

APPENDIX 1: CMR Five-Year Project List

Project Number	Project Title, Sponsor, P.I., Department	Start	End	Activated Total Funds	Project Total
5-38585	Manufacturing Center Design and Testing–FY 2004-2005 (Activated at end of the Fiscal Year) Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/04	6/30/05	\$46,661	\$113,800
5-38585	Manufacturing Center Design and Testing–FY 2003-2004 (Activated at end of FY) Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/03	6/30/04	\$22,323	
5-38585	Design and Testing–FY 2002-2003 Activated at end of FY) Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/02	6/30/03	\$17,680	
5-38590	2001-2002 Testing Account Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/01	6/30/02	\$5,661	
5-38590	2000-2001 Testing Account Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/00	6/30/01	\$21,475	
5-33520	UT-CIS Contract for Employee Services 2004-05 Sponsor: UT Center for Industrial Services P.I.: Currie, K. Dept.: CMR	7/1/04	6/30/05	\$50,000	\$250,000
5-33519	UT-CIS Contract for Employee Services 2003-04 Sponsor: UT Center for Industrial Services P.I.: Currie, K. Dept.: CMR	7/1/03	6/30/04	\$50,000	
5-33518	UT-CIS Contract for Employee Services 2002-03 Sponsor: UT Center for Industrial Services P.I.: Currie, K. Dept.: CMR	7/1/02	6/30/03	\$50,000	
5-33517	UT-CIS Contract for Employee Services 2001-02 Sponsor: UT Center for Industrial Services P.I.: Currie, K. Dept.: CMR	7/1/01	6/30/02	\$50,000	
5-33516	UT-CIS Contract for Employee Services 2000-01 Sponsor: UT Center for Industrial Services P.I.: Currie, K. Dept.: CMR	7/1/00	6/30/01	\$50,000	
5-38590	Manufacturing Center General Work Study (FY 2004-2005) Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/04	6/30/05	\$119,440	(cont'd. on next page)
5-38590	General Work Study (FY 2003-2004) Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/03	6/30/04	\$213,291	
5-38590	General Work Study (FY 2002-2003) Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/02	6/30/03	\$63,944	
	Fleetguard Workstudy – FY 2003-04 Sponsor: Fleetguard Corporation P.I.: Currie, K. Dept.: CMR	7/1/03	6/30/04	\$15,052	

5-36210	Fleetguard Workstudy – FY 2002-03 Sponsor: Fleetguard Corporation P.I.: Currie, K. Dept.: CMR	7/1/02	6/30/03	\$115,535	
5-36210	Fleetguard Workstudy – FY 2001-02 Sponsor: Fleetguard Corporation P.I.: Currie, K. Dept.: CMR	7/1/01	6/30/02	\$219,804	
5-36210	Fleetguard Workstudy – FY 2000-01 Sponsor: Fleetguard Corporation P.I.: Currie, K. Dept.: CMR	7/1/00	6/30/01	\$323,078	\$1,070,144
5-36441	2001-02 Industrial Intern Program Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/01	6/30/02	\$19,252	\$19,252
5-31216	6 th International Conference on Clifford Algebra and Their Applications in Mathematics Sponsor: National Science Foundation P.I.: Ablamowicz, A. Dept.: Math	4/1/02	3/31/03	\$24,990	\$24,990
5-33478	TTU Small Business Development Center-2005- Cooperative Agreement 4-603001-Z0045021 Sponsor: Tennessee Small Development Center P.I.: Currie, K. Dept.: CMR, BA	1/1/05	12/31/05	\$56,664	
5-33477	Small Business Development Center (SBDC) 2004 Sponsor: Tennessee SBDC P.I.: Currie, K., Moore, V. Dept.: CMR	1/1/04	12/31/04	\$56,207	
5-33475	Small Business Development Center 2002-03 Sponsor: SBDC P.I.: Currie, K., Moore, V. Dept.: CMR, BA	1/1/03	12/31/03	\$52,628	
5-33474	Small Business Development Center – 2002 Sponsor: Tennessee SBDC P.I.: Currie, K., Moore, V. Dept.: CMR	1/1/02	12/31/02	\$50,056	
5-33473	Small Business Development Center (SBDC) 2001 Sponsor: Tennessee SBDC P.I.: Moore, V., Currie, K. Dept.: BA, CMR	1/1/01	12/31/01	\$50,888	\$266,443
5-38511	SBDC Program Income FY2001-02 Sponsor: Various Programs P.I.: Reel, M.	7/1/01	6/30/02	\$1,000	\$1,000
5-33484	Small Business Development Center (SBDC) 2004-05 – ECD Matching Funds Sponsor: Tennessee Economic Community Development P.I.: Currie, K. Dept.: CMR, BA	1/1/05	12/31/05	\$6,052	
5-33483	Economic and Community Development Match for SBDC 2004 Sponsor: Economic & Community Development P.I.: Currie, K., Moore, V. Dept.: CMR	1/1/04	12/31/04	\$21,004	(cont'd. on next page)

5-33482	Small Business Development Center (SBDC) 2002-03 –ECD Matching Funds Sponsor: ECD P.I.: Currie, K., Moore, V. Dept.: CMR, BA	1/1/03	12/31/03	\$19,907	
5-33481	ECD Matching for SBDC Center 2002 Sponsor: ECD Virginia Moore P.I.: Currie, K. Dept.: CMR	1/1/02	12/31/02	\$25,928	
5-33480	ECD Matching Funds for Small Business Development Center 2001 Sponsor: ECD P.I.: Moore, V., Currie, K. Dept.: BA, CMR	1/1/01	12/31/01	\$18,248	\$91,139
0-89087	Manufacturing Center Agency Account – FY 2003-04 Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/03	6/30/04	\$6,200	
0-89087	Manufacturing Center Agency Account – FY 2002-03 Sponsor: Various Industries P.I.: Currie, K. Dept.: CMR	7/1/02	6/30/03	\$3,000	
0-89087	Manufacturing Center Agency Account – FY 2001-02 Sponsor: Various Industries & Individuals P.I.: Currie, K. Dept.: CMR	7/1/01	6/30/02	\$2,295	\$11,495
5-39317	Industrial Technological Program Outreach and Facilitation 2005-2006 Sponsor: Tennessee ECD (via DOE) P.I.: Cunningham, G. Dept. ME	4/1/05	6/30/06	\$100,000	\$100,000
5-32272	Development of a Broad Based Tennessee IOF Network, Grant No. DE-FG01-0G01- 02LELE65004, Amendment No. M001 (Half of Activation shared with the Power Center) Sponsor: Department of Energy P.I.: Otuonye, F. Dept.: OofR	8/27/02	9/26/03	\$36,667	\$36,667
5-36216	Fleetguard Graduate Research Project – Mert Sasoglu – Purchase Order #5373 Sponsor: Fleetguard Corporation P.I.: Pardue, S. Dept.: ME	8/1/03	5/31/04	\$19,526	\$19,526
5-36212	Fleetguard Graduate Research – Mike Ellis – POEA3355 Sponsor: Fleetguard Corporation P.I.: Pardue, S. Dept.: ME	7/1/01	9/30/01	\$8,320	
5-36212	Fleetguard Graduate Research – Mike Ellis – Amendment #2 Sponsor: Fleetguard Corporation P.I.: Pardue, S. Dept.: ME	1/2/01	6/30/01	\$11,969	
5-36212	Fleetguard Graduate Research – Mike Ellis – PO A1985 Sponsor: Fleetguard Corporation P.I.: Pardue, S. Dept.: ME	7/1/00	12/31/00	\$11,719	\$32,008

5-36388	Fleetguard/Nelson Customer Focused Technology Planning – P.O. #A4938 Sponsor: Fleetguard P.I.: Currie, K. Dept.: CMR	3/1/03	7/31/03	\$11,344	\$11,344
5-36213	Fleetguard Graduate Research #3 Sponsor: Fleetguard Corporation P.I.: Pardue, S. Dept.: ME	8/21/02	12/31/00	\$9,301	\$9,301
5-36336	Fleetguard Cavitation Research Sponsor: Fleetguard Corporation P.I.: Pardue, S., Dept.: ME	6/1/01	8/15/01	\$3,535	\$3,535
5-36331	Graduate Research –Fall Semester 2000 – Shishir Shirgaonkar Sponsor: Tennessee Company P.I.: Pardue, S. Dept.: ME	8/21/00	8/14/01	\$9,246	\$9,246
5-36341	ARM Finite Element Analysis Service Sponsor: ArvinMeritor, Inc. P.I.: Currie, K. Dept.: CMR	1/18/05	5/17/05	\$11,062	\$129,780
5-36346	ARM Finite Element Analysis Service through The Center for Manufacturing Research – Tennessee Tech University – Continuation of P.O. 7983 Sponsor: ArvinMeritor, Inc. P.I.: Currie, K. Dept.: CMR	6/30/03	9/30/05	\$60,000	
5-36346	ARM Finite Element Analysis Service through The Center for Manufacturing Research – Tennessee Tech University – Continuation #2 of P.O. 7983 Sponsor: ArvinMeritor, Inc. P.I.: Currie, K. Dept.: CMR	6/30/03	8/31/05	\$25,000	
5-36346	ARM Finite Element Analysis Service Sponsor: ArvinMeritor, Inc. P.I.: Currie, K. Dept.: CMR	1/30/03	12/31/03	\$33,718	
5-39318	Titanium Welded Bellows – Phase II – Year 1 Sponsor: Flexial Corporation P.I.: Currie, K. Dept.: CMR	12/1/04	11/30/05	\$142,232	
5-36367	Titanium Welded Bellows – Material and Process Science – Purchase Order #3677 – PROPRIETARY AND CONFIDENTIAL Sponsor: Flexial Corporation P.I.: Wilson, D., Currie, K. Dept.: ME	7/22/03	12/5/03	\$21,000	\$163,232
5-36349	T/J Technologies Battery Research – PROPRIETARY Sponsor: T/J Technologies, Inc. P.I.: Wang, C. Dept.: CMR	4/1/05	9/30/05	\$38,000	\$38,000
5-39312	Advanced Lithium Ion Polymer Batteries for Aerospace Application – Amendment of Subrecipient Agreement 65922 - (via NASA Grant NAG3-2617) Sponsor: Texas A&M University P.I.: Wang, C. Dept. Ch.E.	5/1/04	4/30/05	\$48,667	(cont'd. on next page)

5-39312	Advanced Lithium Ion Polymer Batteries for Aerospace Application - (via NASA Grant NAG3-2617) Sponsor: Texas A&M University P.I.: Wang, C. Dept. Ch.E.	9/1/03	3/1/04	\$26,500	\$75,167
5-38352	Unified End-to-End Provisioning in Multi-Domain Metro-Core Networks – Amendment #1 Sponsor: University of Houston P.I.: Ghani, N. Dept.: ECE	7/19/04	4/30/05	\$2,500	\$49,966
5-38352	Unified End-to-End Provisioning in Multi-Domain Metro-Core Networks – Subrecipient Agreement R-04-0469 Sponsor: University of Houston (via Sprint) P.I.: Ghani, N. Dept.: ECE	4/1/04	4/30/05	\$47,466	
5-31211	CAREER: Dynamic Multi-Domain/Multi-Granularity Network Provisioning-Award No. CNS-0448225 Year 1 Sponsor: National Science Foundation P.I.: Ghani, N. Dept.: ECE	3/1/05	2/28/06	\$86,629	\$86,629
5-32384	Shipboard Wireless Networking Techniques – Continuation Grant N0. N00178-03-9002 Sponsor: Naval Surface Warfare Ctr. P.I.: Rajan, P.K. Dept.: ECE	6/1/04	11/30/04	\$34,517	\$72,003
5-32384	Shipboard Wireless Networking Techniques – N0. N0178-03-9002 Sponsor: Naval Surface Warfare Ctr. P.I.: Rajan, P.K. Dept.: ECE	3/1/03	2/29/04	\$37,486	
5-31243	REU Site: Research Experiences for Undergraduates in Network and Communications Systems – Award No. SCLI-0453438 Year 1 Sponsor: National Science Foundation P.I.: He, X. Dept.: ECE	6/1/05	5/31/06	\$99,644	\$99,644
5-36228	High Performance and Reliable Storage Support for Clusters (Collaborative – ORNL) Sponsor: Oak Ridge Associated Universities – POWE Award P.I.: He, X. Dept.: ECE	6/1/04	8/15/04	\$5,000	\$5,000
5-32309	A General Purpose UWB Transceiver Testbed for Communications and Ranging – Contract W911NF-1-0111-DURIP Instruction Grant Sponsor: Department of Defense P.I.: Qiu, R. Dept.: ECE	5/1/05	4/30/06	\$90,247	\$90,247
5-31222	International Collaboration for the Development of Evolvable Hardware Design Methodology – Award No. INT-0323578 Year 1 of 2 Sponsor: National Science Foundation P.I.: Mahmoud, W. Dept.: ECE	9/1/03	8/31/04	\$12,000	\$12,000

5-31236	High Performance Network Connection for Tennessee Technological University – Year 2 of 2, Award No. ANI-0333656 (One Half Activation Shared with Water Center) Sponsor: National Science Foundation P.I.s: Talbert, D., George, D., Ting, K.L., He, X., Rogers, M. Dept: CS, WC, ME, ECE, CS	10/10/04	9/30/05	\$36,000	
5-31236	High Performance Network Connection for Tennessee Technological University – Year 1 of 2, Award No. ANI-0333656 (One Half Activation Shared with Water Center) Sponsor: National Science Foundation P.I.s: Talbert, D., Ting, K.L., George, D., He, X., Rogers, M. Dept.: CS, ME, WC, ECE, CS	10/1/03	9/30/04	\$64,000	\$100,000
5-39221	NIST ATP Project – CONFIDENTIAL Sponsor: InRAD P.I.s: Ramaswamy, S., Rogers, M. Dept.: CS	8/1/04	5/31/05	\$155,558	\$155,558
5-36217	Development with Financial Matrix, Inc. Sponsor: Financial Matrix, Inc. P.I.: Talbert, D. Dept.: CS	2/25/05	4/15/05	\$7,802	\$7,802
5-36389	Web-Site Development for Next Roof Realtors Sponsors: Next Roof Realtors P.I.: Talbert, D., Rogers, M. Dept.: CS	8/4/03	10/31/03	\$14,262	\$14,262
5-36235	On-Going Software Development Sponsor: Wesley Hooper P.I.: Talbert, D. Dept.: CS	8/4/03	12/31/03	\$16,912	\$16,912
5-36383	Job Flow Software Development Project – Amendment #3 Sponsor: Neilson & Bainbridge Ltd. P.I. Ramaswamy, S., Brown, E. Dept.: CS	11/15/00	7/31/01	\$16,156	
5-36383	Job Flow Software Development Project – Amendment #2 Sponsor: Neilson & Bainbridge Ltd. P.I. Ramaswamy, S., Brown, E. Dept.: CS	5/16/00	8/14/00	\$3,000	\$19,156
5-36319	Shopping Cart Application Sponsor: Cumberland Watersport P.I.: Ramaswamy, S., Brown, E. Dept.: CS	3/5/01	6/4/01	\$5,975	\$5,975
5-32350	Developing Capture Concepts and Dynamic Model and Code for MXER Tether Systems, Modification #1, Contract No. NNMO4AB13C Sponsor: NASA P.I.: Canfield, S. Dept.: ME	5/14/05	12/14/05	\$45,141	(cont'd. on next page)

5-32350	Capture Concepts and Model Development for MXER Tether Systems Model Development – Year 1 of 2 – Contract No. NNMO-4AB13C, Project No. 4200046170 Sponsor: NASA P.I.: Canfield, S. Dept. ME	4/14/04	4/14/05	\$369,000	
5-32336	Development and Evaluation of Capture Devices for Rendezvous with Tether-Driven Transfer Vehicles Year 1 Sponsor: Marshall Space Flight Center (NASA) P.I.: Canfield, S. Dept.: ME	7/1/01	6/30/02	\$22,000	
5-32324	Concept Development and Evaluation of Capture Devices for Rendezvous with Tether-Driven Transfer Vehicles Sponsor: Marshall Space Flight Center (NASA) P.I.: Canfield Dept.: ME	1/1/01	12/31/01	\$38,000	\$474,141
5-32339	Concept Development Study for JEM-EF Experiments for the International Space Shuttle – Grant NAG8-1919 Sponsor: Marshall Space Flight Center (NASA) P.I.: Canfield, S. Dept.: ME	1/1/03	9/30/03	\$25,000	\$25,000
5-39217	Compliant, 3 Dimensional Parallel Manipulators (Miniature and Micro) for Commercial and Military Applications – P.O. #TTU081501 Sponsor: Dynamic Structure & Materials P.I.: Canfield, S. Dept.: ME	8/15/01	8/14/02	\$56,821	\$56,821
5-32321	Active Control of Large, Flexible Space Structures Using Shape Memory Alloys – Grant: NAG8-1749 Sponsor: Marshall Space Flight Center P.I.: Canfield, S. Dept.: ME	10/1/00	9/30/01	\$37,813	\$37,813
5-31242	Tennessee Technological University – Regional Undergraduate Research Center (TTU-RURC) Sponsor: National Science Foundation P.I.s Visco, D., Boles, J. Dept. Ch.E., Chem.	8/15/04	12/31/05	\$49,716	\$49,716
5-35242	Exploring the Effects of Self and Cross-Clustering on the Thermodynamics of Strongly Associating Systems – Phase I – PRF-42227-ACL9 Sponsor: American Chemical Society P.I.: Visco, D. Dept.: Ch.E.	1/1/05	8/31/06	\$58,774	\$58,774
5-33210	UTSI-TTU Graduate Program Collaboration University of Tennessee Space Institute Sponsor: University of Tennessee Space Institute P.I.: Visco, D.	5/17/04	8/15/05	\$8,752	\$8,752

5-36348	Thermodynamic Modeling of Polymeric Foam Systems Sponsor: Honeywell P.I.: Visco, D. Dept.: Ch.E.	1/1/02	12/31/02	\$60,000	\$60,000
5-31240	RUI: Micro and Meso-Scale Strain Measurements in Cement-Based Materials – Award No. CMS-0324616 Year 2 of 3 Sponsor: National Science Foundation P.I.: Biernacki, J. Dept.: Ch.E.	8/1/04	7/31/05	\$80,302	
5-31240	RUI: Micro and Meso-Scale Strain Measurements in Cement-Based Materials – Supplement #2 to – # CMS-0324616 Sponsor: National Science Foundation P.I.: Biernacki, J. Dept.: Ch.E.	1/1/05	12/31/05	\$7,250	
5-31240	Supplement to Micro and Meso-Scale Strain Measurements in Cement-Based Materials Sponsor: National Science Foundation P.I.: Biernacki, J. Dept.: Ch.E.	1/1/04	12/31/04	\$6,000	
5-31240	RUI: Micro and Meso-Scale Strain Measurements in Cement-Based Materials – Year 1 Award – Award # CMS-0324616 Sponsor: National Science Foundation P.I.: Biernacki, J. Dept.: Ch.E.	8/1/03	7/31/04	\$88,969	\$182,521
5-38315	Effect of Wood Pulp Fibers on Cement Hydration and Cement Paste Microstructure- Continuation of 5-38315 PROPRIETARY AND CONFIDENTIAL Sponsor: Buckeye Corporation P.I.: Biernacki, J. Dept.: Ch.E.	10/01/05	9/30/05	\$31,980	
5-38315	Buckeye Experimentation on Cement without Fibers – Letter of Intent – PROPRIETARY AND CONFIDENTIAL Sponsor: Buckeye Technologies P.I.: Biernacki, J. Dept.: Ch.E.	1/1/04	12/31/04	\$10,354	\$42,334
5-31234	INTERNATIONAL: Indo-US Workshop on High Performance Cement Based Concrete Composites Sponsor: National Science Foundation P.I.: Biernacki, J. Dept.: Ch.E.	1/1/04	12/31/04	\$24,000	\$24,000
5-31224	Acquisition of Scanning Electron Microscope (Half of Activation Shared with Water Center) Sponsor: National Science Foundation P.I.: Biernacki, J. Dept.: Ch.E.	8/1/01	7/31/02	\$125,000	\$125,000
5-31224	Microanalysis in Science and Engineering K-12 Education Initiative – supplement to TTU Account 5-31224, Grant No. DMR-0115961 Sponsor: National Science Foundation P.I.: Biernacki, J., Wilson, C., Knox, L. Dept.: Ch.E., ME, Earth Sciences	5/1/03	7/31/03	\$19,000	\$19,000
5-37319	Proprietary Work Sponsor: US Subsidiary of International Co. P.I.: Biernacki, J. Dept.: Ch.E.	10/1/00	12/31/01	\$53,829	\$53,829

5-32356	Effects of Porosity and Low-Velocity Impact Damage on Residual Strength of GFRP Laminate – Year 2 Sponsor: NASA P.I.: Wilson, C. Dept.: ME	7/1/04	6/30/05	\$24,000	
5-32356	Effects of Porosity and Low-Velocity Impact Damage on Residual Strength of GFRP Laminate – Year 1 Sponsor: NASA P.I.: Wilson, C. Dept.: ME	7/1/03	6/30/04	\$24,000	\$48,000
5-32352	Hydrostatic Effects on Yielding and Fatigue Life – Graduate Student – Year 3 Sponsor: NASA P.I.: Wilson, C. Dept.: ME	9/9/01	9/8/02	\$22,000	
5-32352	Hydrostatic Effects on Yielding and Fatigue Life – Graduate Student – Year 2 Sponsor: NASA P.I.: Wilson, C. Dept.: ME	9/1/00	8/31/01	\$22,000	\$44,000
5-32237	Verification of NASGRO Elastic-Plastic Modules: J-Integral Computation Sponsor: Marshall Space Flight Center (NASA) P.I.: Wilson, C. Dept.: ME	12/1/01	8/31/02	\$35,000	\$35,000
5-32327	Understanding the Service Life of Composites: Porosity and Nonuniform Fiber Distribution Effects – Year 4 of #58404-S5-TTU- 5-32327 Sponsor: National Center for Advanced Manufacturing (via NASA) P.I.: Wilson, C., Hoy, D. Dept. ME	6/30/04	3/18/05	\$65,000	
5-32327	Understanding the Service Life of Composites – Phase 3 Submission #58404-S5-32327 Sponsor: National Center for Advanced Manufacturing P.I.: Wilson, C., Pardue, S. Dept.: ME	4/1/03	6/30/04	\$169,274	
5-32327	Understanding the Service Life of Composites – Submission 2 #58404-S5-32327 Sponsor: National Center for Advanced Manufacturing P.I.: Wilson, C. Dept.: ME	7/1/02	3/15/03	\$60,000	
5-32327	Understanding the Service Life of Composites – Year 1 – UNO R&T Foundation Project Number #58404 Sponsor: National Center for Advanced Manufacturing (NASA) P.I.: Wilson, C. Hoy, D. Dept.: ME	6/1/01	3/31/02	\$127,301	\$421,575
5-32328	Minimizing Life Cycle Costs of Composites thru Design-Year 2-NASA Project NCC8-233 Foundation #58404-S4 Sponsor: National Center for Advanced Mfg. (NCAM) P.I.: Currie, K. Dept.: CMR, ME	7/1/02	3/18/03	\$60,000	(cont'd. on next page)

5-32328	Minimizing Life Cycle Costs of Composites thru Design-Year 1- UNO R&T Foundation Project #58404 Sponsor: National Center for Advanced Mfg. (NCAM) P.I.: Currie, K., Wilson, D. Dept.: CMR	6/1/01	3/31/02	\$145,701	\$205,701
5-31214	U.S.-Egypt Cooperative Research: Innovative Technology for Improving Wear Resistance and Fracture Toughness of Austempered Ductile Iron – Award No. OISE-04311481, Year 1 of 2 Sponsor: National Science Foundation P.I.: ELSawy, A. Dept. MIT	9/1/04	8/31/05	\$10,431	\$10,431
5-31229	Computer-Aided Knowledge-Based Process Planning for Surface Mount Rework-Award No.: INT-0215760 Year 3 of 3 Sponsor: National Science Foundation P.I.: Fidan, I. Dept.: IT	7/1/04	6/30/05	\$8,000	
5-31229	Computer-Aided Knowledge-Based Process Planning for Surface Mount Rework-Award No.: INT-0215760 Phase 2 of 3 Sponsor: National Science Foundation P.I.: Fidan, I. Dept.: IT	7/1/03	6/30/04	\$8,000	
5-31229	Computer-Aided Knowledge-Based Process Planning for Surface Mount Rework-Award No.: INT-0215760 Phase 1 Sponsor: National Science Foundation P.I.: Fidan, I. Dept.: MIT	7/15/02	6/30/03	\$8,000	\$24,000
5-31239	Integrating Rapid Prototyping Technology into RRU's Manufacturing and Industrial Technology Curriculum Sponsor: National Science Foundation P.I.: Fidan, I., ElSawy, A. Dept.: MIT	6/1/03	5/31/04	\$50,351	\$50,351
5-38852	Cutting-Edge Enhancement of TTU's Virtual Manufacturing Practices – Software Grant. Sponsor: 3DATUM Inc P.I.: Fidan, F. Dept.: MIT	3/1/04	2/28/05	\$21,250	\$21,250
5-31235	Theory and Practice of Point Line Kinematics – Grant #DMI-0219859 Year 3 of 3 Sponsor: National Science Foundation P.I.: Ting, K.L. Dept.: CMR	8/1/04	7/31/05	\$81,865	
5-31235	REU Supplement to Theory and Practice of Point Line Kinematics Sponsor: National Science Foundation P.I.: Ting, K.L. Dept.: CMR	12/1/04	7/31/05	\$6,000	
5-31235	Theory and Practice of Point Line Kinematics – Grant #DMI-0219859 Year 1 Sponsor: National Science Foundation P.I.: Ting, K.L. Dept.: CMR	8/1/02	7/30/03	\$70,056	
5-31235	Theory and Practice of Point Line Kinematics – Grant #DMI-0219859 Year 2 of 3 Sponsor: National Science Foundation P.I.: Ting, K.L. Dept.: CMR	8/1/03	7/31/04	\$91,488	\$249,409

5-31213	Acquisition of Research and Education Equipment for Geometric Design and Manufacturing Integration Sponsor: National Science Foundation P.I.: Ting, K.L. Dept.: CMR	8/1/03	1/31/05	\$304,143	\$304,143
5-36359	Design of Apple PII Display Deck Release Mechanism Sponsor: Exponent Failure Analysis Assoc. P.I.: Ting, K.L. Dept.: CMR	5/14/01	12/31/01	\$20,000	\$20,000
5-32293	In-Situ Real Time Monitoring and Control of Mold and Filling Processes – Year 2 of 3, Award DE-FC36-04GO14228 Sponsor: Department of Energy P.I.: Abdelrahman, M., Currie, K. Dept.: ECE, CMR	2/1/05	1/31/06	\$336,014	\$684,092
5-32293	In-Situ Real Time Monitoring and Control of Mold and Filling Processes – Year 1 Sponsor: Department of Energy P.I.: Abdelrahman, M. Dept.: ECE, CMR	2/1/04	7/31/05	\$348,078	
5-31231	Production Technology of High Purity Pig Iron in Small and Medium Cupola Foundries, Grant No. IDT-0217104 Sponsor: National Science Foundation P.I.: Abdelrahman, M. Dept.: ECE	8/1/02	7/31/04	\$30,000	\$30,000
5-32271	Integrated Industrial Process Sensing and Control System Applied To and Demonstrated on Cupola Furnaces – Year 3 Grant #: DE-FC07-99CH10975 Sponsor: US Department of Energy (DOE) P.I.: Abdelrahman, M. Dept.: ECE	1/8/01	1/7/02	\$158,036	\$158,036
5-39308	Counter Gravity (Hitchiner) and Pressure Assisted Lost Magnesium Casting – Subcontract #4000035322 – Year 1 of 3 Sponsor: Oak Ridge National Laboratory P.I.: Currie, K. Dept.: CMR	9/1/04	9/30/05	\$70,000	\$70,000
5-31238	CAREER: Novel Conductive Oxide Coatings on Metallic Interconnect for Intermediate-Temperature SOFC – Award No. DMR-0238113 Year 3 of 5 Sponsor: National Science Foundation P.I.: Zhu, J. Dept.: ME	2/1/05	1/31/06	\$92,976	(cont'd. on next page)
5-31238	REU Supplement to NSF Grant DMR-02348113 Novel Conductive Oxide Coatings Sponsor: National Science Foundation P.I.: Zhu, J. Dept.: ME	2/1/04	1/31/05	\$7,000	

5-31238	CAREER: Novel Conductive Oxide Coatings on Metallic Interconnect for Intermediate-Temperature SOFC Applications – Year 2 of NSF Grant DMR-0238113 Sponsor: National Science Foundation P.I.: Zhu, J. Dept.: ME	1/30/04	1/31/05	\$78,410	
5-31238	CAREER: Novel Conductive Oxide Coatings on Metallic Interconnect for Intermediate-Temperature SOFC – Award No. DMR-0238113 Year 1 Sponsor: National Science Foundation P.I.: Zhu, J. Dept.: ME	2/1/03	1/31/04	\$74,164	\$252,550
5-32287	Tailoring FE-Base Alloys for Intermediate-Temperature SOFC Interconnect Application – Phase 1-A-Cooperative Agreement No. DE-FC26-04NT42223 Sponsor: U.S. Department of Energy P.I.: Zhu, J. Dept.: ME	10/1/04	9/30/05	\$187,090	\$187,090
5-39311	Alloying Effects on Alloy Preparation and Microstructural Features in TbFe ₂ – Subcontract 400021483 Allotment #2 Sponsor: Oak Ridge National Lab. P.I.: Zhu, J. Dept.: ME	2/20/03	2/20/04	\$20,000	
5-39311	Alloying Effects on Alloy Preparation and Microstructural Features in TbFe ₂ Sponsor: Oak Ridge National Lab. P.I.: Zhu, J. Dept.: ME	6/1/04	8/15/04	\$20,000	
5-39311	Alloying Effects on Alloy Preparation and Microstructural Features in TbFe ₂ – Allotment #1, Subcontract 4000021483 Sponsor: Oak Ridge National Lab. P.I.: Zhu, J. Dept.: ME	2/21/04	2/20/05	\$20,000	\$60,000
5-39304	Stamping and Sealing of Nitride Coated Metal PEM Bipolar Plates – Grant #ED-03-01043-00 (DOE Subcontract) Sponsor: Tennessee ECD P.I.: Cunningham, G., Zhu, J., Dept.: ME	10/1/02	3/31/04	\$99,987	\$99,987
5-39301	Stoichiometric Effects in AB ₂ Laves Continuation – Year 2 of Phase 2 – Subcontract 4000005119 Sponsor: Oak Ridge National Lab. P.I.: Zhu, J. Dept.: ME	11/8/02	12/10/03	\$35,000	
5-39301	Stoichiometric Effects in AB ₂ Laves Sponsor: Oak Ridge National Lab. P.I.: Zhu, J. Dept.: ME	9/21/00	9/21/01	\$30,000	
5-39301	Stoichiometric Effects in AB ₂ Laves – Phase 2 of Year 1 – Subcontract 4000005119 Sponsor: Oak Ridge National Lab. P.I.: Zhu, J. Dept.: ME	11/8/01	12/12/02	\$35,000	\$100,000

5-36313	Interconnect Material for Fuel Cell Powered Vehicles: Innovative Fabrication of Conductive Coatings Sponsor: Honda Corporation P.I.: Zhu, J. Dept.: ME	1/1/01	12/31/01	\$30,000	\$30,000
5-36328	Aluminide Coatings for Power-Generation Applications – Renewal – Contract 4000032183 Sponsor: Oak Ridge National Laboratory P.I.: Zhang, Y. Dept.: ME	5/10/04	7/31/05	\$78,000	
5-36306	Aluminide Coatings for Power Generation Applications – Year 3 Allotment #1, Subcontract 4000007035 Sponsor: Oak Ridge National Lab. P.I.: Zhang, Y., Currie, K. Dept.: ME, CMR	1/1/03	12/31/03	\$20,000	
5-36306	Aluminide Coatings for Power Generation Applications – Year 3 Allotment #2, Subcontract 4000007035 Sponsor: Oak Ridge National Lab. P.I.: Zhang, Y. Dept.: ME, CMR	1/1/03	12/31/03	\$57,200	
5-36306	Aluminide Coatings for Power Generation Applications – Year 2, Subcontract 4000007035 Sponsor: Oak Ridge National Lab. P.I.: Zhang, Y., Currie, K. Dept.: ME, CMR	1/1/02	1/4/03	\$78,800	
5-36306	Aluminide Coatings for Power Generation Applications Sponsor: Oak Ridge National Lab. P.I.: Zhang, Y., Currie, K. Dept.: ME, CMR	1/21/01	12/31/01	\$78,000	\$312,000
5-32317	Analysis of Nearly Steady Photospheric Flows – Grant NAG8-1631-Year 3 Sponsor: Marshall Space Flight Center (NASA) P.I.: Han, S. Dept.: ME	9/7/01	9/8/02	\$29,000	
5-32317	Analysis of Nearly Steady Photospheric Flows – Grant NAG8-1631-Year 2 Sponsor: Marshall Space Flight Center (NASA) P.I.: Han, S. Dept.: ME	9/9/00	9/8/01	\$29,000	\$58,000
5-32325	Enhancement of Ejector Efficiency in Advance Reusable Propulsion Engines – Grant NAG8-1794 – Year 2 Sponsor: Marshall Space Flight Center (NASA) P.I.: Han, H., Peddieson, J., Idem, S. Dept.: ME	1/2/02	12/31/02	\$90,000	
5-32325	Enhancement of Ejector Efficiency in Advance Reusable Propulsion Engines – Year 1 – Grant NAG8-1794 (Joint Project with Electric Power Center) Sponsor: NASA P.I.: Han, S. Dept.: ME	1/1/01	9/30/01	\$30,000	\$120,000

5-31210	Expanding Innovation Opportunities in Tennessee – Year 3 – Grant #EHR-0091631 Sponsor: National Science Foundation P.I.: Johnson, G. Dept.: College of Engr	10/1/02	9/30/03	\$199,931	
5-31210	Expanding Innovation Opportunities in Tennessee – Year 2 – Grant #EHR-0091631 Sponsor: National Science Foundation P.I.: Johnson, G. Dept.: College of Engr.	10/1/01	9/30/02	\$196,247	
5-31210	Expanding Innovation Opportunities in Tennessee – Year 1 – Grant #EHR-0091631 Sponsor: National Science Foundation P.I.: Johnson, G. Dept.: College of Engr	10/1/00	9/30/01	\$183,517	\$579,695
5-36378	APVS Checkweigher System Sponsor: TechWerks, L.L.C. P.I.: Currie, K. Dept.: CMR	1/1/04	3/31/04	\$12,500	\$12,500
5-36325	Automated Prescription Verification System (APVS) Sponsor: TechWerks, LLS (EconoGenesys) P.I.: Alouani, A., Currie, K. Dept.: ECE, CMR	3/15/03	12/31/03	\$98,600	\$98,600
5-36315	Dental Tool Prototype Sponsor: Wilkinson Dental Devices, Inc. P.I.: Currie, K. Dept.: CMR	10/15/02	10/14/03	\$86,635	\$86,635
147 Activations for					\$8,801,969