeting, 2013
Advanced Materials and Reservoir Engr. for Extreme Oil & Gas Environments, TMS 2013
Engineering Solutions for Sustainability: M&R II, Orlando, FL, 2015.
Energy Technologies and Carbon Dioxide Management Symp., Orlando, FL, 2015.
REWAS 2016, Nashville, TN, TMS Annual Meeting, 2016
PRICM-9, Kyoto, Japan, 2016. Thermec 2016, Graz, Austria, 2016.
Engineering Solutions for Sustainability: M&R III, Denver, CO, 2017.
Light Metals Technology, MS&T, Pittsburgh, PA, 2017
Thermec 2018, Paris, France, 2018.
Bauxite Residue Valorization, Athens, Greece, 2020.
Diran Apelian Honorary Symposium, REWAS 2022, TMS 2022, Anaheim, CA, 2022.
Light Metals Technology, LMT 2023, Melbourne, Australia, 2023.