Warren J. Jasper
Department of Textile Engineering Chemistry and Science
North Carolina State University

Education

Massachusetts Institute of Technology	Aeronautics and Astronautics	B.S. (1982)
Massachusetts Institute of Technology	Aeronautics and Astronautics	M.S. (1983)
Stanford University	Aeronautics and Astronautics	Ph.D. (1990)

Appointments

2012-present	Textile Engineering Program Director
2007-present	Professor, NC State University, Raleigh NC
1997-2007	Assoc. Professor, NC State University, Raleigh, NC
1991-1997	Assist. Professor, NC State University, Raleigh, NC
2001-2002	Billion Operations per Second, Inc, Principal Systems Engineer, Raleigh NC.

Awards

Charles Stark Draper Laboratory Fellowship 1982-83
Hughes Aircraft Company Doctoral Fellowship 1985-1989
Gertrude Cox Award for Innovative Excellence in Teaching and Learning with Technology, 2009-2010.
Fulbright Specialist Program: Engineering Education 2014

Professional Licenses

Registered Professional Engineer: North Carolina (1994-present)
Red Hat Certified Engineer #807101197403225

Publications (selected from over 40 peer reviewed Journal and Conference Proceedings)

S.C. Rasipuram, M. Wu, I.A. Kuznetsov, A.V. Kuznetsov, J.F Levine, W.J. Jasper, and A.V. Saveliev, ``Submicrometre particle filtration with a dc activated plasma textile", *J. Phys D: Appl. Physics*, vol 47 2014

S. Jasper and W. Jasper, ``Methods and impact of reducing salt in dyeing cellulose: a case study with CI Direct Blue 90", *Coloration Technology*, Vol 129, July 2013, pp 104

M. Wu, W.J. Jasper, A.V. Kuznetsov, N. Johnson, S.C. Rasipuram, ``Submicron particle filtration in monolith filters - A modeling and experimental study", *Journal of Aerosol Science*, Vol. 57, 2013 pp. 96-113.

S. Gangadharn, A.V. Kuznetsov, H. Zhu, J. Hinestroza, W. Jasper, ``Modeling of Cross Flow Across an Electrostatically Charged Monolith Filter", *Particulate Science and Technology*, Accepted June 2011.

G. Wu, A.V. Kuznetsov, W. J. Jasper, ``Distribution characteristics of exhaust gases and soot particles in wall-flow ceramics filter", *Journal of Aerosol Science*, Vol 42 Issue 7, pp 447-461, July 2011.

M. Wu, A. Kuznetsov, W. Jasper, ``Modeling of particle trajectories in an electrostatically charged channel", *Physics of Fluids*, Vol. 22, No. 4, 2010.

J. Kim, W. Jasper, and J. Hinestroza, "Direct probing of solvent-induced charge degradation in polypropylene electret fibers via electrostatic force microscopy", *Journal of Microscopy*, Vol. 225 No. 1, January 2007, pp. 72-79.

W. Jasper, J. Hinestroza, A. Mohan, J. Kim, B. Shiels, M. Gunay, D. Thompson and R. Barker, "Effect of Xylene Exposure on the Performance of Electret Filter Media", *Journal of Aerosol Science* Vol. 37 No. 7 pp903-911, 2006.

W. Jasper, J. Hinestroza, A. Mohan, D. Thompson and R. Barker, "Effect of phase on toluene on filtration performance of electret filter media against di-octyl-phthalate aerosols", *Journal of the International Society of Respiratory Protection,* Vol. 22. Fall/Winter pp 97-105, 2005.

W. Jasper, J. Joines and J. Brenzovich, "Fabric Defect Detection Using a Genetic Algorithm Tuned Wavelet Filter", *Journal of the Textile Institute*, Vol. 96 No. 1 pp. 43-54, 2005.
J. Kim, W. Jasper, J. Hinestroza, "Charge characterization of an electrically charged fiber via Electrostatic Force Microscopy", *Journal of Engineered Fibers and Fabrics,* Vol. 1, No. 2 2006.
J. Hinestroza, J. Kim, W. Jasper, "Direct Probing at the Nanoscale of Charge Degradation in Polypropylene Electret Fibers via Electrostatic Force Microscopy", *AATCC Review*, Vol. 6. No. 9, Sept 2006.
W. Jasper, R. Barker, D. Thompson, "Preliminary Investigation of Electret Filter Degradation by Chemical Exposure", International Symposium on Fibers, Fibrous Structures and Filtration, St. Louis, MO, 2004.

Synergistic Activities

Co-authored a book chapter with M. Gunay (Antalya, Turkey) entitled Modelling, Simulation and Control of the Dyeing Process

Summer Textile Exploration Program (STEP): mentor High School Students during the summer in combining data acquisition tools, Linux and textiles.

ABET (Accreditation Board for Engineering and Technology) Coordinator for the Textile Engineering Program starting in 2002-2012. Lead the department in two successful 6 year reaccreditation in 2004 and 2010.

Reviewer for Textile Research Journal, Journal of the Textile Institute, Journal of Physics, Color Research and Applications, Machine Vision and Applications, and Optical Engineering.

Author of over 50 open source Linux device drivers for data acquisition and control. See ftp://lx10.tx.ncsu.edu/pub/Linux/drivers