

## John J. Classen

### Professional Preparation

B.S. Agricultural Engineering, University of Arkansas, May, 1987

M.S. Agricultural Engineering, University of Arkansas, May, 1990

Ph.D. Agricultural Engineering, Texas A&M University, May, 1995

### Appointments

June 2014 – present: Director of Graduate Programs

January 1995 - present: Associate professor (Assistant professor from January 1, 1995 to June 30, 2000), agricultural waste management and bioresource recovery, North Carolina State University.

### Refereed Journal Publications

Das, L., P. Kolar, J. A. Osborne, R. R. Sharma-Shivappa, J. J. Classen. 2015. Selective oxidation of lignin into aromatic aldehyde using niobium oxalate. Transactions of the ASABE, In Press.

Hu, D., L. Wang-Li, O.D. Simmons, J.J. Classen, and J.A. Osborne. **2015**. Spatiotemporal variations of bioaerosols in the vicinity of an animal feeding operation facility in the U.S. Journal of Environmental Protection. 6, 614-627. <http://dx.doi.org/10.4236/jep.2015.66056>.

Hu, D., Wang-Li, L., Simmons, O.D., Classen, J.J., Osborne, J.A., Byfield, G.E., 2014. Bioaerosol concentrations and emissions from tunnel ventilated high-rise layer operation houses in the United States. Transactions of the ASABE 57(3): 915-925.

Liang, W., Classen, J.J., Shah, S.B., and Sharma-Shivappa, R. Ammonia fate and transport mechanisms in broiler litter. 2014. Water, Air, and Soil Pollution. 225: 1812. <http://dx.doi.org/10.1007/s11270-013-1812-x>.

Classen, J.J., Chandler, W.J., Huie, R.S., and Osborne, J.A. 2013. A centrifuge-based procedure for suspended solids measurements in animal wastes. Transactions of the ASABE 56(2): 747-752.

Das, L., Kolar, P., Classen J.J., and Osborne, J.A. 2013. Adsorbents from pine wood via K<sub>2</sub>CO<sub>3</sub>-assisted low temperature carbonization for adsorption of *p*-cresol. Industrial Crops and Products 45: 215-222.

Liang, W., Shah, S.B., Classen, J.J., and Sharma-Shivappa, R. 2013. Modeling ammonium adsorption on broiler litter and cake. Water Air and Soil Pollution 224: 1405.

Das, L. Kolar, P., Osborne, J.A., and Classen, J.J. 2012. Adsorption of *p*-cresol on granular activated carbon. Agricultural Engineering Institute: CIGR Journal 14(4):37-49.

Classen, J.J. and Lal, H. 2012. Agricultural Waste Management Systems and Software Tools, In: Waste Management – An Integrated Vision, ed. Luis Fernando Marmolejo Rebellon. InTech.com.

Love, C.D., Kolar, P., and Classen, J.J., 2011. Adsorption of ammonia on ozonated activated carbon. Transactions of the ASABE 54(5): 1931-1940.

Guerdat, T.C., Losordo, T.M., Classen, J.J., Osborne, J.A., and DeLong, D.P., 2011. Evaluating the effects of organic carbon on biological filtration performance in a large scale recirculating aquaculture system. *Aquacultural Engineering*, 44(1):10-18.

Guerdat, T.C., Losordo, T.M., Classen, J.J., Osborne, J.A., and Delong, D.P., 2010. An evaluation of commercially available biological filters for recirculating aquaculture systems. *Aquacultural Engineering*, 42(1):38-49.

### **Recent Sponsored Research**

Classen, J., Rice, J., Robarge, W., Zering, K., Williams, C.M., Kraus, H. 2014-2017. Improving the Economics of Manure Management for NC Swine Farms. Murphy-Brown, LLC, \$536,685.

Classen, J.J., Rice, J.M., Kolar, P., Zering, K.D., and Williams, C.M. Ammonia Recovery from Swine Wastewater with Selective Membrane Technology. NRCS Conservation Innovation Grant, \$293,151 federal award (total amount \$589,785). Sep 1, 2012 – Aug 31, 2015.

Classen, J.J., Rice, J.M., Kolar, P., Simmons, O.D., Zering, K.D., van Heugten, E., 2010-2013. Under Floor Belt and Energy Recovery System for Swine Production. NRCS Conservation Innovation Grant, \$659,655 federal award.

### **Synergistic Activities**

Classen, J.J., Rice, J.M., McNeill, J.P. and Simmons, O.D. III., 2011. Design and evaluation of a discreet sampler for waste treatment lagoons. *Applied Engineering in Agriculture* 27(6):1007-1014.

Teaching and Learning with Technology Summer Institute, North Carolina State University, 2007. The Summer Institute is a week-long series of workshops and activities designed to develop the technology skills and pedagogical background to bring advanced technology into the classroom and distance education courses.

Multi-State Research Project S-1032: Improving the Sustainability of Livestock and Poultry Production in the United States, 2007-2012. Active member of project development team; chair of program planning, 2007-2011, 2013; Chair of Committee, 2014.

Sponsored 2 high school students for the 2012 *Creating Awareness of Agriculture and Life Sciences Disciplines, Degree Programs and Discoveries* program that encourages minorities to enter STEM degree programs.

### **Collaborators & Other Affiliations**

Collaborators and Co-Editors

Osborne, Jason (NCSU); Rivin, Jonathan (Univ. Wisconsin); Rice, J. Mark (NCSU); Kolar, Praveen (NCSU); Boyette, Michael (NCSU); Shah, Sanjay (NCSU); Sharma-Shivappa, Ratna (NCSU); Das, Lalitendu (NCSU); Lal, Harbans (USDA NRCS); Williams, C. Michael (NCSU); Zering, Kelly (NCSU); Hale, Scott (NCSU); Simmons, O.D. (NCSU); van Heugten, Eric (NCSU);