David W. Herrin

University of Kentucky
Department of Mechanical Engineering
151 Ralph G. Anderson Building
Lexington, KY 40506-0503

Phone: 859-218-0609

E-mail: dherrin@engr.uky.edu

A. Professional Preparation

University of Cincinnati, Cincinnati, OH, Mechanical Engineering, B.S., 1991 University of Cincinnati, Cincinnati, OH, Engineering Mechanics, M.S., 1993 University of Kentucky, Lexington, KY, Mechanical Engineering, Ph.D., 2000.

B. Appointments

University of Kentucky

January, 2012 – Present Associate Professor

July, 2011 – December, 2011 Associate Research Professor January, 2004 – June, 2011 Assistant Research Professor

2000-2003 Post-doctoral scholar

1993-2000 Instructor / Research Assistant / Teaching Assistant

C. Publications

- 1. Zhou, L., Wu, T. W., Ruan, K., and Herrin, D. W., "A Reciprocal Identity Method for Large Silencer Analysis," Journal of Sound and Vibration, Vol. 364, pp.165-176 (2016).
- Hua, X. and Herrin, D. W., "The Effect of Conical Adapters and Choice of Reference Microphone when using the Two-Load Method for Measuring Muffler Transmission Loss," Applied Acoustics, Vol. 93, pp. 75-87 (2015).
- 3. Zhang, Y. and Herrin, D. W., "Assessing the Effects of Impedance Modifications using the Moebius Transformation," Journal of Vibration and Acoustics, Vol. 137 (2015).
- 4. Hua, X., Jiang, C., Herrin, D. W., and Wu, T. W., "Determination of Transmission and Insertion Loss for Multi-Inlet Mufflers using Impedance Matrix and Superposition Approaches with Comparisons," Journal of Sound and Vibration, Vol. 333, No. 22, pp. 5680-5692 (2014).
- Liu, J., Hua, X., and Herrin, D. W., "Estimation of Effective Parameters for Microperforated Panel Absorbers and Applications," Applied Acoustics, Vol. 75, pp. 86-93 (2014).
- Liu, J., Hua, X., and Herrin, D. W., "Estimation of Effective Parameters for Microperforated Panel Absorbers and Applications," Applied Acoustics, Vol. 75, pp. 86-93 (2014).
- 7. Hua, X., Herrin, D. W., Wu, T. W., and Elnady, T., "Simulation of Diesel Particulate Filters in Large Exhaust Systems," Applied Acoustics, Vol. 74, No. 12, pp. 1326-1332 (2013).

D. Synergistic Activities

- 1. Director of the Vibro-Acoustics Consortium The Consortium consists of 20 companies. The mission of the consortium is to assist in training members in the use of vibro-acoustic software, assess software, and play a role in enhancing the state-of-the-art (2007-Present).
- 2. Board of Directors of the Institute of Noise Control Engineering
- 3. Co-Technical Chair for INTERNOISE 2017