

## IOANNIS MINIS

### PERSONAL DATA

**Place and Date of Birth** Athens, 20 May 1958  
**Family Status** Married, 2 children  
**Telephone** 22710-35450(office),  
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### EDUCATION

Ph.D., Mechanical Engineering, University of Maryland, College Park, February 1988.  
Dissertation topic: "Prediction of Machine Tool Chatter in Turning."

M.S., Mechanical Engineering, Clarkson University, August 1983. Thesis Topic: "Theoretical and Experimental Investigations on Void Distributions and Phase Equilibria in Randomly Packed Granular Materials."

Diploma, Mechanical Engineering, National Technical University of Athens, Greece, February 1982. Diploma thesis topic: "Modeling and Control of the Fuel-to-Air Ratio in Internal Combustion Engines."

### EMPLOYMENT

Jul. 2002 – today Professor, Department of Financial and Management Engineering, University of the Aegean, Greece. Research in the areas of concurrent engineering, production and service systems.

Ian. 1997 – Jul. 2002 Business Sector Manager, Planning Management Consultants, Athens, Greece.

August 1995 – Jan. 1997 Associate Professor, Department of Mechanical Engineering, University of Maryland, College Park. Research in the areas of Machining Dynamics and Control, and Production Systems.

January 1996 - June 1996 Visiting Professor, Department of Mechanical Engineering, National Technical University of Athens, Greece. Teaching and research in the areas of concurrent engineering and production systems.

May 1993 - August 1995 Assistant Professor, Department of Mechanical Engineering, University of Maryland, College Park. Research in the areas of Machining Dynamics and Control, and Production Systems.

July 1991 – Jan. 1997 Joint appointment with the Institute for Systems Research, University of Maryland, College Park. Director of the Computer Integrated Manufacturing laboratory of the M.E. Department and ISR (since October 1993).

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|-----------------------|---|
| Feb. 1988 - May 1993  | Assistant Professor, Department of Mechanical Engineering, University of Maryland, Baltimore County. Research in the areas of Machining Dynamics and Control, and Production Systems.                                 |
| Dec. 1984 - Jan. 1988 | Research Fellow and Assistant Instructor, Department of Mechanical Engineering, University of Maryland, College Park. Research in Machining Dynamics conducted at the National Institute of Standards and Technology. |
| Jan. 1984 - Nov. 1984 | Research Assistant, Department of Mechanical Engineering, University of Maryland, College Park. Research in the area of Automatic Controls.   |
| Aug. 1982 - Aug. 1983 | Research Assistant, Clarkson University, Potsdam, NY. Research in the area of Statistics of Granular Materials.   |

### **Awards**

1. Mechanical Engineering Department Fellowship, University of Maryland, College Park, 1985-1988.
2. Westinghouse Professorship for the academic year 1989-1990, Department of Mechanical Engineering, University of Maryland.
3. Best paper award in the area of Engineering Database Management: "Use of PDES in Group Technology Applications for Electronics", 1992 ASME International Conference on Computers in Engineering.
4. 1993 Earl E. Walker Outstanding Young Manufacturing Engineer Award, Society of Manufacturing Engineers (SME).

## **RESEARCH, SCHOLARLY AND CREATIVE ACTIVITIES**

### **Books**

1. Zeimpekis, V., Tarantilis, C.D., Giaglis, G.M., Minis, I., "*Dynamic Fleet Management: Concepts, Systems, Algorithms & Case Studies*", Springer-Verlag, New York, 241pages, 2007.

### **Chapters in Books**

1. Proth, J.M. and Minis, I., "Planning and Scheduling Based on Petri Nets", in *Petri Nets in Flexible and Agile Automation*, edited by M.C. Zhou, Kluwer Academic Publishers, Boston, MA, 1995, Chapter 5, pp. 109-148.

2. Minis<sup>1</sup>, I. and Berger, B.S., “Modeling, Analysis and Characterization of Machining Dynamics”, in *Dynamics and Chaos in Manufacturing Processes*, edited by F.C. Moon, Wiley, New York, 1998, Chapter 5, pp. 125-164.
3. Herrmann, J., Minis, I. and Nau, D.S., “Integrated Design and Process Planning for Microwave Modules”, in *Integrated Process and Product Development: Methods, Tools, and Technologies*, Wiley, New York, 1998, Chapter 14, pp. 377-405.
4. Minis, I. and Ampazis, N., “Applications of Neural Networks in Supply Chain Management”, accept in *Nature Inspired Computing*, Volume II, Chapter XXXIX, 589 – 607, 2006.
5. Zeimpekis, V., Minis, I., Mamassis, K. and Giaglis, G.M., “Dynamic Management of a Delayed Delivery Vehicle in a City Logistics Environment”, accepted for publication in *Dynamic Fleet Management: Concepts, Systems, Algorithms & Case Studies*, Springer-Verlag, 2007, Chapter 9, 197 – 217.

### Refereed Journal Articles

1. Minis<sup>1</sup>, I., Magrab, E. and Pandelidis, I., “Improved Methods for the Prediction of Chatter in Turning. Part 1: Determination of Structural Response Parameters”, *ASME Journal of Engineering for Industry*, vol. 112, n.1, 1990, pp. 12-20.
2. Minis<sup>1</sup>, I., Magrab, E. and Pandelidis, I., "Improved Methods for the Prediction of Chatter in Turning. Part II: Determination of Cutting Process Parameters," *ASME Journal of Engineering for Industry*, vol. 112, n.1, 1990, pp. 21-27.
3. Minis<sup>1</sup>, I., Magrab, E. and Pandelidis, I., “Improved Methods for the Prediction of Chatter in Turning. Part III: A Generalized Linear Theory”, *ASME Journal of Engineering for Industry*, vol. 112, n.1, 1990, pp. 28-35.
4. Minis<sup>1</sup>, I., Yanushevsky, R. and Tembo, A., “Analysis of Linear and Nonlinear Chatter in Milling”, *Annals of the CIRP*, vol. 35, n.1, 1990, pp. 459-462.
5. Minis<sup>1</sup>, I., Jajodia, S. and Harhalakis, G., “Manufacturing Cell Formation with Multiple, Functionally Identical Machines” *ASME Manufacturing Review*, vol. 3, n.4, 1990, pp. 252-261.
6. Boulet, B., Chhabra, P., Harhalakis, G. and Minis, I., "Cell Controllers: Analysis and Comparison of Three Major Projects," *Journal of Computers in Industry*, vol. 16, 1991, pp. 239-254.
7. Jajodia, S., Minis, I., Harhalakis, G. and Proth, J.M., “CLASS: Computerized Layout Solutions Using Simulated Annealing”, *International Journal of Production Research*, vol. 30, n.1, 1992, pp. 95-108.
8. Berger, B.S., Minis, I. and Rokni, M., “Metal Cutting Dynamics: An Experimental-computational Study”, short paper, *Journal of Sound and Vibration*, vol. 156(1), 1992, pp. 165-169.

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<sup>1</sup> Lead Author

9. Berger, B.S., Rokni, M. and Minis, I., "The Nonlinear Dynamics of Metal Cutting", *International Journal of Engineering Science*, vol. 30, n. 10, 1992, pp. 1433-1440.
10. Minis, I. and Yanushevsky, R., "A New Theoretical Approach for the Prediction of Machine Tool Chatter in Milling", *ASME Journal of Engineering for Industry*, vol. 115, n.1, 1993, pp. 1-8.
11. Minis<sup>1</sup>, I. and Tembo, A., "Experimental Verification of a Stability Theory for Periodic Cutting Operations", *ASME Journal of Engineering for Industry*, vol. 115, n.1, 1993, pp. 9-14.
12. Negas, T., Yeager, G., Bell, S., Coats, N. and Minis, I., "BaTi<sub>4</sub>O<sub>9</sub>/Ba<sub>2</sub>Ti<sub>9</sub>O<sub>20</sub>-based Ceramics Resurrected for Modern Microwave Applications", *American Ceramic Society Bulletin*, vol. 72, n.1, 1993, pp. 80-89.
13. Berger, B., Rokni, M. and Minis, I., "Complex Dynamics of Metal Cutting", *Quarterly of Applied Mathematics*, vol. LI, n.4, 1993, pp. 601-612.
14. Harhalakis, G., Ioannou, G., Minis, I. and Nagi, R., "Manufacturing Cell Formation under Random Product Demand", *International Journal of Production Research*, vol. 32, n.1, 1994, pp. 47-64.
15. Uebel, M., Ali, M. and Minis, I., "The Effect of Bandwidth on Telerobot System Performance", short paper, *IEEE Transactions on Systems, Man and Cybernetics*, vol. 24, n.2, 1994, pp. 342-348.
16. Rokni, M., Berger, B.S. and Minis, I., "Characteristics of Dimension Functions Associated with Cutting Measurements", *ASME Journal of Vibration and Acoustics*, vol. 117, n.3(A), 1995, pp. 259-264.
17. Proth, J.M. and Minis, I., "Complexity of Production Management in a Petri Net Environment", *Rairo*, special issue on *Complexity and Industrial Systems*, 1995, v. 29, n.3, 1995, pp. 321-352.
18. Berger, B.S., Minis, I., Chen, Y.H., Chavali, A. and Rokni, M., "Attractor Embedding in Metal Cutting", short paper, *Journal of Sound and Vibration*, vol. 184(5), 1995, pp. 936-942.
19. Herrmann, J., Ioannou, G., Minis, I., Nagi, R. and Proth, J.M., "Design of Material Flow Networks in Manufacturing Facilities", *Journal of Manufacturing Systems*, vol. 14, n.4, 1995, pp. 277-289.
20. Berger, B.S., Minis, I., Deng, K., Chen, Y.S., Chavali, A. and Rokni, M., "Phase Coupling in Orthogonal Cutting", short paper, *Journal of Sound and Vibration*, vol. 191, n. 5, 1996, pp. 976-985.
21. Candadai, A. Herrmann, J.W. and Minis<sup>1</sup>, I., "Applications of Group Technology in Distributed Manufacturing", *Journal of Intelligent Manufacturing*, 1996, 7, pp. 271-291.

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22. Harhalakis, G., Lu, T., Minis<sup>1</sup>, I. and Nagi R., “A Practical Method for the Design of Hybrid-type Production Facilities”, *International Journal of Production Research*, vol. 34, n. 4, 1996, pp. 897-918.
23. Mehra, A., Minis, I. and Proth, J.M., “Hierarchical Production Planning for Complex Manufacturing Systems”, *Advances in Engineering Software*, vol. 26, 1996, pp. 209-218. Also appeared in the *Proc. of the 1994 ASME International Conference on Computers in Engineering*, Minneapolis, MN, September 1994.
24. Herrmann, J., Ioannou G., Minis, I. and Proth, J.M., “A Dual Ascent Approach to the Fixed-Charge Capacitated Network Design Problem”, *European Journal of Operations Research*, vol. 95, n.3, 1996.
25. Agrawal, A., Harhalakis, G., Minis<sup>1</sup>, I. and Nagi, R., “Just-in-time Production of Large Assemblies”, *IIE Transactions*, vol. 28, 1996, pp. 653-667.
26. Berger, B.S., Minis, I., Rokni, M., Papadopoulos, M., Deng, K. and Chaveli, A., “Cutting State Identification,” *Journal of Sound and Vibration*, vol. 200, n. 1, 1997, pp. 15-29.
27. Rokni, M., Berger, B.S. and Minis, I., “Singular Values of Cumulant Matrices,” *Journal of Sound and Vibration*, vol. 205, n. 5, 1997, 706-711.
28. Berger, B.S., Minis, I., Harley, J., Rokni, M. and Papadopoulos, M., “Wavelet based Cutting State Identification,” *Journal of Sound and Vibration*, vol. 213, n. 5, 1998, 813-827.
29. Ioannou, G. and Minis, I., “A Review of Current Research in Manufacturing Shop Design Integration, *Journal of Intelligent Manufacturing*, vol. 9, n.1, 1998, 57-72.
30. Herrmann, J.W., Ioannou, G, Minis, I. and Proth, J.M., “Minimization of Acquisition and Operational Costs in Horizontal Material Handling System Design”, *IIE Transactions*, vol. 31, n. 7, 1999, pp. 679-693.
31. Berger, B.S., Minis, I. “Non-stationary Cutting”, *Journal of Sound and Vibration*, vol. 217, n. 1, 1998, p.p. 183-190.
32. Minis, I., Herrmann, J., Lam, G. and Lin, E. “A Generative Approach for Design Evaluation and Partner Selection for Agile Manufacturing”, ”, *Journal of Manufacturing Systems*, vol. 18, n. 6, 1999, 383-395.
33. Agrawal, A., Minis, I. and Nagi, R., "Cycle Time Reduction by Improved MRP-based Production Planning", *International Journal of Production Research*, v. 38, n. 18, 2000, 4823-4841.
34. Ampazis, N. and Minis<sup>1</sup>, I. “Design of Cellular Manufacturing Systems using Latent Semantic Indexing and Self Organizing Maps”, *Computational Management Science*, vol. 1, n. 3-4, 2004, 275-292.

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<sup>1</sup> Lead Author

35. Giaglis, G.M., Minis, I., Tatarakis, A. and Zeimpekis, V., “Minimizing Logistics Risk through Real-time Vehicle Routing and Mobile Technologies: Research to-date and Future Trends”, *Journal of Physical Distribution and Logistics Management*, vol. 34, n. 9, 2004, 749-764.
36. Minis, I., Paraschi, M. and Tzinourtas, A., “The Design of Logistics Operations for the Olympic Games”, *Journal of Supply Chain and Physical Distribution Management*, vol. 36, n. 8, 2006, p.p. 621-642.
37. Minis<sup>1</sup>, I., Ampazis, N. and Mamassis, K. “Efficient Real Time Management of Goods Distribution to Clustered Clients”, *International Journal of Integrated Supply Management*, vol. 3, n 3, 2007, p.p. 211-227.
38. Zeimpelis, V., Tatarakis, A., Giaglis, G.M. and Minis, I. “Towards a Dynamic Real-time Vehicle Management System for Urban Distribution”, *International Journal of Integrated Supply Management*, vol. 3, n. 3, 2007, p.p. 228-243.
39. Minis<sup>1</sup>, I., Keys, E. and Athanasopoulos, T. “Contribution to the Design of the Athletes Bus Network During the Athens 2004 Olympic Games”, *Transportation Research Part A*, v. 40, n. 9, 2007, pp. 776-791.
40. Tsirimpas, P., Tatarakis, A., Minis, I., Kyriakidis, E.G., "Single Vehicle Routing with a Predefined Customer Sequence and Multiple Depot Returns", *European Journal of Operations Research*, vol. 187, n.2, 2007, 483 - 495.
41. Gliatis, V., Minis, I., “Service Attribute-Process Matrix: a tool for designing and managing services”, *Journal of Systems Science and Systems Engineering*, v. 16, n. 3, 2007, 257-276.
42. Minis, I., Tsamboulas, D., “Contingency Planning and War Gaming for the Athens 2004 Olympic Transport Operations”, accepted for publication in *Transport Reviews*, 2007.

### **Journal Papers Under Review**

1. Minis, I., Angelopoulos, J., Kyrioglou, G., “Contribution to the Design of the Car Fleet System During the Athens 2004 Olympic Games”, *Transport Research Part A*, 2007.

### **Refereed Conference Proceedings (Full paper reviewed)**

1. Harhalakis, G., Minis, I. and Nagi, R., “Development and Application of a Knowledge Based System for Cellular Manufacturing”, *Proc. of the Third International Conference on Expert Systems and the Leading Edge in Production and Operations Management*, Hilton Head, SC, May 1989.
2. Yanushevsky, R. and Minis, I., “Optimal Control of the Cutting Force in Metal Cutting Operations”, *Proc. of the 1990 American Control Conference*, San Diego, CA, May 1990.

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<sup>1</sup> Lead Author

3. Harhalakis, G. and Minis, I., ‘Cell Formation for Minimal Traffic under Capacity Constraints’, presented to the 1991 ASME Winter Annual Meeting, included in *Design Analysis and Control of Manufacturing Cells*, PED-Vol. 51, ASME, New York, 1991.
4. Berger, B., Minis, I. and Rokni, M., “The Dimension of Attractors Associated with Metal Cutting Dynamics”, presented to the 1991 ASME Winter Annual Meeting, included in *Sensors, Controls and Quality Issues in Manufacturing*, PED-Vol. 55, ASME, New York, 1991.
5. Uebel, M., Minis, I. and Cleary, K., “Improved Computed Torque Control for Industrial Robots”, *Proc. of the 1992 IEEE Robotics and Automation Conference*, Nice, France, May 1992.
6. Harhalakis, G., Kinsey, A. and Minis, I., “Automated Group Technology Code Generation Using PDES”, *Proc. of the Third International Conference on Computer Aided Manufacturing*, RPI, Troy, NY, May 1992.
7. Harhalakis, G., Minis, I. and Rathbun, H., “Automated Manufacturability Evaluation for Microwave Modules”, *Proc. of the Third International Conference on Computer Aided Manufacturing*, RPI, Troy, NY, May 1992.
8. Harhalakis, G. and Minis, I., “A Group Technology-based Manufacturability Evaluation System for a Class of Electronic Products”, presented in the 1993 ASME Winter Annual Meeting and included in *Intelligent Concurrent Design: Fundamentals, Methodology, Modeling, and Practice*, DE-Vol.6 1, ASME, New York, 1993.
9. Nau, D., Ball, M., Gupta, S., Minis, I. and Zhang, G.M., “Design for Manufacture by Multi-Enterprise Partnerships”, *Proc. of the Computer Integrated Engineering Workshop: A Tribute to Steve Fenves*, Carnegie Mellon University, Pittsburgh, PA, June 1994.
10. Greenslet, J. and Minis, I., “Design of a Real-Time Surface Roughness Measurement System for Turning”, *Proc. of the 1994 Japan-USA Symposium on Flexible Automation*, Tokyo, Japan, July 1994.
11. Candadai, A., Champati, S., Herrmann, J., Minis, I. and Ramachandran, V., “Product and Enterprise Information Requirements in Agile Manufacturing”, *Proc. of the 1994 ASME International Conference on Computers in Engineering*, Minneapolis, MN, September 1994.
12. Herrmann, I., Mehra, A., Minis, I. and Proth, J.M., “Hierarchical Production Planning with Part, Spatial and Time Aggregation”, *Proc. of the Fourth International Conference on Computer Integrated Manufacturing and Automation Technology*, RPI, Troy, NY, October 1994.
13. Ball, M., Gupta, S., Minis, I., Nau, D. and Zhang, G.M., “Design for Manufacture in Multi-Enterprise Partnerships: Current Status and Future Directions”, presented in the 1994 ASME World Congress, Chicago, IL, November 1994, and included in *Computer Integrated Concurrent Design*, ASME, New York, 1994.
14. Candadai, A., Herrmann, J., Minis, I. and Ramachandran, V., “Product and Process Information Models for Microwave Models”, presented in the 1994 ASME World Congress,

- Chicago, IL, November 1994, and included in *E/M CAD Systems for Electronic Packaging*, ASME, New York, 1994.
15. Berger, B.S., Minis, I., Deng, K., Chen, Y.S., Chavali, A. and Rokni, M., “Higher Order Spectral Analysis of Time Series”, *Proceedings of the 34th Heat Transfer and Fluid Mechanics Institute*, Sacramento, CA, June 1995.
  16. Gupta, S.K., Herrmann, J.W., Lam, G. and Minis, I., “Automated High Level Process Planning for Agile Manufacturing,” *Proceedings of the 1995 ASME Design Engineering Technical Conferences (Computer-Integrated Concurrent Design Conference)*, Boston, MA, September 1995.
  17. Herrmann, J.W., Minis, I. and Ramachandran, V.J., “Information Models for Partner Selection in Agile Manufacturing,” *1995 ASME World Congress*, San Francisco, CA, November 1995.
  18. Candadai, A., Herrmann, J.W. and Minis, I., “A Systematic Approach for Variant Design Critiquing in Agile Manufacturing”, *1995 ASME World Congress*, San Francisco, CA, November 1995.
  19. Mehra, A., Minis, I. and Proth, J.M., “ A Hierarchical Planning Model for Multistage Production Systems, *Proc. IEEE Conference on Emerging Technologies and Factory Automation*, Paris, France, October 1995.
  20. DeLaney, D., Herrmann, J.W., Ioannou, G., Lu, T., Minis, I., Mirza, A. and Palmer, R., “Design and Implementation of a Hybrid Manufacturing Facility”, *Computers and Industrial Engineering*, vol. 29, n.1, pp. 215-319, 1995.
  21. Herrmann, J. and Minis, I., “Integrating Design Evaluation and Partner Selection”, *Proc. of the Fifth National Agility Conference*, Boston, MA, March 1996.
  22. Herrmann, J., Lam, G. and Minis, I., “Manufacturability Analysis Using High Level process Planning”, *Proc. of the 1996 ASME Design for Manufacturing Conference*, Irvine, CA, August 1996.
  23. Hebbar, K., Smith, S.J.J., Minis, I. and Nau, D.S., “Plan-based Evaluation of Designs for Microwave Modules”, *Proc. of the 1996 ASME Design for Manufacturing Conference*, Irvine, CA, August 1996.
  24. Smith, S.J.J., Hebbar, K., Nau, D.S. and Minis, I., “Integrating Electrical and Mechanical Design and Process Planning”, *Proc. of the Knowledge Intensive CAD-2, IFIP Workshop Series*, Carnegie Mellon University, September 1996.
  25. Kalyanapasupathy, V., Lin, E. and Minis, I., “Group Technology Code Generation over the Internet”, *Proc. of the 1997 ASME Design Conference*, Sacramento, CA, September 1997.
  26. Elinson, A., Herrmann, J., Minis, I., Nau D. and Singh G., “Toward Hybrid Variant/Generative Process Planning”, *Proc. of the 1997 ASME Design Conference*, Sacramento, CA, September 1997.
  27. Herrmann, J., Lin, E. and Minis, I. “An Operator Information System for Parallel, Off-line Assembly”, *Proc. of ETFA 97*, Los Angeles, CA, September 1997.

28. Tsamboulas, D. and Minis, I., "Checking the Consistency of the Rail Resources with the Railway Demand: The Athens 2004 Olympic Games", *the 10th WCRT Conference*, 2004.
29. Gliatis, V., Minis, I., "Service Attribute-Process Matrix: A Tool for Designing and Managing Services", *IEEE/SSSM'06*.
30. Minis, I., Kourounis, T., "Estimation of Target Selling Price in New Product Development", *Proc. of the 2006 ASME International Design Engineering Technical Conferences & Computers in Engineering Conference*, September 10-13, 2006.
31. V., Zeimpekis, G.M. Giaglis, I. Minis, "Development and evaluation of an intelligent fleet management system for city logistics", *Proceedings of the 41st Hawaii International Conference on System Sciences (HICSS)*, January 7-10, 2008.

#### **Refereed Conference Proceedings (Abstract reviewed)**

1. Krikelis, N. and Minis, I., "Modeling of Internal Combustion Engines Applied to CFR and Daimler-Benz Engines", *Proc. of the International AMSE Conference*, Paris, France, July 1982.
2. Pandelidis, I., Pecht, M. and Minis, I., "Active Compliance of a Robot Manipulator", *Proc. of the Fifth IASTED International Symposium: Robotics and Automation*, New Orleans, November 1984.
3. Minis, I., Pandelidis, I., and Pecht, M., "Simulation of the Chatter Phenomenon in Metal Cutting", *Proc. of the IASTED International Conference on Applied Simulation and Modeling*, Vancouver, Canada, July 1986.
4. Harhalakis, G., Minis, I., Nagi, R. and Proth, J.M., "A Comprehensive Group Technology System for Cellular Manufacture", *Proc. of the 10th International Conference on Production Research*, Nottingham, U.K., August 1989.
5. Gore, J.P., Minis, I. and Jang, J.H., "Acoustically Modulated Free Jet Flames", *Proc. of the AIAA 28th Aerospace Sciences Meeting*, Reno, Nevada, January 1990.
6. Bahadur, S., Harhalakis, G., Hosier, R. and Minis, I., "A PDES Model for Microwave Modules", *Proc. of the 1991 ASME International Conference on Computers in Engineering*, Santa Clara, CA, August 1991.
7. Harhalakis, G., Kinsey, A. and Minis, I., "Use of PDES in Group Technology Applications for Electronics", *Proc. of the 1992 ASME International Conference on Computers in Engineering*, San Francisco, CA, August 1992.
8. Harhalakis, G. and Minis, I., "Manufacturability Evaluation of Electronic Products Using Group Technology", *Proc. of the 19th Annual NSF Grantees Conference on Design and Manufacturing Systems*, UNC Charlotte, NC, January 1993.

9. Ioannou, G., Minis, I., Nagi, R. and Proth, J.M., "Design of Material Handling Flow Paths", *Proc. of 20th Annual NSF Grantees Conference on Design and Manufacturing Systems*, MIT, Boston, MA, January 1994.
10. Candadai, A., Herrmann, J.W., Minis, I. and Nagi, R., "Variant Design Critiquing for Agile Manufacturing", *Proc. of 21st Annual NSF Grantees Conference on Design and Manufacturing Systems*, San Diego, CA, January 1995.
11. Ball, M., Minis, I., Nau, D.S. and Zhang, G.M., "Virtual Factories for Electro-Mechanical Device Manufacturing", *Proc. of 21st Annual NSF Grantees Conference on Design and Manufacturing Systems*, San Diego, CA, January 1995.
12. Herrmann, J.W., Ioannou, G., Minis, I. and Proth, J.M., "Planning for Unit-load, Horizontal Material Handling Systems", *Proc. of 21st Annual NSF Grantees Conference on Design and Manufacturing Systems*, San Diego, CA, January 1995.
13. Lin, E., Minis, I., Nau, D.S. and Regli, W.C., "An Assessment of Virtual Manufacturing Technologies", *Proc. of 22nd Annual NSF Grantees Conference on Design and Manufacturing Systems*, January 1996.
14. Herrmann, J., Minis, I. and Wolf, P., "Work Order Release in Job Shops", *Proc. of the 4th IEEE Mediterranean Symposium on New Directions in Control and Automation*, Chania, Crete, Greece, June 1996.
15. Trichur, V., Ball, M.O., Baras, J.S., Hebbar, K., Minis, I., Nau, D.S., Smith, S.J.J., "Integrating Tradeoff Analysis and Plan-based Evaluation of Designs for Microwave Modules" *Proc. of the Conference on Agile and Intelligent Manufacturing Systems*, Troy, New York, October 1996.
16. Ampazis, N. and Minis, I., "SOM Clustering Manufacturing Application", *Proc. of the Computational Management Science conference*, Crete, Greece, May 27, 2003.
17. Giaglis, G. M., Minis, I., Tatarakis, A. Zeimpekis, V. "Real-time Decision Support Systems in Urban Distributions: Opportunities afforded by mobile and wireless technologies" *Proc. of the 3<sup>rd</sup> International ECR Research Symposium*, Athens Greece, 11-12 September 2003.
18. Minis, I. and Athanasopoulos, T., "Contribution to the Design of the Athletes' Bus Network during the Athens 2004 Olympic Games", *Euro XX 20<sup>th</sup> European Conference on Operational Research*, paper-ID:586, page 198, July 2004.

19. Minis, I., Mamasis, C. and Ampazis, A., “Real-time Distribution Management Models”, *the Euro XX 20<sup>th</sup> European Conference on Operational Research*, paper-ID:584, page 171, July 2005.
20. Zeimpekis, V., Giaglis, G., Minis, I., “A Dynamic Real-Time Fleet Management System for Incident Handling in City Logistics”, *IEEE Vehicular Technology Conference*, Stockholm, 30 May-1 June 2005.
21. Zeimpekis, V., Mamassis, K., Giaglis G.M., Minis, I. Mavros, A. “Real-time fleet management for urban freight distributions”, *Proc. of the 9<sup>th</sup> National Congress on Logistics, Logistics 2005*, Thessaloniki, Greece, 25-26 November, 2005.
22. Zeimpekis, V., Giaglis, G., Minis, I., “Dynamic Incident Handling in Urban Freight Distributions”, *Proc. of the 3<sup>rd</sup> International Workshop on Freight Transportation and Logistics (ODYSSEUS 2006)*, Altea, Spain, May 23-26, 2005.
23. Zeimpekis, V., Giaglis, G., Minis, I. “Dynamic Vehicle Dispatching Travel Times In Urban Settings”, *Proceedings of the 21th European Conference on Operational Research (EURO XXI)*, 2-5 July, 2006, Reykjavik, Iceland.
24. Vlachos<sup>1</sup>, I., Zeimpekis, V., Minis, I., Mouzakitidis, S., “RF- ID Enabled Management of Fruit Logistics”, *Proc. of IEEE International Conference on e-Business Engineering*, 2006.
25. Tsamboulas, D.A., Minis, I., Karanasiou, M., “Transport: Competitiveness and Complementarity of Transport Mode- Perspectives for Combined Transport”, *1st International Conference on Combined Transport*, University of the Aegean, (in CD ROM), Chios, 2007.

### **Invited Talks**

1. ASEE/NSF sponsored course on Advanced Techniques in Automated Manufacturing, National Institute of Standards and Technology, “Group Technology”, June 1989.
2. Hardinge Bros. Machine Tool Company, “Modeling, Analysis and Control of Metal Cutting Dynamics”, February 1990.
3. Maryland Plastics Inc., “Computer Integrated Manufacturing”, September 1990.
4. Trans-Tech Inc., “Statistical Process Design and Control”, February 1991.
5. Department of Business and Management, University of Maryland, College Park, “Design of Cellular Manufacturing Systems”, November 1991.
6. ASME Washington D.C. Chapter, “Chaos in Mechanical Engineering”, (with B.S. Berger), November 1992.
7. Westinghouse, ESG., “Optimal Selection of Partners in Agile Manufacturing”, December 1993.

8. INRIA-Lorraine, France, “Current Topics of Research in the Computer Integrated Manufacturing Laboratory of the University of Maryland”, January 1994.
9. AIAG, Detroit, MI, “Optimal Selection of Partners in Agile Manufacturing”, May 1994.
10. University of California at San Diego, NSF Institute of Mechanics and Materials, “Modeling and Analysis of Machine Tool Chatter”, March 1995.
11. State University of New York, Praxair Seminar Series, Department of Industrial Engineering, “Design Evaluation and Partner Selection in Agile Manufacturing”, November 1995.
12. National Institute of Standards and Technology, “Design Evaluation and Partner Selection in Agile Manufacturing”, November 1995.
13. Keynote address in the *6th Conference of the Institute of Production Management*, Athens, Greece, “Integrated Product Development and Production, and the Competitiveness of Time”, March 1996.
14. Multiple presentations in Greek Public Organisation, Public and Private Companies (1997 - today).

## Contracts and Grants

### Principal Investigator

<i>Date</i>	<i>Sponsor</i>	<i>Co-investigators</i>	<i>Title</i>		<i>Funding</i>
6/89-6/90	Minta Martin		Prediction of Machine Tool Chatter in Milling	\$	20,000
8/89-8/91	Westinghouse/ MIPS	G. Harhalakis	Life Cycle Engineering Using Group Technology	\$	118,883
7/90-12/90	NASA Goddard Space Flight Center		Robot Performance Metrics for the RRC Arm at NASA-GSFC	\$	7,720
1/91-12/91	NASA Goddard Space Flight Center		Robust Regulation of Robot Control Systems	\$	34,702
7/91-6/94	Institute for Systems Research	G. Harhalakis, D.Nau, G.M. Zhang	CIM: Information Integration and Decision Making	\$	99,000 <sup>1</sup>
7/94-6/96	Institute for Systems Research	M. Ball, J. Baras, M. Fu, D.Nau, V.S. Subramanian, G.M. Zhang	Virtual Factories	\$	57,250 <sup>1</sup>
8/91-8/93	Westinghouse/	G. Harhalakis	Optimal Facility Layout and	\$	176,526

<sup>1</sup> Amount under Minis’ direct control; excludes fringe benefits, tuition and overhead.

<i>Date</i>	<i>Sponsor</i>	<i>Co-investigators</i>	<i>Title</i>		<i>Funding</i>
	MIPS		Cycle Time Reduction for Antenna Assembly		
9/91-6/92	DRIF		Integrated Design of Machine Tools	\$	9,600
9/92-6/93	DRIF		Robust Turning Using a Smart Toolholder	\$	9,600
1/93-12/93	Extrude Hone Corp.		Real-time Measurement of Surface Roughness in Turning	\$	22,067
9/93-9/94	Westinghouse/ MIPS	G. Harhalakis	A Master Plan for Hybrid Shop Layout	\$	83,639
9/93-12/95	U.S. Army, Tank and Automotive Command	G. Harhalakis	Optimal Selection of Partners in Agile Manufacturing	\$	564,216
1/95-10/97	Westinghouse/ MIPS	J. Herrmann	Order Release for Job Shop Loading and Scheduling	\$	68,756
8/95-7/98.	NSF	M. Fu, J. Herrmann	Perturbation Analysis and Parallel Computing for Production Management	\$	30,000 <sup>1</sup>
3/95-2/96	Lawrence Associates Inc.	D. Nau	Background Research in Virtual Manufacturing	\$	37,000
10/96-9/97	National Institute for Standards and Technology	D. Nau	Virtual Assembly Lines	\$	24,997
10/03– 9/05	Ministry of Development General Secretariat for Research and Technology, Greece	Athens Economics and Business University, Planning S.A, Nikas S.A, Diakinisi S.A., Emfasis Tilematiki <sup>1</sup>	The Use of Mobile Technologies in Execution Supply Chain	€	149,795 <sup>1</sup>
11/02- 9/05	Greek Ministry of Education Ph. D. Student Support (Iraklitos)		Target Costing in Integrated Product Development	€	32,751

<sup>1</sup> International cooperation grant. Excludes fringe benefits and overhead.

<sup>1</sup> Funding for University of Aegean out of a total of 872.552€

<i>Date</i>	<i>Sponsor</i>	<i>Co-investigators</i>	<i>Title</i>	<i>Funding</i>
12/04-11/06	Ministry of Development General Secretariat for Research and Technology, Greece	Intrastet S.A., Step One S.A., University of Patras	Development of Enterprise Intelligence Portal using Broad band Technologies for Traditional Manufacturing Sectors	€ 23,480 <sup>1</sup>
01/05 – 12/08	Ministry of Development General Secretariat for Research and Technology, Greece		Vehicle Integrated Planning and Management in an Environment of Uncertain Demand	€ 45,000
09/05-01/06	Hellenic Railways		Financial and Economic Evaluation of Four Cargo Railway Extension	€ 270,250
09/05-11/05	Planning A.E		Support of the Innovation and Technology Program “TECHNOGENESIS”	€ 24,000
2006-2008	Ministry of Development	Planning A.E., Wackenhut Telematix, Hellenic Post Courier	Management of Dynamic Requests in Logistics Services	€ 120.000 <sup>2</sup>
2006-2008	Ministry of Development	ENA CHIOS, Planning S.A.	Innovative Methods for Business Development and Organization in the Northern Aegean Region	€ 118.000 <sup>3</sup>
2006-2008	Ministry of Development	Mobile Technology, Figs	Fruit Traceability Using RFID Technology	€ 60.000,00 <sup>1</sup>

<sup>1</sup> Funding for University of Aegean out of a total of 492.072€

<sup>2</sup> Funding for University of Aegean out of a total of 700.000€

<sup>3</sup> Funding for University of Aegean out of a total of 530.000€

<i>Date</i>	<i>Sponsor</i>	<i>Co-investigators</i>	<i>Title</i>	<i>Funding</i>
		and Nuts Cooperative, Agricultural University		

Co-principal Investigator

<i>Date</i>	<i>Sponsor</i>	<i>Co-investigators</i>	<i>Title</i>	<i>Funding</i>
8/88-8/89	PSI-EG&G/ MIPS	E.B. Magrab (PI) M. Abdelhamid	Automation and Control of Metal Forming Operation	\$ 53,700
4/93-4/96	U.S. Department of Energy	B.S. Berger (PI)	Characterization of Metal Cutting Dynamics	\$ 204,658
10/93-9/98	NSF	H. Russell (PI), B.S. Berger, J. Sirkis, G.M. Zhang	Design of Sensor-based Machine Tools for Machining of Advanced Ceramics	\$ 537,500
5/96 - 5/97	Office of Naval Research	D.S. Nau (PI), J.W. Herrmann	Adaptive Process Planning and Plan-based Design Evaluation. Phase I.	\$ 150,000
9/96 - 9/97	Black & Decker Inc./MIPS	J.W. Herrmann (PI)	An Operator Information System for Parallel Workstations	\$ 77,892

Co-investigator

<i>Date</i>	<i>Sponsor</i>	<i>Co-investigators</i>	<i>Title</i>	<i>Funding</i>
2/88-2/89	Kop-Flex Inc./ MIPS	E.B. Magrab (PI) G. Harhalakis	Application of Group Technology to the Kop-Flex Product Line	\$ 34,700
2/89-8/89	Food Instruments Corp./MIPS	E.B. Magrab (PI)	Control of Container Integrity for Food Instruments Corp.	\$ 77,400

**Reviewing Activities**

1. Paper reviewer:  
ASME Journal of Engineering for Industry

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<sup>1</sup> Funding for University of Aegean out of a total of 155.026€

ASME Journal of Dynamic Systems, Measurement and Control  
ASME Journal of Vibration and Acoustics  
IEEE Transactions on Reliability  
IEEE Transactions on Systems, Man and Cybernetics  
IEEE Transactions on Robotics and Automation  
International Journal of Production Research  
International Journal of Machine Tools and Manufacture  
Precision Engineering  
Journal of Sound and Vibration  
Journal of Robotic Systems  
Journal of Intelligent Manufacturing  
Journal of Vibration and Control  
International Journal of Production Economics  
Journal of Zhejiang University, Science (A&B)

ASME Winter Annual Meeting  
ASME Computers in Engineering Conference  
IEEE CDC

2. Book reviewer:

Close and Frederick, *Modeling and Analysis of Dynamic Systems*, Houghton Mifflin Co.

*Nature Inspired Computing*, Idea Group, 2005, Reviewer of two chapters

*Dynamic Fleet Management: Concepts, Systems, Algorithms & Case Studies*, Springer-Verlag, Reviewer of one chapter

### **Research Laboratory Development**

- The Laboratory of Design, Production and Operations Systems at the University of the Aegean, has been developed by Dr Minis to promote research and education in the sector of concurrent engineering and production of new products and operations of planning chain. The laboratory has been equipped with a CNC lathe, a CNC milling machine, several computers and electronic instrumentation as well as special software packages. (AutoCAD, Matlab, Simul8). Research conducted in the laboratory includes concurrent product design to target cost, and production and operation management. Funding for the laboratory has been provided by the General Secretariat for Research and Technology Ministry of Development, Greece.
- The Machine Tool Dynamics Laboratory supports research and education in the analysis, prediction and control of machining dynamics. Data acquisition equipment and various sensors have been donated by the National Institute of Standards and Technology. Funding for the purchase of a CNC lathe has been provided by the Engineering Research Center of the University of Maryland. The laboratory is also equipped with an 8-channel

spectrum analyzer and a microcomputer system that serves as a digital controller. Research conducted in the laboratory has been sponsored by the National Science Foundation, the US Department of Energy, the Extrude Hone Corp. and the University of Maryland.

## **TEACHING AND ADVISING**

### **Courses Taught in the University Aegean**

- NOT 0103 Product Design, F 01-02, F 02-03  
 NOT 0107 Unified Engineering IV(Control Systems and Signal Analysis), F 02-03, F 03-04, F 04-05, F 05-06, F 06-07, F 07-08  
 GE 0118 Operations Research I, S 01-02, S 02-03, S 03-04  
 GE 0110 Statistics I, S 02-03, S 06-07  
 GE 0129 Modeling, Analysis and Design of Stochastic Systems, F 03-04, F 04-05, F 05-06, F 06-07, F 07-08.  
 NOT 0109 Production Systems, S 03-04, S 04-05, S 05-06, S 06-07  
 NOT 0102 Statics, S. 06-07

### **Courses Taught in the University of Maryland**

- ENME 360 Dynamics of Machinery  
 F92 (55 students), F96 (38 students)  
 ENME 403 Automatic Controls  
 S89, S93, F95 (average number of students: 35 per semester)  
 ENME 605 Advanced Systems Control  
 S92, F93, F94 (average number of students: 15 per semester)  
 ENME 606 Nonlinear Systems  
 F91 (4 students)  
 ENME 607 Systems Integration and Simulation  
 F89, S90 (average number of students: 9 per semester)  
 ENME 621 Advanced Topics in Control Systems  
 F90, S91, S94 (average number of students: 8 per semester)  
 ENME 614 Advanced Production Control Techniques  
 S95 (14 students)  
 -- Integrated Product and Process Design. Part of the 8th semester course “Study of Work and Elements of Ergonomics” in the Mechanical Engineering Department of NTUA, Greece (145 students).

### **Courses Development in the University of the Aegean**

1. MH 0103 Product Design: An Introduction (1st Semester). This is an introductory course into product design. The course presents basic design concepts, including the development of technical specifications, the axiomatic approach to design, and the relationship between the form and function of the product with its materials and manufacturing processes. The course also presents the principles of mechanical drawing through a series of drawing projects, in which the students sketch complex parts and develop related CAD drawings. Finally, each student participates in a group project, in which a commercial product is analyzed and discussed in a term paper.
2. MH 0107 Unified Engineering IV (5th Semester). This is an introductory course into dynamical systems analysis and system control. In addition related topics of signal analysis are discussed. The course presents basic concepts in system modeling (including the necessary mathematical background), discusses transient system response and system stability. Control system design techniques are presented, including root locus and PID controller tuning. Finally, system frequency response and its relationship to signal analysis are discussed.
3. GE 0118 Operations Research I (4th Semester). This is an introductory course to mathematical programming and operations research. The course focuses on linear programming, including developing models for complex problems, solving linear programs using the Simplex method, and understanding the fundamental concepts of linear programming. In addition the course presents basic methods of network analysis and dynamic programming.
4. GE 0110 Statistics I (6th Semester). This is an introductory course in statistics and includes basic topics, such as: descriptive statistics, parameter estimation, hypothesis testing, regression analysis, analysis of variance.
5. GE 0129 Modeling, Analysis and Design of Stochastic Systems (7th Semester). Random events have a great impact on both production and service-related systems. This course focuses on quantitative methods employed in the analysis, design and operation of systems that involve randomness. In particular, the course will examine discrete and continuous Markov models, as well as queuing systems. The related methods will be applied in significant practical issues of system design and operation.
6. MH 0109 Production Systems (8th Semester). This course presents fundamental concepts of production planning, management and control. Specific topics discussed include aggregate production planning, inventory management, production databases, materials planning, manufacturing resource planning, just-in-time production, management of factory dynamics, push and pull systems.

## **Course Development in the University of Maryland**

1. ENME 621 Advanced Topics in Control Systems. Presents current topics of research in control theory. Focuses on the analysis and synthesis of systems with uncertain dynamics. Two approaches are examined: adaptive control and robust control. The latest theoretical advances in these areas are applied to several case studies in mechanical and aerospace systems.
2. ENME 606 Nonlinear Systems. Focuses on the analysis and synthesis of nonlinear control systems. Basic and advanced stability theory and the synthesis of regulators using feedback linearization and sliding control are presented. Emphasis is placed on mechanical and aerospace applications.
3. ENME 605 Advanced Systems Control (Revised contents.) Focuses on the analysis and synthesis of linear dynamical systems. Transfer function and state variable representations, stability, controllability and observability are presented. System design topics include state feedback, state estimators and the fundamentals of optimal control.
4. ENME 614 Advanced Production Control Techniques (Revised contents.) Reviews the production systems of manufacturing firms. Poses important and interesting problems in production system design and operation. Presents relevant, powerful mathematical tools of production systems engineering including Markov processes, linear and dynamic programming. Applies these tools to selected problems of industrial relevance. Discusses current practices in industry and identifies opportunities for advancement.

### **Development of Academic Course Curriculum**

1. ENME 392 Statistical Methods for Process and Product Development (with E.B. Magrab, L. Milor and G.M. Zhang). The course introduces an integrated statistical methodology for the improvement of products and processes in terms of performance, quality and cost. The fundamental techniques that form the basis of this methodology include: Designed experimentation, which is employed to obtain the input/output relationships of a process or product, and to determine appropriate input levels; statistical process control, which is used for monitoring process performance. These techniques are implemented by student teams through laboratory activities. Software is employed to support these activities and supplement the classroom material.
2. ENSE 622 System Modeling and Analysis (MSSE program of ISR). Basic system types are defined and fundamental concepts, such as system state, inputs, outputs and disturbances are discussed. Powerful modeling methods are reviewed and employed to build formal structures for solving practical, system-related problems. Quantitative analytical techniques are presented and applied, including Petri nets, Markov processes, queuing theory, and the fundamentals of decision and risk analysis. System simulation is discussed and employed for system analysis and development.

### **Advising (Research Direction)**

### **Ph.D. Students Graduated**

1. Abel Tembo, 1994, *Analysis Prediction and Control of Machining Dynamics Applied to Turning Processes*.
2. Anshu Mehra, 1995, *Hierarchical Production Planning for Job Shops*, (co-advisor with J.M. Proth).
3. George Ioannou, 1995, *Integrated Manufacturing Facility Design*.

### **M.S. Students Graduated**

#### Advisor

1. Abel Tembo, 1990, *Prediction of Machine Tool Chatter in Milling*.
2. Mark Uebel, 1991, *Improved Computed Torque Control for Industrial Robots*.
3. John Greenslet, 1994, *Real-Time Measurement of Surface Roughness in Turning*.
4. Ajay Chavali, 1995, *Analysis of Time Series in Metal Cutting Dynamics*
5. Arun Candadai, 1995, *Information Models and Automated Design Processing for Product Evaluation in Agile Manufacturing*.
6. Giang Lam, 1995, *Automated High Level Process Planning and Manufacturability Analysis for Agile Manufacturing*.
7. Vijay Ramachandran, 1996, *Information Models for Agile Manufacturing*..
8. Caleb Belai, 1996, *Parametric Optimization of Machining Dynamics*.
9. Venkatraman Kalyanapasupathy, 1997, *Automated Generation of Group Technology Codes over the Internet*.
10. Lemonia Amygdalou, 2006, *Use of RFID in Fruit Transportation Applications*.

#### Co-advisor

1. Satish Jajodia, 1990, *Design of Manufacturing Cells with Multiple, Functionally Identical Machines* (with G. Harhalakis).
2. Sudhanshu Bahadur, 1991, *A PDES Model for Microwave Modules* (with G. Harhalakis.)
3. Amy Kinsey, 1992, *Automated Generation of GT codes from a PDES Product Information Model* (with G. Harhalakis).
4. Howard Rathbun, 1992, *Automated Manufacturability Evaluation for Microwave Modules* (with G. Harhalakis).
5. Ashutosh Agrawal, 1993, *Just-in-time Production of Large Assemblies in a Job-shop* (with G. Harhalakis).
6. Thomas Lu, 1993, *Integrated Approach for Hybrid Shop Layout* (with G. Harhalakis).

7. Marios Levendopoulos, 1995, *A New Class of Petri Nets for Modeling, Planning and Scheduling of Flexible Manufacturing Systems* (with G. Harhalakis and J.M. Proth).
8. Daniel Harris, 1995, *Feasibility of Transient Control of the Glenn L. Martin Wind Tunnel Main Drive* (with J. Barlow).
9. Kiran Hebbar, 1996, *An Integrated Design and Manufacturability Evaluation System for Microwave Modules* (with D.S. Nau).
10. Murali Narayanaswamy, 1996, *Bottleneck-based Order Release for Job Shop Control* (with J.W. Herrmann).

### **Diploma Theses Supervised**

1. Hara Papachristou, 2005, *The Problem of Orientation with Time Windows*, University of the Aegean.
2. Georgios Ninikas, 2005, *Improvement of Rerouting Method of a Vehicle Distributing to Grouped Customers*, University of the Aegean.
3. Vasiliki Pappa, 2006, *Modeling and Manufacturability Evaluation Methods of Simple Assemblies*, University of the Aegean
4. Tsirimpas Polivios, 2006, *Extensions of the simple Vehicle Routing Problem with Depot Retimes*, University of the Aegean
5. Nana Neamonitou, 2006, *Cost Estimation of Forging, Cutting and Assembly Processes*, University of the Aegean
6. Alexis Asimakopoulos, 2006, *Determination of the Distribution Service Rate in Retail Customers*, University of the Aegean
7. Konstantinos Keramiotis, 2006, *Parametric Study of a Genetic Algorithm for the Team Orienting Problem*, University of the Aegean
8. Katerina Andritsou, 2006, *Solving the Orienting Problem with Time Windows using a Genetic Algorithm*, University Of the Aegean
9. Kalliopi Kyrou, 2007, *Feasibility Analysis of Selected Manufacturing Processes*, University of the Aegean.
10. Eleni Tsiourva, 2007, *Value Stream Mapping in Financial Services*, University of the Aegean.
11. Olga Manou, 2007, *Application of Just-In-Time Principles to Financial Services*, University of the Aegean.

### **M.S. Scholarly Papers Supervised**

1. Christakis Komodromos, 1989, *Numerical Investigation of Milling Dynamics*.
2. Zelalem Eshete, 1992, *Variable Spindle Speed Machining*.
3. Scott Pearle, 1994, *Strategic Modernization of a Small Manufacturing Facility Using a Systems Approach* (MSSE.)

### **Undergraduate Students**

1. Carlton Riddick, 1992, Summer Undergraduate Research Program.
2. Yun Kyu Kang, 1993, Research Experiences for Undergraduates Program.
3. Michael Vukovich, 1994, Research Experiences for Undergraduates Program.
4. Chris Morris, 1995, Research Experiences for Undergraduates Program.
5. Rana Razzaque, 1996, Research Experiences for Undergraduates Program.

### **Post-doctoral Associates Supervised**

1. Jeffrey W. Herrmann, October 1993 - August 1995.
2. Satyandra K. Gupta, September 1994 - January 1995.
3. Edward Lin, December 1994 – January 1997.

### **Ph.D. Students in Progress**

1. A. Tatarakis 2002 – today, *Real – time Management of Ex van Deliveries*
2. T. Kourounis 2002 – today, *Target Costing in New Product Development*
3. K. Mamasis 2003 – today, *Algorithms of Real – time Replanning in Urban Deliveries*
4. V. Gliatis 2004 – today, *Lean Banking*
5. T. Athanasopoulos 2005 – today, *Planning and Management of Distribution in an Uncertain Demand Environment*.
6. P. Dimopoulos 2004- today, *Design for Disassembly for Environmentally Conscious Product End of Life*.
7. G. Ninikas 2006 – today, *Management of Distribution under Dynamic Requests*.

### **Diploma Theses in Progress**

1. Stergios Koukovinos, 2005, University of the Aegean.
2. Eleni Limnaiou, 2006, University of the Aegean.
3. Kalousa Episkopou, 2007, University of the Aegean.

4. Maria – Eleni Katsarou, 2007, University of the Aegean.
5. Giannis Selianitis 2007, University of the Aegean.
6. Ioannis Efthimiopoulos, 2006, University of the Aegean

### **Extension Activities**

1. Curriculum development and teaching: “An Introduction to Manufacturing Engineering”, Higher Education Outreach Program, sponsored by NASA and SWE, UMBC, Summer 1989.
2. Short Course: “Statistical Quality Assurance”, Bowles Fluidics Corp., Summer 1988.
3. Short Course: “Total Quality Improvement”, Trans-Tech Inc., Spring 1991, Spring 1992.
4. Short Course: “Statistical Experiments for Product and Process Development”, Solarex Corp., Summer 1993.

### **SERVICE**

#### **Professional Society Memberships**

1. Member, American Society of Mechanical Engineers (ASME).
2. Member, Technical Society of Greece.

#### **Member of Conference Organizing Committees**

1. Euro XX 20<sup>th</sup> European Conference on Operational Research “*Operational Research and the Management of Electronic Services*”, July 2004, Rhodes, Greece.

#### **Conference Session Organizer**

1. “Product Data Exchange Standards”, in *1993 ASME Database Symposium*, San Diego, CA, August 1993.
2. “Engineering Enterprise Product Data Modeling”, in *1994 ASME Database Symposium*, Minneapolis, MN, September 1994.
3. “Automated Design Critiquing”, in *1994 ASME World Congress*, Chicago, IL, November 1994 (co-organizer with D.S. Nau).
4. “Design and Process Planning in Synthetic and Virtual Environments”, in *1995 ASME Computer-Integrated Concurrent Design Conference*, Boston, MA, September 1995 (co-organizer with D.S. Nau).
5. Member, Scientific Committee, *IEEE Conference on Emerging Technologies and Factory Automation*, Paris, France, October 1995.

### **Conference Session Chairman**

1. “Algorithms for Estimation and Optimization”, in *1990 Automatic Control Conference*, San Diego, CA, May 1990, (co-chair.)
2. “Design Methodologies for Manufacturing Systems, Products and Processes”, in *Third International Conference on Computer Aided Manufacturing*, RPI, Troy, NY, May 1992.
3. “Product Data Exchange Standards”, in *1993 ASME Database Symposium*, San Diego, CA, August 1993.
4. “Engineering Databases”, in *1993 ASME Winter Annual Meeting*, New Orleans, LA, November 1993.
5. “Engineering Enterprise Product Data Modeling”, in *1994 ASME Database Symposium*, Minneapolis, MN, September 1994.
6. “Automated Design Critiquing”, in *1994 ASME World Congress*, Chicago, IL, November 1994, (co-chair).
7. Panelist, "Virtual Manufacturing Enterprises," *Autofact 1994*, SME, Detroit, MI, November 1994.
8. “Design and Process Planning in Synthetic and Virtual Environments”, in *1995 ASME Computer-Integrated Concurrent Design Conference*, Boston, MA, September 1995.
9. Panelist, “Globalization: Challenge and Opportunity for the Greek Enterprise”, in the *6th Conference of the Institute of Production Management*, Athens, Greece, March 1996.

### **Reviewing Activities for Agencies**

1. Member, NSF Proposal Review Panel, Division of Design and Manufacturing Systems, March 1992.
2. Member, NSF Proposal Review Panel, Division of Dynamic Systems and Control, February 1994.
3. Research proposal individual reviews: NSF Division of Design and Manufacturing Systems, (1992-present.)
4. Ministry of Education, Evaluation of doctoral proposals Irakleitos, “Scholarships of Research with Priority in Basic Research” (2003).

### **University Service**

#### **University of the Aegean**

1. Department Representative, Dean’s Committee, School of Management, (2002 – 2004)
2. Member, Committee for Re-designing FME Department’s Undergraduate Curriculum, (2003)

3. Project Leader “Enhancement of Higher Education, FME Department, (2003)
4. Chairman, University Technical Committee, (2003- today)
5. Member, multiple faculty selection committees, (2002 – today)
6. Member, faculty selection committee, Department of Production and Technology Management, University of Piraeus, (2003)
7. Associate Member of the Board, Foundation of Assessing University Degree Equivalence (ΔΙΚΑΤΣΑ), (2003 – 2004)
8. Member, faculty selection committee, Department of Product and System Design, (2004)
9. Member, faculty selection committee, Department of Economics, University of Thessaloniki, (2004)
10. Member of three-member evaluation committees for faculty selection in a) Information Technology, b) Control Systems, c) Financial Engineering, d) Marketing.
11. Member of the faculty selection panel, FME Department (2004 – today).

#### **College of Engineering, University of Maryland**

1. Library liaison, UMBC (1988-1989)
2. Member, PCC committee (1993-1997).

#### **Department of Mechanical Engineering, University of Maryland**

1. Chairman, ad hoc committee for development of Systems Curriculum in CIMAD (1990)
2. Member, search committee for Director of M.E., UMBC (1991)
3. Member, curriculum development committee for the undergraduate option in Manufacturing Engineering, UMBC (1991-1992)
4. Member, ISR committee on industrial interaction, ISR (1992)
5. Seminar coordinator, UMBC (1992-1993)
6. Chairman, working group for undergraduate curriculum development in Engineering Economics, Statistics and Quality Management (1993)
7. Member, graduate program review ad hoc committee (1993-1994)
8. Member, Computer Integrated Manufacturing and Design (CIMAD) program committee (1988-1994).
9. Chairman, minority recruitment committee (1993-1995)
10. Chairman, ad hoc committee for the recruitment of faculty in controls (1995)

11. Member, ad hoc committee for the recruitment of faculty in manufacturing systems (1995)
12. Member, M.S. in Systems Engineering program committee, ISR (1992-present)
13. Member, Design and Manufacturing program committee (1994-present)
14. Member, ad hoc committee for the establishment of the Ph.D. program in Systems Engineering (1995)
15. Member, ISR facilities committee (1995)
16. Member, search committee for ISR director (1995)
17. Member, Advisory Committee of Mechanical Engineering Department (1996-present)
18. Chairman, ad hoc committee for the recruitment of faculty in computer ME applications.