C. SURYANARAYANA, Ph.D., FIMMM, FASM

Professor & Graduate Coordinator

Department of Mechanical, Materials and Aerospace Engineering
University of Central Florida, Orlando, FL 32816-2450
Tel: 407-823-6662; FAX: 407-823-0208; e-mail: csuryana@mail.ucf.edu

EDUCATION:

Ph.D. (Met. Eng.)	Banaras Hindu University, Varanasi, India	1970
M.S. (Met. Eng.)	Banaras Hindu University, Varanasi, India	1967
B.E. (Metallurgy)	Indian Institute of Science, Bangalore, India	1965
B.S. (Math, Phys, Chem)	Andhra University, Waltair, India	1963

CURRENT RESEARCH INTERESTS AND FIELDS OF SPECIALIZATION:

- Synthesis, Processing, and Characterization of Nanomaterials
- Nanocomposites
- Mechanical Alloying for Developing New Materials
- Rapid Solidification Processing of Metallic Materials
- Quasicrystalline Materials
- Materials Characterization by X-ray Diffraction and Electron Microscopy Techniques

PROFESSIONAL EXPERIENCE:

2004 – to-date:	Professor, University of Central Florida, Orlando
2001 – 2004:	Associate Professor, University of Central Florida, Orlando
1997 – 2000:	Research Professor, Colorado School of Mines, Golden
1990 – 1996:	Visiting Professor and Associate Director, Institute for Materials and Advanced Processes, University of Idaho, Moscow
1988 – 1990:	National Research Council Senior Research Associate, Wright-Patterson Air Force Base, Dayton, OH
1982 – 1988:	Professor of Physical Metallurgy, Banaras Hindu University, Varanasi, India
1973 - 1982:	Reader in Physical Metallurgy, Banaras Hindu University, Varanasi, India
1967 – 1973:	Lecturer in Metallurgy, Banaras Hindu University, Varanasi, India

Short-Term Visiting Assignments

2006: Visiting Professor, Helmut-Schmidt University, Hamburg, Germany

2005, 2004, 2003, 2002, 2001: Visiting Scientist (during summer months) at the GKSS Research Center, Geesthacht, Germany

1986: Visitor to Oxford, Cambridge and Sheffield Universities in U.K. under the British Council program of Academic Links Interchange Scheme (ALIS).

1979 – 1980: Japan Society for Promotion of Science (JSPS) Fellow, Tohoku University, Sendai, Japan

1973: Visiting Scientist, Atomic Energy Establishment, Mol, Belgium

1973: Royal Society Commonwealth Bursar, University of Oxford, Oxford, UK

ACADEMIC AWARDS, HONORS, AND DISTINCTIONS:

2003: **Listed by the Institute of Scientific Information as one of the 214 most cited researchers in materials science from 17 countries (including USA, UK, Japan, Germany, France, …)**

2006: University of Central Florida Teaching Incentive Program (TIP) Award

2005 – to-date: Member, Editorial Advisory Board of Materials and Manufacturing Processes, published by Taylor and Frnacis.

2003 – to-date: Member, Editorial Advisory Board of International Materials Reviews, published by ASM International and Institute of Materials, London, UK

2003 – to-date: Member, Editorial Advisory Board of Journal of Materials Engineering and Performance, published by Springer.

2003 – to-date: Listed in Marquis Who's Who in America

2003: University of Central Florida MMAE Department Researcher of the Year award

2001: International Expert on Mechanical Alloying to advise the scientists at the GKSS Research Center, Geesthacht, Germany.

1999 – to-date: Associate Editor, Journal of Metastable and Non-Equilibrium Materials, published by TransTech Publications.

1999 – to-date: Member of Editorial Committee, Powder Metallurgy Briefs, published by Metal Powder Industries Federation

1998 – to-date: Member, Editorial Advisory Board, Materials Science and Engineering A, published by Elsevier.

1998: Awarded the DISTINGUISHED ALUMNUS AWARD by Banaras Hindu University, Varanasi, India

1995: Elected Fellow of ASM International

1994 – to-date: Member, Board of Reviewers, Metallurgical and Materials Transactions A of TMS

1994: Elected Fellow of the Institute of Materials, London, UK

1993: Awarded the Best Technical Paper Award by the Steel Authority of India Ltd., Ranchi for 1992-1993

1992: ASM-IIM Lectureship Award

1986: Visitor to Oxford, Cambridge and Sheffield Universities in U.K. under the British Council program of Academic Links Interchange Scheme (ALIS).

1983: NATIONAL METALLURGIST'S DAY AWARD of the Union Ministry of Steel and Mines, Government of India, for significant contributions to the field of "Rapid Solidification of Metals"

1983: Editor, Bulletin of the Electron Microscope Society of India

1974: YOUNG SCIENTIST'S MEDAL of the Indian National Science Academy for outstanding contributions to "modern metallography" (for persons below 30 years of age)

1973: Royal Society Commonwealth Bursary to carry out research at the University of Oxford, Oxford, UK.

1972: Pandya Memorial SILVER MEDAL of the Indian Institute of Metals for the paper adjudged to be of highest merit among those published in their TRANSACTIONS by Associate Members

1967: Banaras Hindu University GOLD MEDAL for securing the highest percentage of marks in the M.S. (Met. Eng.) Examination

COURSES TAUGHT (at UCF**):**

Graduate Level

EMA 6126: Physical Metallurgy (Fall 06, Fall 05, Fall 04, Fall 03, Fall 02, Fall 01)

EMA 6130: Phase Transformations in Metals and Alloys (Spring 05, Spring 02)

EMA 6516: X-Ray Diffraction and Crystallography (Spring 06, Spring 04, Spring 03)

EMA 5504: Modern Characterization of Materials (Summer 01)

Undergraduate Level

EGN 3365: Structure and Properties of Materials (Fall 2006, Spring 06, Spring 05, Spring 04)

EMA 3706: Structure and Properties of Aerospace Materials (Fall 06, Spring 06, Fall 02)

EMA 3012: Experimental Techniques in Mechanics and Materials (Spring 03, Spring 02, Fall 01, Spring 01)

EMA 3000: Polymeric and Composite Materials (Summer 01)

COURSES TAUGHT AT OTHER UNIVERSITIES:

Graduate Level: X-ray Diffraction, Phase Transformations, Transmission Electron Microscopy, Non-equilibrium Processing of Materials, Powder Metallurgy, Physical Metallurgy of Light Alloys, Experimental Techniques in Physical Metallurgy, Alloy Design and Development,

Undergraduate Level: X-ray and Electron Metallography, Elements of Structural Metallurgy, Heat Treatment of Ferrous and Non-ferrous Alloys, Metallography, Materials Selection and Design, Engineering Materials Systems.

GRADUATE STUDENT DISSERTATIONS AND THESES SUPERVISED:

Ph.D.

1. G.V.S. Sastry (1981), Electron Microscopic Studies on Rapidly Quenched Aluminum Alloys (Chair)
2. Z.A. Chaudhury (1983), Structure of Rapidly Quenched Aluminum Alloys (Chair)
3. M. Hanumantha Rao (1985), Rapid Solidification of Commercial Aluminum Alloys (Chair)
4. Sheojee Singh (1987), Rapid Solidification Studies of Aluminum-Transition Metal Alloys (Chair)
5. Jyothi Menon (1988), Characterization of Metastable Crystalline and Quasicrystalline Structures in Rapidly Solidified Al-Co Alloys (Chair)
6. C.D. Singh (1989), Texture Analysis in Cold Rolled Austenitic Stainless Steels (Co-Chair)
7. S.K. Pandey (1990), Thermodynamics and Electron Microscopy of Rapidly Solidified Aluminum-Base Alloys (Chair)
8. Satyajeet Sharma (2007): Metallic Glass Formation by Mechanical Alloying Methods

Significant Advisement in the Dissertation Committee:

9. Earl Hixson (2003) The Effect of Intrinsic Stress on the Crystallization of an Amorphous Diffusion Barrier Layer with Applications to Refractory Metals.
10. D.K. Mukhopadhyay (1996), Development of Low Activation Oxide Dispersion Strengthened Ferritic Steels for Fusion Reactor.
11. Deepak Upadhyaya (1995), Development of a Superior Coating System for Continuous Silicon Carbide Fibers for Use in Titanium-Based Metal Matrix Composites.

Ph.D. Thesis Committee Member of

1. Praveen Sinha (1995) (WSU), Point Defects in Quenched and Mechanically Alloyed Intermetallic Compounds
2. Deepak Upadhyaya (1995), Development of a Superior Coating System for Continuous Silicon Carbide Fibers for Use in Titanium-Based Metal Matrix Composites
3. D.K. Mukhopadhyay (1996), Development of Low Activation Oxide Dispersion Strengthened Ferritic Steels for Fusion Reactor

4. Janice K. Lomness (2001), An Investigation into the Relationship Between the Hydrogen Storage Properties and the Microstructure of Mechanically Alloyed Mixtures of Titanium, Magnesium, and Nickel
5. Soon-Jik Hong (2001), Nanocrystallization Behavior and Consolidation of Rapidly Solidified High Strength Al Alloys
6. Hong-Moule Kim (2001), Microstructures and Wear Properties of High Functional Al Composite Materials
7. D.Y. Maeng (2001), Consolidation and Strength of Rapidly Solidified and Extruded Al Matrix Alloy Composites
8. Brian W. Kempshall (2001), Effects of Bi Grain Boundary Impurity Segregation on the Grain Boundary Diffusion of Ni into <100> Cu Symmetric Twist Grain Boundaries
9. Satyajit Shukla (2001), Synthesis and Characterization of Sol-Gel derived Nanomaterials and Nanocrystalline Electroless Metal Coatings.
10. Stephen M. Schwarz (2002): Diffusion of Ni through Cu Twist Grain Boundaries and Influences of Diffusion-Induced Recrystallization on Volume Diffusion in Cu-Ni Couples.
11. Islam A. Salama (2003): Laser Doping and Metallization in Wide Bandgap Materials: SiC, GaN, and AlN.
12. Chandrasen Rathod (2005): Diffraction Studies of Deformation in Shape Memory Alloys and Selected Engineering Components
13. Sudhir Rajagopalan (2005): Deformation Studies of NiTi Shape Memory Alloys Using Instrumented Indentation
14. Zhaoxu Tian (2006): Laser Metallization and Doping of SiC and Their Applications on Fabrication of SiC Diodes and Endotaxial Layer
15. Sara Shmalo: In-Situ Neutron Diffraction Investigation of NiTiFe Shape Memory Alloys during Mechanical Loading at Cryogenic and Room Temperatures
16. Vinu Balakrishnan: Low Temperature NiTiFe Shape Memory Alloys: Actuator Engineering and Investigation of Deformation Mechanisms using in-situ Neutron Diffraction
17. R. Mahadevan Manjeri: Processing-Structure-Properties Correlations in Low Temperature NiTiFe Shape Memory Alloys
18. Shipeng Qiu: Internal Stress Measurements in Engineering Materials using Neutron Diffraction at Stress and Temperature

M.S.

1. A. Ranga Rao (1975), Age Hardening Studies in Magnesium Alloys (Chair)
2. S.K. Tiwari (1976), Structure of a Rapidly Solidified Al-30%Mg Alloy (Chair)
3. L.R.K. Rao (1978), Structure and Mechanical Properties of Melt-Quenched Al-Cu Alloys

(Chair)

4. G. Sridhar (1982), Studies on Rapidly Solidified Aluminum Alloy RR 58 (Chair)
5. D.K. Gangopadhyay (1984), Structure of Rapidly Solidified Al-Zr Alloys (Chair)
6. Subash Chandra (1987), Electron Microscopy of Quasicrystalline $Mg_{32}(Al,Zn)_{39}$ (Chair)
7. D.K. Mukhopadhyay (1993), Structural Evolution in Mechanically Alloyed Al-Fe Alloys (Co-Chair)
8. Guo-Hao Chen (1993), Mechanical Alloying of Ti_3Al-Based Alloys (Co-Chair)
9. Zhixue Peng (1993), Mechanical Alloying of Niobium-Aluminum Based Powders (Co-Chair)
10. Enhong Zhou (1995), Development of Low Density Ti-Mg Alloys by Mechanical Alloying (Co-Chair)
11. Marilyn V. Kuehn (2002), Electron Microscopy of Carbon Nanotube Paper (Chair)
12. Devender Singh (2003), Metastable Phases in Mechanically Alloyed Al-Mg Powders (Chair)
13. Rajesh Neelakantan (2003), Study of Defects Associated with Implantation of High Dose Vanadium and Chromium into (100) Single Crystal Silicon (Chair)
14. Pushkar Katiyar (2004), Processing, Microstructural and Mechanical Characterization of Mechanically Alloyed Al-Al_2O_3 Nanocomposites (Chair)
15. Balaji Prabhu (2005), Microstructural and Mechanical Characterization of Al-Al2O3 Nanocomposites Synthesized by High-Energy Milling (Chair)
16. Umesh S. Patil (2005), Structural Evolution in Mechanically Alloyed Fe-Based Powder Systems (Chair)

M.S. Thesis Committee Member of

1. Mrs. Sutapa Bhaduri (1995), Synthesis and Consolidation of Alumina-Based Nanoceramics
2. Mr. Kedar Sapre (2001), Adsorption Behavior of Imidazoline Inhibitor and Corrosion Product Layer (CPL) Evolution in 1018 C-Steel Exposed to Multiphase Environment.
3. Vivek S. Gade (2002), Development of Copper Indium Gallium Disulfide, $CuIn_{1-x}Ga_xS_2$ (CIGS2) Thin Film Solar Cells on Large Area Ultra Lightweight Titanium Foils Coated with SiO_2 Barrier Layers
4. Chandrasen Rathod (2003), An In-Situ Synchrotron X-ray Diffraction Study of Stress-Induced Transformations in NiTi
5. Sachin S. Kulkarni (2003), Development of Scrubber, Optimization of Deposition Parameters for Large Area CIGS2 Solar Cells
6. Adrian L. Little (2004), An In-Situ Neutron Diffraction Study of Shape-Memory NiTi During Tensile and Compressive Loading
7. Jennifer Lemanski (2005): Shape Memory Alloy Actuators for Spaceport Technologies:

Materials Characterization and Prototype Testing

8. Nidhi Mahajan (2005), Self-Assembled Supramolecular Structures of Chiral Phospholipids: Structures, Mechanical Properties and Patterning
9. Himesh Bhatt (2005): Synthesis and Characterization of Nanocrystalline Hydroxyapatite Powder and the Effects of Oxide-Based Sintering Additives on Tricalcium Phosphate

Undergraduate Research Project Supervision

- Jessica Jansen (2002), Nanocrystal Formation in Ball-Milled Materials (NSF-REU).
- Nemekhbayar Dashbaljir (2000), Fracture Toughness Testing of Thin TSP Diamond Specimens.
- Erin Leigh Justen (2000), Fracture Toughness Testing of Thin TSP Diamond Specimens.
- Emma Joyce Nicoletti (1999-2000), Microwave Brazing of Tungsten Carbide to TSP Diamond Drill Bits.
- Renee Davis (1999), Transformation Behavior of Mechanically Alloyed Cu-In-Ga-Se Powders
- Tom Dennin (1999), Designing and Fabricating a Multi-Purpose, Closed-Field Unbalanced Magnetron Sputtering System.
- Chris Muratore (1998), Alloy Development for Hydrogen Storage.

EDITORIAL ACTIVITIES:

Member, Editorial Board of ***Materials Science and Engineering A***

Member, Editorial Committee of ***Journal of Materials Engineering and Performance***

Member, Editorial Committee of ***International Materials Reviews***

Key Reader, ***Metallurgical and Materials Transactions A***

Member, Editorial Board of ***Materials and Manufacturing Processes***

REVIEWING ACTIVITIES:

Reviewer of scientific manuscripts for publication in

- Acta Materialia
- Advanced Performance Materials
- AIAA Journal of Propulsion and Power
- Applied Physics Letters
- Bulletin of Phase Diagrams
- Combustion and Flame
- Composites A: Applied Science and Manufacturing
- Intermetallics
- Journal of the American Ceramic Society
- Journal of Applied Physics
- Journal of Materials Research
- Journal of Materials Science

- Journal of Materials Science Letters
- Journal of Materials Science: Materials in Electronics
- Journal of Materials Synthesis and Processing
- Journal of Non-Crystalline Solids
- Journal of Phase Equilibria
- Journal of Vacuum Society
- Materials Research Bulletin
- Materials Science and Engineering A
- Materials Science and Technology
- Metallurgical and Materials Transactions A
- Nanostructured Materials
- Philosophical Magazine
- Philosophical Magazine Letters
- Physics and Chemistry of Materials
- Powder Metallurgy Briefs
- Reviews in Particulate Materials
- Scripta Materialia
- Thin Solid Films
- Transactions of the Indian Institute of Metals
- Ultramicroscopy
- Wear

In addition to the reviewing of manuscripts for archival journals mentioned above, several manuscripts submitted for Conference Proceedings were also reviewed. Specific mention may be made of the following conferences for which a large number of manuscripts were reviewed:

- Nanomaterials, Pittsburgh, PA, 2005
- Processing and Properties of Structural Nanomaterials, Chicago, IL, November 9-12, 2003.
- Surface Engineering in Materials Science II, San Diego, CA, March 2-6, 2003.
- THERMEC 2000, Las Vegas, NV, December 4-8, 2000.
- Ultrafine Grained Materials, Nashville, TN, March 12-16, 2000.
- Tenth International Conference on "Rapidly Quenched and Metastable Materials (RQ-10)", Bangalore, India, August 22-27, 1993.
- Processing and Properties of Nanocrystalline Materials, Cleveland, OH, October 29-November 2, 1995.
- Second International Conference on "Mechanical Alloying for Structural Applications", Vancouver, BC, Canada, September 20-22, 1993.
- Third International Conference on "Advanced Materials (ICAM-3)", Tokyo, Japan, August 31-September 3, 1993.
- Eighth International Conference on "Rapidly Quenched and Metastable Materials (RQ-8)", Sendai, Japan, August 22-27, 1993.
- First International Conference on Nanostructured Materials, Cancun, Mexico, September 22-26, 1992.
- Seventh World Titanium Conference, San Diego, CA, June 28-July 2, 1992.

PLENARY LECTURES AT INTERNATIONAL CONFERENCES:

- Plenary Lecture at the 13th International Symposium on "Metastable and Nano Materials", Warsaw, Poland, August 27-31, 2006.
- Plenary Lecture at the International Conference on "Trends in Mechanical Alloying: Science, Technology and Applications", Jaipur, India, February 21-23, 2001.
- Plenary Speaker at the Annual Meeting of the Korean Powder Metallurgy Association, South Korea, November 3, 2000.
- Plenary Speaker at the Seminar on "Nanocrystalline Materials", 48th Congress of the Brazilian Association of Materials, Rio de Janeiro, Brazil, July 25-30, 1993.

INTERNATIONAL CONFERENCES ORGANIZED:

- International Symposium on Manufacturing, Properties, and Applications of Nanocrystalline Materials, Columbus, OH, October 18-21, 2004
- Processing and Properties of Structural Nanomaterials, Chicago, IL, November 9-12, 2003.
- Surface Engineering in Materials Science II, San Diego, CA, March 2-6, 2003.
- THERMEC 2000 (International Conference on Processing and Manufacturing of Advanced Materials), Las Vegas, NV, December 4-8, 2000.
- Ultrafine Grained Materials, Nashville, TN, March 12-16, 2000.
- Recent Advances in Powder Consolidation, Rosemont, IL, October 14-15, 1998.
- Processing and Properties of Nanocrystalline Materials, Cleveland, OH, October 29-November 2, 1995.
- Synthesis/Processing of Lightweight Metallic Materials, Las Vegas, NV, February 13-16, 1995.
- Light Metals: Science and Technology, Varanasi, India, November 14-16, 1983.

In addition to the above, actively involved in the Organizing Committees of the following international conferences:

- THERMEC 2003 (International Conference on Processing and Manufacture of Advanced Materials), Madrid, Spain, July 7-11, 2003.
- International Conference on Trends in Mechanical Alloying: Science, Technology, and Applications, Jaipur, India, February 21-23, 2001.
- International Conference on Metallurgical Technologies, Varanasi, India, December 9-12, 1998.
- Second International Conference on Structural Applications of Mechanical Alloying, Vancouver, BC, Canada, September 20-22, 1993.
- First International Conference on Structural Applications of Mechanical Alloying, Myrtle Beach, SC, March 27-29, 1990.

LECTURES AT SHORT COURSES/WORKSHOPS:

- Advanced Metallography, Banaras Hindu University, Varanasi, India, June 1971.

- Phase Transformations, Indian Institute of Technology, Kanpur, India, December 1971.
- Field Emission and Ion Microscopy, Banaras Hindu University, Varanasi, India, March 1972.
- Application of Electron Optical Techniques to the Characterization of Materials, Indian Institute of Technology, Kanpur, India, December 1980.
- Non-Destructive Examination, Banaras Hindu University, Varanasi, India, December 1981.
- Applications of Electron Microscopy, Roorkee University, Roorkee, India, June 1983.
- Electron Microscopy, Banaras Hindu University, Varanasi, India, March 1985.
- Electron Microscopy in Materials Research, Indian Institute of Science, Bangalore, India, May 1987.
- Bulk Nanostructured Materials: Processing, Structure, Properties, and Applications, ASM International, Columbus, OH, October 2004

INVITED RESEARCH SEMINARS/LECTURES:

- Helmut Schmidt University, Hamburg, Germany, August 17, 2006.
- GKSS Research Center, Geesthacht, Germany, June 6, 2005.
- Tata Research, Development, and Design Center, Pune, India, December 20, 2004.
- National Institute of Technology, Jaipur, India, December 16, 2004.
- GKSS Research Center, Geesthacht, Germany, July 22, 2004.
- University of Barcelona, Bellaterra, Spain, July 16, 2004.
- Hanyanag University, Ansan, South Korea, November 28, 2003.
- Kongju National University, Kongju, South Korea, November 27, 2003.
- Chonbuk National University, Chonju, South Korea, March 19, 2003.
- Hanbat National University, Daejon, South Korea, March 19, 2003.
- International Advanced Research Center for Powder Metallurgy and New Materials, Hyderabad, India, December 17, 2002.
- Hanyanag University, Ansan, South Korea, May 16, 2002
- Research Institute of Industrial Science and Technology (RIST), Pohang City, South Korea, May 13, 2002.
- Gyeong-Sang National University, Chinju City, South Korea, May 10, 2002.
- ASM San Fernando Valley Chapter, Los Angeles, CA, April 26, 2001.
- GKSS Research Center, Geesthacht, Germany, August 16, 2001.
- Korea Advanced Institute of Science and Technology, Daejon, South Korea, May 14, 2001.
- Colorado School of Mines, November 12, 1998.
- Korea Institute of Science and Technology, September 22, 1998.
- Colorado School of Mines, March 12, 1998.
- Banaras Hindu University, Varanasi, India, December 6, 1996.
- Inland Empire (Spokane) Chapter of ASM International, September 13, 1994.
- University of Idaho, Moscow, ID, February 10, 1994.
- Washington State University, Pullman, WA, November 2, 1993.

- Nihon University, Tokyo, Japan, August 30, 1993.
- Nagoya University, Nagoya, Japan, August 20, 1993.
- Osaka University, Osaka, Japan, August 19, 1993.
- Kobe Steel Co., Kobe, Japan, August 18, 1993.
- NEC Research Laboratories, Tokyo, Japan, August 17, 1993.
- University of Idaho, Moscow, ID, February 1, 1993.
- Indian Institute of Science, Bangalore, India, August 23,1992.
- Indian Institute of Metals, Bombay Chapter, Bombay, India, August 21,1992.
- Banaras Hindu University, Varanasi, India, August 19, 1992.
- Washington State University, Pullman, WA, April 23, 1992.
- University of Idaho, Moscow, ID, March 8, 1991.
- University of Dayton, Dayton, OH January 11, 1990.
- Wright-Patterson Air Force Base, Dayton, OH, September 13, 1988.
- University of Oxford, Oxford, UK, December 4, 1986.
- University of Cambridge, Cambridge, UK, November 19, 1986.
- University of Sheffield, Sheffield, UK, October 30, 1986.
- National Physical Laboratory, New Delhi, October 20, 1986.
- Bangladesh University of Engineering & Technology, Dhaka, Bangladesh, October 21, 1984.
- Bangladesh Atomic Energy Commission, Dhaka, Bangladesh, October 20, 1984.
- Tohoku University, Sendai, Japan, October 8, 1984.
- Tokyo University, Tokyo, Japan, September 27, 1984.
- Kyoto University, Kyoto, Japan, September 21, 1984.
- Osaka University, Osaka, Japan, September 19, 1984.
- Sumitomo Light Metal Industry Ltd., Nagoya, Japan, September 18, 2004.
- Japan Institute of Light Metals, Nagoya, Japan, September 17, 1984.
- Defence Metallurgical Research Laboratory, Hyderabad, India, July 31, 1982.
- Indian Physics Association Tirupati, India, June 29, 1982.
- Corporate Research & Development Division, Bharat Heavy Electricals Ltd., Hyderabad, June 21, 1982.
- Reactor Research Center, Kalpakkam, India, December 27, 1980.
- Reactor Research Center, Kalpakkam, India, December 26, 1980.
- Indian Institute of Technology, Madras, Department of Metallurgy, December 23, 1980.
- Indian Institute of Technology, Madras, Department of Physics, December 23, 1980.
- Banaras Hindu University, Varanasi, India, September 20, 1980.
- Kawasaki Steel Co., Mizushima, Japan, May 26, 1980.
- Sumitomo Special Metals Co., Osaka, Japan, May 24, 1980.
- Kyoto University, Kyoto, Japan, October 20, 1979.
- Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf, Germany, December 5, 1973.
- University of Erlangen, Erlangen-Nürnberg, Germany, December 4, 1973.
- Catholic University, Leuven, Belgium, November 23, 1973.
- Atomic Energy Research Center, Mol, Belgium, November 21, 1973.
- Atomic Energy Research Center, Mol, Belgium, November 7, 1973.
- University of Sussex, Brighton, UK, May 15, 1973.

PROFESSIONAL SERVICE:

- Refereed research proposals for the National Science Foundation (also panelist), Department of Energy, Department of Defense, Army Research Office, American Chemical Society, NSF Program on Women's International Science Collaboration (WISC), University of California Energy Institute, and others.

Committee Activities (outside UCF):

2003 - 2004	…..	Member, Strategic Council on Membership and Services Expansion of ASM International
2003 – 2004	…..	Member, Organizing Committee of ASM Materials Solutions Conference and Show, Columbus, OH, October 18-21, 2004.
2003 – to-date	…..	Chairman, Nanomaterials Task Force of ASM International
2003 – 2005	…..	Vice Chairman, TMS Powder Materials Committee
2001 – 2003	…..	Secretary, TMS Powder Materials Committee
1999 – 2001	…..	Chairman, ASM International Materials Synthesis and Processing Committee
1998 – to-date	…..	Member, TMS Powder Materials Committee
1990 – to-date	.....	Member, ASM International Materials Synthesis and Processing Committee
1989- to date	.....	Member, TMS Titanium Committee
1987-88	.....	Chairman, Varanasi Chapter of the Indian Institute of Metals
1986-88	.....	Member, Executive Committee of the Electron Microscope Society of India.
1977-78	.....	Member, Executive Committee of the Indian Vacuum Society.

UCF Committee Activities:

- Member, UCF Commission on Nanoscience and Technology (2002-2003).
- MMAE Departmental Representative, UCF Library Committee (2003-2004).
- Member, MMAE Search Committee for Biomaterials faculty position (2002-2003).
- Chairman, MMAE Departmental Laboratory and Facilities Committee (2002-2004)
- Member, MMAE Departmental Undergraduate Committee (2002-2004).
- Chairman, MMAE Search Committee for Biomaterials faculty position (2001-2002).
- Member, MMAE Committee for Undergraduate Laboratory Equipment (2000-2001).
- Co-opted member, AMPAC Search Committee for faculty members in the area of Nanomaterials (2001-2002).

MEMBERSHIP OF PROFESSIONAL SOCIETIES:

- Fellow, ASM International
- Fellow, Institute of Materials, Minerals and Mining, London, UK

- Member, TMS
- Life Member, Materials Research Society of India
- Life Member, The Indian Institute of Metals
- Life Member, Electron Microscope Society of India
- Life Member, Indian Vacuum Society

LIST OF PUBLICATIONS

Patent

1. R.P. Radtke, J.J. Moore, and C. Suryanarayana
   A Brazing Process Utilizing a Combustion Synthesis Reaction
   U.S. Patent Serial # 60/162,488 (Filed October 29, 1999).

Books

1. C. Suryanarayana
   Rapidly Quenched Metals - A Bibliography 1973-1979
   IFI/Plenum, New York, 1980, 278 pp.

2. T. R. Anantharaman and C. Suryanarayana
   Rapidly Solidified Metals: A Technological Overview
   Trans Tech Publications, Aedermannsdorf, Switzerland, 1987, 260 pp.

3. C. Suryanarayana
   Bibliography on Mechanical Alloying and Milling
   Cambridge International Science Publishing, Cambridge, UK, 1995, 439 pp.

4. C. Suryanarayana and M. G. Norton
   X-Ray Diffraction: A Practical Approach
   Plenum Press, New York, NY, 1998, 273 pp.

5. C. Suryanarayana (ed.)
   Non-Equilibrium Processing of Materials
   Pergamon Press, Oxford, UK, 1999, 438 pp.

6. C. Suryanarayana
   Mechanical Alloying and Milling
   Marcel Dekker, Inc., New York, NY, 2004, 466 pp.

7. C. Suryanarayana
   Experimental Techniques in Mechanics and Materials
   Wiley Custom Services, New York, 2006, 388 pp.

Edited Conference Proceedings

1. R. Krishnan, P. Mukhopadhyay and C. Suryanarayana (eds.)
   Proceedings of the X Annual Conference of the Electron Microscope Society of India,
   1978, 116 pp.

2. C. Suryanarayana (ed.)
   Fifty Years of Electron Microscopy
   Special Issue of the Bulletin of the Electron Microscope Society of India, 1981, 57 pp.

3. C. Suryanarayana (ed.)
Proceedings of the XV Annual Conference of the Electron Microscope Society of India, 1983
(Vol. 7 of the Bulletin of the Electron Microscope Society of India), 215 pp.

4. C. Suryanarayana, P. M. Prasad, S. L. Malhotra and T. R. Anantharaman (eds.)
Light Metals: Science and Technology
Proceedings of an International Symposium, TransTech Publications, Aedermannsdorf, Switzerland, 1985, 271 pp.

5. F.H. Froes, C. Suryanarayana and C.M. Ward-Close (eds.)
Synthesis/Processing of Lightweight Metallic Materials
TMS, Warrendale, PA, 1995, 368 pp.

6. C. Suryanarayana, J. Singh and F.H. Froes (eds.)
Processing and Properties of Nanocrystalline Materials
TMS, Warrendale, PA, 1996, 494 pp.

7. R.S. Mishra, S.L. Semiatin, C. Suryanarayana, N.N. Thadhani, and T.C. Lowe (eds.)
Ultrafine Grained Materials
TMS, Warrendale, PA, 2000, 434 pp.

8. T. Chandra, K. Higashi, C. Suryanarayana, and C. Tome (eds.)
Processing and Manufacturing of Advanced Materials (THERMEC 2000)
Elsevier, Oxford, UK, 2001 (on CD-ROM and keynote contributions as Vol. 117, No. 3, 2001 of the International Journal of Materials Processing Technology as a Special Issue).

9. S. Seal, N.B. Dahotre, J.J. Moore, C. Suryanarayana, and A. Agarwal (eds.)
Surface Engineering in Materials Science II
TMS, Warrendale, PA, 2003, 333 pp.

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