Edward W. Davis, Ph.D.

274 Wilmore Labs **Phone: (334) 844-5471**
Auburn, AL 36849 **email: ewd0001@aubun.edu**

Publications:

1. Lakin, J. M. and Davis, E. W., First-Year Students' Attitudes Towards the Grand Challenges and Nanotechnology. Journal of STEM Education, Accepted.
2. Davis, E. W.; Raju, P. K.; and Davis, V. A., Nanotechnology Solutions to Engineering Grand Challenges. Proceedings of the 2016 Envisioning the Future of Undergraduate STEM Education: Research and Practice Symposium.
3. Davis, E. W.; Lakin, J. M.; Davis, V. A.; and Raju, P.K., Nanotechnology Solutions to Engineering Grand Challenges. Proceedings of the 2016 ASEE Annual Conference and Exposition, 2016.
4. Lakin, J. M.; Davis, E. W.; and Davis, V. A., Promoting Engineering Persistence among Women Through Alignment of Occupational Values and Perceptions of the Field, Proceedings of the 2016 ASEE Annual Conference and Exposition, 2016.
5. Davis, E. W.; Lakin, J. M.; Raju, P.K.; and Davis, V. A., NUE: The Freshman Experience and Nanotechnology Solutions to Engineering Grand Challenges, Proceedings of the 2016 ASEE Annual Conference and Exposition, 2016.
6. Ward, C. J.; Tronndorf, R.; Eustes, A. S.; Auad, M. L.; Davis, E. W., Seed-Mediated Growth of Gold Nanorods: Limits of Length to Diameter Ratio Control. Journal of Nanomaterials 2014, 2014, 765618 1-7.
7. Ward, C. J.; DeWitt, M.; Davis, E. W., Halloysite Nanoclay for Controlled Release Applications. In Nanomaterials for Biomedicine, American Chemical Society: Washington D.C., 2012; Vol. 1119, pp 209-238.
8. Radhakrishnan, V. K.; Davis, V. A.; Davis, E. W., The Effect of Melt Extrusion Process Parameters on Rotary-Evaporated Poly(propylene) Nanocomposites. Macromolecular Materials and Engineering 2012, 297 (9), 864-874.
9. Fanter, N. J.; Davis, E. W.; Baker, C. L., Fixation of the Achilles Tendon Insertion Using Suture Button Technology. The American Journal of Sports Medicine 2012, 40 (9), 2085-2091.
10. Radhakrishnan, V. K.; Zagarola, S. W.; Davis, E. W.; Davis, V. A., Thermal properties of polypropylene nanocomposites: Effects of carbon nanomaterials and processing. Polymer Engineering & Science 2011, 51 (3), 460-473.
11. Nandikonda, S.; Davis, E. W., Parameters Affecting the Microwave-Assisted Polyol Synthesis of Silver Nanorods. ISRN Nanotechnology 2011, 2011, 104086 1-7.
12. Ward, C. J.; Song, S.; Davis, E. W., Controlled Release of Tetracycline-HCl from Halloysite-Polymer Composite Films. Journal of Nanoscience and Nanotechnology 2010, 10 (10), 6641-6649.
13. Radhakrishnan, V. K.; Davis, E. W.; Davis, V. A., Influence of initial mixing methods on melt-extruded single-walled carbon nanotube–polypropylene nanocomposites. Polymer Engineering & Science 2010, 50 (9), 1831-1842.
14. Davis, E. W.; Radhakrishnan, V. K.; Davis, V. A. Scalable route to well-dispersed polyolefin/carbon nanotube composites Plastics Research Online [Online], 2010. http://4spepro.org/view.php?source=002910-2010-04-12.
15. Schmuhl, N.; Davis, E.; Cheung, H. M., Morphology of Thermally Polymerized Microporous Polymer Materials Prepared from Methyl Methacrylate and 2-Hydroxyethyl Methacrylate Microemulsions. Langmuir 1998, 14 (4), 757-761.

16. Davis, E. W.; Mukkamala, R.; Cheung, H. M., Effects of Precursor Composition on Pore Morphology for Thermally Polymerized Acrylic Acid/Methyl Methacrylate-Based Microemulsions. Langmuir 1998, 14 (4), 762-767.