Awarded Proposals

- 1. DOE proposal with ORNL in response to DOE Funding Opportunity Announcement (FOA) titled "Fuel Cell Technologies Office Annual FOA" entitled "Novel Plasticized Melt Spinning Process of PAN Fibers Based on Task-Specific Ionic Liquids," 01/10/17-09/30/20, \$150,000.
- DOE proposal with ORNL in response to DOE Technology Commercialization Fund FY 2017, Topic 2: Cooperative Development, with Oak Ridge National Laboratory (ORNL) entitled "Polymer-Based Adsorbents for the Recovery of Uranium from Desalination Facilities (TCF 17-13422)," 01/10/17-09/30/20, \$40,000.
- 3. DOE SBIR Program, Phase II proposal in response to opportunity number DE-FOA-0001072 (Topic 19 "Advanced technologies for nuclear energy", subtopic g "Separations and Waste Forms for Advanced Domestic Fuel Cycles") entitled "Bench to pilot scale prototype for electrospinning biorenewable chitin sorbents for uranium from seawater: Process development, cost, and environmental analysis," 07/01/14-06/30/16, \$1,498,846.
- 4. DOE SBIR Program Phase I proposal in response to opportunity number DE-FOA-0000628 entitled "Designing a mini-pilot scale unit for extraction and electrospinning of chitin as an adsorbent for uranium from seawater," 06/01/12-02/28/13, \$149,999.
- 5. Alabama Department of Commerce Innovation Fund, (Subaward from The University of Alabama) "Continuous production of high purity chitin from shrimp and crab waste as a resource for high value biomedical applications," 01/01/13-05/31/14, \$9,000.
- NSF SBIR Program Phase I/IB proposal in response to opportunity number NSF 11-691 (Topic-Biological and Chemical Technologies; subtopic BM1 – Materials for Biomedical Applications) entitled "New Chitin/Alginate Biocomposites by Homogeneous Processing in Ionic Liquids: Disruptive Technology for Wound Care Application," 01/01/12-06/30/12, \$149,926.
- DOE SBIR Program Phase I proposal in response to opportunity number DE-FOA-0000161 (Topic 22-Advance Coal Research, subtopic b- Alternative Fuels: Catalytic Reaction Processing of Coal and Biomass in Ionic Liquids) entitled "Catalytic Cleavage of Lignin-Carbohydrate Bonds in Ionic Liquid Solutions of Biomass Leading to Lignin, Cellulose, and Hemicellulose Fractionation," 06/19/10-06/18/11, \$99,999.

Pending Proposals

- 8. DOE SBIR Program-Phase I proposal in response to opportunity number DE-FOA-0002360 (Topic 10a-Small Business Bioenergy Technologies Increasing Community Partnerships) entitled "Waste biomass valorization through strategic partnerships," 06/28/21-03/27/22, \$200,000.
- 9. DOE Joint FY20 Bioenergy and Advanced Manufacturing FOA BOTTLE proposal in response to opportunity number DE-FOA-0002322 (FY2020 AMO Critical Materials FOA: Next-Generation Technologies and Field Validation-Topic Area 2, Area of Interest 3: Li Extraction from Unconventional Sources) entitled "Ultra-High Capacity Adsorbent Nanofibrous Mats for the Recovery of Lithium from Seawater, Geothermal Brines, and Beyond," 08/01/21-10/31/23, \$625,024.
- 10. DOE proposal with Oak Ridge National Laboratory in response to opportunity number TCF-20-21379 entitled "Nanofluids with Enhanced Heat Transfer and Reduced Corrosion Properties for Advanced Molten Salt Reactors," 06/01/20-05/31/22, \$80,000.