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EXPERIENCE:

2007-Present Director, Microscopy Facility, Research Professor Department of Materials Science and Engineering, Clemson University
2004-2007 Chief Scientist, Microscopy Facility, Clemson University
2001-04 Research Associate
Director Microscopy, Center for Advanced Materials in the State of Oregon(CAMCOR), Director of Histology and Confocal Facilities, Department of Neuroscience, University of Oregon
1990-01 Director of Microscopy Facility, Clemson University
1980-90 Coordinator Research, Clemson University
1974-80 Laboratory Assistant, Clemson University

EDUCATION:

Ph.D. Clemson University, 2000, Zoology
M. Ag. Clemson University, 1992, IPM
B.A. Central Wesleyan College, 1985, Biology

INTEREST/EXPERIENCE

Scanning Electron Microscopy – 25 Years
Variable Pressure Scanning Electron Microscopy – 12 Years
Energy Dispersive X-Ray- 15 Years
Wave Length Dispersive X-Ray – 5 Years
Transmission Electron Microscopy – 35 Years
HR Transmission Electron Microscopy – 3 years
Auger/SIMS – 10 years
Focused Ion Beam – 6 years
Field Emission Scanning Electron Microscopy – 12 Years
X-Ray Photospectroscopy, XPS – 10 years
Balzer Freeze Fracture/Cryo – 3 years
Ion Mill, Microtomes/Cryo Microtomes, Polishing, Saws as well
As other secondary equipment needed for sample preparation – 35 years

GRADUATE STUDENT COMMITTEES:

Kris Sinclair, Ph.D. Bioengineering
Mojtaba Samiee, Ph.D. Materials Science & Engineering
Herbert Boeckels, Ph.D. Materials Science & Engineering

PROFESSIONAL ACTIVITIES:

Sigma Xi
Microscopy Society of America
Southeastern Microscopy Society
ASM International
Microbeam Society of America
International Metallographic Society

PROFESSIONAL SERVICE:

1982 – Appalachian Regional Microscopy Society, Physical-Member-At-Large
1986-1988 - Appalachian Microscopy Society, Secretary/Treasurer
1989-1990 – Appalachian Microscopy Society, President
1989-1994- Microscopy Society America, Education Committee
1990-1993 – Southeastern Microscopy Society, Physical-Member-At-Large
1994-1997 – Microscopy Society of America, Chair Education Committee
1993-1994 – Southeastern Microscopy Society, President-Elect
1994-1995- Southeastern Microscopy Society, President
1994-1995 – Consultant Touchstone Engineering Firm, Wheeling, West Virginia
1995-1998 – Consultant Greenwood Genetics Center, Greenwood, SC
1996 – NSF Engineering Instrumentation Grant Selection Committee
1997-1999 – Microscopy Society of America, Council Member (Biological Director)
2000-2003 – Microscopy Society of America, Editorial Board
2001-2004 - Consultant Bend Research, Bend Oregon
2003-2005 – Chair Education Committee, Electronic Device Failure Analysis Society
2005-2008 – ASM Education Committee
2005-2007 – Publications Committee Microscopy Society of America
2008-2010 – Microscopy Society of America, Treasurer

PUBLICATIONS: (80 total. Most of my career has been devoted to teaching and working with the industrial sector on confidential materials)

Tao Li, Laying Wu, Nisaraporn Suthiwangcharoen, Michael A. Bruckman, Dayton Cash, JoAn S. Hudson, Soumitra Groshroy, and Qian Wang, Controlled Assembly of Rodlike Viruses and Polymer. The Royal Society of Chemistry, Submitted, 2009.

Sijie Lin, Jason Reppert, Qian Hu, JoAn S. Hudson, Michelle L. Reid, Tatsiana A. Ratnikova, Apparao M. Rao, Hong Luo, and Pu Chun Ke, Uptake, Translocation and transmission of Carbon Nanomaterials in Rice Plants. Small Nano Micro, Submitted, 2009.

Yonnie Wu, Richard C. Laughlin, David C. Henry, Darryl E. Krueger, JoAn S. Hudson, Cheng-Yi Kuan, Jian He, Jason Reppert, and Jeffery P Tomkins, Naturally occurring and stress induced tubular structures from mammalian cells, a survival mechanism. BMC Cell Biology 2007, 8:36 (16 Aug 2007).

Senthilkumar Chandrasekaran, Basak Yazgan-Kokuoz, JoAn Hudson, H.R.Rack,

The Potential for Achieving Enhanced Mechanical Performance in TiC Particulate Reinforced Ti-6Al-6V-2Sn Powder Metallurgy Composites, Ti-2007 Science and Technology, Volume II Proceedings of the 11th World Conference on Titanium (JIMIC5), 599-602 pg. June 3-7, 2007.

Basak Yazgan-Kokuoz, John Braswell, Patrick Martin, JoAn Hudson, and H.R. Rack, Stability of Ti-5Al-5Mo-2Cr-1Ni (Corona-X), Ti-2007 Science and Technology, Volume II Proceedings of the 11th World Conference on Titanium (JIMIC5), 965-968 pg. June 3-7, 2007.

Basak Yazgan-Kokuoz, JoAn Hudson, and Henry J. Rack, Anisothermal Alpha Phase Precipitation in Ti-3Al-8V-6Cr-4Zr-4Mo (Ti-38644), Ti-2007 Science and Technology, Volume II Proceedings of the 11th World Conference on Titanium (JIMIC5), 969-972 pg. June 3-7, 2007.

Arno S. Rettenbacher, Mark W. Perpall, Luis Echegoyen, JoAn S. Hudson, and Dennis W. Smith Jr. Radical Addition of a Conjugated Polymer to Multilayer Fullerenes (Carbon Nano-onions), Chem. Mater. 2007, 19, pg.1411-1417

Arno S. Rettenbacher, Bevan Elliott, JoAn Hudson, Armen Amirkhanian and Luis Echegoyen, Preparation and Functionalization of Multilayer Fullerenes (Carbon Nano Onions), Chemistry A European Journal, 12 (2) 2006, Wiley VCH, Verlag, pg.376-387.
(Also, photo was the cover for this edition).