JANET K. LUMPP

EDUCATION:

B.S.Met.E., Materials Engineering, Purdue University, 1988, with highest distinction *M.S.Met.E.*, Materials Engineering, Purdue University, 1989 *Ph.D.*, Materials Engineering, The University of Iowa, 1993

PROFESSIONAL EXPERIENCE:

Professor, Electrical and Computer Engineering, University of Kentucky, 2012 –
Associate Director, NASA Kentucky Space Grant Consortium and EPSCoR Programs, 2010 –
Associate Professor, Electrical and Computer Engineering, University of Kentucky, 1998 – 2012
Assistant Professor, Electrical and Computer Engineering, University of Kentucky, 1993–1998
Faculty Research Participant, Solid State Division, Oak Ridge National Lab, Summer 1994
Graduate Student Co-Op, Rockwell International, Cedar Rapids, IA, 1990-1993
Undergraduate Student Co-Op, Argonne National Laboratory, Argonne, IL, 1986-1988

AWARDS AND DISTINCTIONS:

IMAPS Outstanding Educator (2010) National Science Foundation Career Award (1997) National Science Foundation Research Initiation Award (1994) National Science Foundation Graduate Fellowship (1989) Department of Defense Graduate Fellowship (1989).

PUBLICATIONS (5 MOST RELEVANT):

- J.Li, J.K. Lumpp, R. Andrews, D. Jacques, "Aspect Ratio and Loading Effects of Multiwall Carbon Nanotubes in Epoxy for Electrically Conductive Adhesives", *Journal of Adhesion Science and Technology*, 22 (14), 1659-1671, 2008. Invited paper for special issue on Electronically Conductive Adhesives.
- J. Leifer, J.T. Black, S.W. Smith, N. Ma and J.K. Lumpp, "Measurement of In-plane Motion of Thin-Film Structures Using Videogrammetry", *AIAA Journal of Spacecraft and Rockets*, 44 (6), 1317-1325, 2007.
- J.K. Lumpp, K.D. Bradley, R.T. Haines, "Kentucky Electronics Education Project (KEEP): Putting Professional Development into Practice", *International Journal of Engineering Education*, Special Issue on Trends in Pre-College (K-12) Engineering Education, 23 (5), 910-915, 2007.
- J.S. Lenihan, J.C. Ball, V.G. Gavalas, J.K. Lumpp, J. Hines, S. Daunert, and L.G. Bachas, "Microfabrication of Screen-Printed Nanoliter Vials with Embedded Surface-Modified Electrodes", *Analytical and Bioanalytical Chemistry*, 387 (1), 259-265, January 2007.
- P. Thota, J. Leifer, S.W. Smith, J.K. Lumpp, "Pattern Evaluation for In-Plane Displacement Measurement of Thin Films", *Experimental Mechanics*, 45 (1), 18-26, Feb. 2005.

SYNERGISTIC ACTIVITIES

NASA Kentucky Space Grant Consortium and EPSCoR Programs: Associate Director for NASA Space Grant programs providing competitive funding opportunities for Affiliate Member institutions. Space Grant awards support Graduate Fellowships, Undergraduate Scholarships, Research Initiation Awards, Team Projects, Curriculum Development/Revision and Mini-Grants.

NASA EPSCoR programs develop research capacity at institutions of higher education in Kentucky through Research Infrastructure Development Grants, Workshop/Conference/Seminar support and nationally competed Research Area Awards.

PI: multidisciplinary research program on Advanced Carbon Nanotechnology (\$1.79M, 5/04-5/08) as part of a five institution consortium with Vanderbilt University, North Carolina State University, University of Florida and International Technology Center. **Faculty participant**: two NSF-IGERT programs including multidisciplinary training and co-advising of graduate students. **Director:** KEEP – Kentucky Electronics Education Project – classroom activities and professional development workshops for K-12 using microelectronics as a theme in STEM education. KEEP began as an NSF CAREER Award educational component and has reached nearly 2000 students directly and trained 150 teachers. A CD-ROM was produced containing instructional videos, plant tour, handouts and circuit projects.