
CE 591 Environmental Engineering Seminar

Energy (Topic One) and Energy & Resources – Integrated Sustainable Solutions for WWTPs in the 21st Century (Topic Two)

TOPIC ONE: ENERGY

Description

- Energy Benchmarking: Why Benchmarking? Approach, Benefits
- Typical Wastewater Treatment Energy Use Metrics: Relevant Metrics; National Averages
- Alternative Funding Mechanisms : Local, Federal, Third Party
- Areas of Energy Optimization: Understanding Plant Processes; Equipment vs. Operational Modifications
- LEED's Design

TOPIC TWO: ENERGY & RESOURCES – INTEGRATED SUSTAINABLE SOLUTIONS FOR WWTPs IN THE 21ST CENTURY

Description

- FOG and Food Waste to Energy
- Cogeneration and Other Uses for Digester Gas
- Carbon Footprint and Greenhouse Gas Renewable
- Renewable Energy Opportunities at Wastewater Facilities

Who Should Attend

Graduate students registered for CE591 (All Disciplines), outside professionals seeking information and PDH credit, and the general public with interest in how engineers are meeting the challenge of sustainable design.

Format of Course

6:30 p.m. – 8:30 p.m. *Both lectures and Q/A Sessions**

8:30 p.m. – 9:30 p.m. *Review previous week assignment and provide current week assignment*

Date and Location

April 23, 2009 Salisbury Lab – RM 305 WPI Campus

Registration Information

Professional Development Registration:

\$50 Lectures Only CRN 27976 CESUS13

-- 2 Hrs PDH's Awarded

Graduate Course Registration:

CRN 27162 – 3 Credits Awarded

About the Speakers

Mr. Pat Clifford is an electrical and instrumentation engineer with over ten years of experience in the design and rehabilitation of electrical power and SCADA systems for water and wastewater treatment and distribution facilities. He has also recently performed extensive work in energy management, energy reduction projects and renewable energy projects at similar facilities to help better manage the large energy costs associated with the water and wastewater industry. He is currently the Business Unit Manager for AECOM's Energy and AE services groups.

Mr. Joerg Blischke holds a master's degree in chemical process engineering from the University of Stuttgart, Germany. He has more than 15 years of experience in various environmental engineering disciplines, including: waste treatment processes and resource management (ranging from renewable waste-to-energy conversion via anaerobic digestion to composting, material recycling,



landfill gas management, odor control); air quality compliance services; and water and groundwater treatment systems.

For more information or to register call 508-831-5517. Graduate students may register at: <http://www.wpi.edu/Admin/Registrar/course056.html>;

others may register through <http://cpe.wpi.edu/Individual/Workshops/regform.html>.