

REPORT OF PROPOSALS

For the Month of October/2001

<u>Department</u>	<u>Investigator</u>	<u>Sponsor</u>	<u>Title</u>		<u>Amount</u>
CHEMICAL ENG'G.	Kazantzis, N.	ACS PRF	Diagnostic Observer-based Digital Monitoring of Nonlinear Processes.	\$	25,000
COMPUTER & COMMUNICATION CENTER	Mullen, J.	Oklahoma Univ.	CRCD: Integration of High Performance Computing in Nanotechnology	\$	37,385
CIVIL & ENVIRONMENTAL ENGINEERING	Ray, M.	National Academy of Sciences	Use of Event Data Recorder Technology for Highway Crash Data Analysis	\$	250,000
COMPUTER SCIENCE	Ward, M.	TRW Data Systems Operations	High Dimensional Data Visualization	\$	61,790
ELECTRICAL & COMPUTER ENGINEERING	Pedersen, P. *Ludwig, R. *Makarov, S.	NSF	Target-Specific Optimization of Ultrasound Array Transducer Systems for Non-Destructive Applications	\$	389,691
	Pedersen, P.	NSF	Ultrasound Assessment of the Micro-Architecture of Cancellous Bone	\$	407,025

MANAGEMENT	Zeng, A. *Rong, Y.	NSF	GOALI: A Deployed and Shared Resource Solution for Establishing Suppliers Alliances in Supplier-Based Manufacturing	\$	401,081
MATHEMATICAL SCIENCES	Larsen, C.	NSF	Interaction Between Bulk and Surface Energies, and Applications to Materials Science	\$	178,014
	Yakovlev, V.	National Research Council	Accurate Modeling of High-Permittivity Lossy Dielectric Media for Microwave Power Application-Evaluations of Models and Development of Optimal Modeling Strategies	\$	14,600
MECHANICAL ENG'G.	Fofana, M.	NSF	GOALI: Dynamic Interaction Between Machine Tool and Process Degradation	\$	602,923
	Dementriou, M.	NSF	Design and Implementation of a Controller Activation Scheme in Flexible Structures.	\$	229,637
	Hou, Z	NSF	Health Monitoring for Large- Scale Structural System Using Local Measurements in Critical Regions	\$	297,243
	Rencis, J. *Shivkumar, S.	NSF	GOALI: Simulation of Thermo-Mechanical Deformation and Microstructure Evolution in High Speed Rolling of Long Products for U.S. Steel Industry	\$	241,021
	Demetriou, M.	NSF	Actuator and Sensor Placement of Narrow Band Control of Structural Acoustic Systems	\$	258,435
	Brown, C.	Computer Optics, Inc.	Measuring the Texture of Scratches on Germanium Domes to Determine if They are Repairable	\$	99,682
	Fofana, M. *Farr, W.	NSF	Stochastic Bifurcation in Modified Duffin Equations	\$	396,341

Esmaeeli, A	ACS- PRF	Large Scale Simulation of Suspension of Drops in Electric Fields	\$	120,000
Rong, Y.	NSF	GOALI: Integrated and Computerized Setup Planning and Fixture Design	\$	11,000
Dimentberg, M.	NSF	Stochastic Oscillations and Intermittency in Population Dynamics	\$	247,901
Pryputniewicz, R.	BWXT-Pantex	Study of a Viability of an Integrated MEMS Sensor	\$	648,007
*Co-PI		Total	\$	4,916,776