

Mani Mina

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EDUCATION

Ph.D.	Electrical Engineering, Iowa State University (EM and Optoelectronic Devices)	1989
M.S.	Electrical Engineering, Iowa State University (EM and Optical Devices)	1987
M.S.	Physics, Iowa State University (Passive Solar Heating)	1985
B.S.	Physics, Iowa State University	1982

INDUSTRIAL AND ACADEMIC EXPERIENCE

2005-	Director Spacecraft Systems and Operations Laboratory (SSOL):a NASA sponsored laboratory College of Engineering, Iowa State University (Effective Feb1 2005)
2001-Present	Adjunct Assistant Professor, Electrical and Computer Engineering, Iowa Sate Univ.
2001-2001Q2	Senior Director, ETREMA PRODUCTS, INC. Ames, Iowa
2000-2001	New Business Director , Technology Resource Group (TRG), Des Moines, Iowa
1998-2000	Business Development Manager, Technology Resource Group (TRG), Des Moines, Iowa
1998-present	Adjunct Assistant Professor, Electrical and Computer Engineering
1993-present	Mazdaq Consulting, Ames, Iowa
1995-1998	President and COO, Amtak Inc., Ames, Iowa
1995-1998	Collaborator Assistant Professor, Electrical and Computer Engineering
1991-1995	Adjunct Assistant Professor and Member of Graduate Committee, Electrical and Computer Engineering
1989-1995	Research Consultant and Member of Board of Directors, Advance Medical Systems, Inc., Des Moines, Iowa
1989-Fall 1991	Research Scientist (Post Doctorate Fellow), Microelectronics Research Center, Ames, Ia
1989-1991	Temporary Assistant Professor, Electrical and Computer Engineering
1985-1989	Lecturer (TA) in Electrical and Computer Engineering
1983-1984	Research Assistant, Theoretical Solid State Physics, Ames Laboratory
1982-1985	Teaching Assistant, Physics Department

SIGNIFICANT PUBLICATIONS

1. "On trading wavelengths with Fibers: A cost-performance based study," A. K. Somani and M. Mina, and L. Li, accepted for publication IEEE/ACM Transactions on networking, Vol.12, Iss. 5, pp955-951, Oct 2004.
2. "Back to the basics: Fundamental Strategies for engineering education", M. Mina published in the academic bookshelf, Journal of Engineering Education, July 2003.
3. "Evaluation of the effects of pulsed-magnetic field treatment on magnetic materials", C.C.H. Lo, D.C. Jiles, M. Mina, M.J. Johnson, B. Koepke, L.C. Kerdus, and J. Leib, Material Evaluation, Vol 60, No. 8, August 2002, pp 971-976
4. "Finite Element Analysis of Multilevel Acoustic Fresnel Lenses", S. C. Chan, M. Mina, S. S. Udpa, W. Lord, and L. Udpa, *IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control*. Vol 43, No. 4, pp 670-677, July 1996.
5. "On the Analytical Equivalence of Electromagnetic Fields Solutions from a Known Source Distribution", A. Safaeinili, M. Mina, *IEEE Trans. Electromag. Compat.*, Vol. 33, No. 1, pp. 69-71, Feb. 1991.
6. "Wavelength Conversion Technology and the impact on future optical networks", M. Mina and A. K. Somani, 39th Annual Allerton Conference on Communication, Control, and Computing, October 2001.
7. "Studies on the effects of pulsed-magnetic field treatment on magnetic materials", M.J. Johnson, L.C. Kerdus, C.C.H. Lo, J.E. Snyder, J. Leib, S.J. Lee, M. Mina, and D.C. Jiles, *28th Reviews of Progress in Quantitative Nondestructive Evaluation (QNDE)*, Burnswick, Maine, July2001
8. "On trading wavelengths with Fibers: A cost-performance based study," A. K. Somani and Mani Mina, 38th Annual Allerton Conference on Communication, Control, and Computing, October 2000.

9. "It is almost the next century: Do you know what your computers will be?" M. Mina, *The Inside Line*, Vol. 12, No. 1, January 1999, Page 10.
10. "Educating the Public: A Better Way to the 21st Century", M. Mina *Materials Evaluation* August 1997, Vol. 55, No. 8, 888.
11. "NDT Grows in the Food Industry", M. Mina *Materials Evaluation* July 1997, Vol. 55, No. 7, 802.
12. "Practical Considerations for Data fusion of 2-D Eddy Current Images", M. Mina, S. Udpa, L. Udpa, W., *The 2nd international Workshop on Electromagnetic nondestructive Evaluation* October 28-29, 1997 Tokyo Japan
13. "Design Considerations for the Remote Field Eddy Current Probe for Inspecting Ferromagnetic Flat Structures", S. Nath, M. Mani, Y. Sun, *Reviews of Progress in Quantitative Nondestructive Evaluation*, Vol. 16, pp.1061-1066, eds. D. O. Thompson and D.E. Chimenti, Plenum Press, New York, 1997.
14. "A new approach for practical two dimensional data fusion utilizing single eddy current probe", M. Mina, S. S. Udpa, L. Udpa and J. Yim, *Reviews of Progress in Quantitative Nondestructive Evaluation*, Vol. 16, pp. 749- 755, eds. D. O. Thompson and D.E. Chimenti, Plenum Press, New York, 1997.
15. "Finite Element Analysis of Multilevel Acoustic Fresnel Lenses", S. C. Chan, M. Mina, S. S. Udpa, W. Lord, and L. Udpa, *IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control*. Vol 43, No. 4, pp 670-677, July 1996.

SCIENTIFIC AND PROFESSIONAL SOCIETIES MEMBERSHIP

Institute of Electrical and Electronics Engineers (IEEE) Senior Member
 American Society of Nondestructive Testing (ASNT)
 Chair, Publication Activity Division
 Electromagnetic Education and Professional Division
 Associate Technical Editor (ATE) of *Materials Evaluation*
 Coordinator, *Electromagnetic Methods Handbook*
 Member of ηκν, ΣΨ

SYNERGISTIC ACTIVITIES

Development of course material for advanced graduate course in optical devices and microwaves; undergraduate student research projects in electrical engineering; and development of seminar and short courses.

HONORS AND AWARDS

2005 Faculty member of the year for the College of Engineering, Leaders INspiring Connections and Senior Class council, Iowa State University, Ames, Iowa
 2004 Winner of the best innovation in Learning Community, Iowa State institute, Ames, Iowa
 2004 Superior Engineering Teacher Award
 2004 Warren B. Boast Undergraduate Teaching Award
 2004 Student Council, EE/CprE Faculty of the year award
 2003 VEISHEA Faculty of the Year Award
 2002 Warren B. Boast Undergraduate Teaching Award
 2002 Superior Engineering Teacher Award
 2002 Professor of the week, E-week 2002
 1999 Honors Program Teaching Award, Iowa State University
 1992 Outstanding Professor in Electrical Engineering, Engineering Council Award
 1989 Research Excellence Award, Electrical and Computer Engineering Department
 1987 Teaching Excellence Award, Electrical and Computer Engineering Department
 1985 Richard G. Patrick Award for Outstanding Teaching, Department of Physics
 1983 Best Teaching Assistant of the Year Award, Physics Department
 Member of the Graduate Committee, Iowa State University (since 1995)

POTENTIAL CONFLICTS OF INTEREST IN MERIT REVIEW

Ph.D. Theses Advising Committee: Professors C. Hsieh, C. Soukuulis, James Coronos
 Collaborators: Professors Satish Udpa, Lalita Udpa, Bill Lord, and Drs Shridhr Nath, Yushi Sun