# SCUREF Task Orders
## *Active During the Past Three Years*

### Clemson University

1 Examination of the Electrical Properties of Micro- s
and Nano-Scale Properties in Weak Electrostatic Field
*Dr. Apparo Rao, Department of Physics and Astronomy*

2 ARML Imaging Instrument Access
*Dr. Laxmikant Saraf, Advanced Material Research Lab*

3 SRNL-Clemson University Graduate Course in Nuclear Safeguards
*Dr. Timothy Devol, Environmental Engineering and Earth Sciences*

4 Support on Performance and Limitations of
Electron Backscatter Diffraction
*Dr. Brian Powell, Environmental Engineering and Earth Science*

5 SRNS SCM Asset Management Operational Involvements
*Dr. Scott Mason, Industrial Engineering*

6 Ceramic Materials Synthesis and Characterization
*Dr. Kyle Brinkman, Materials Science and Engineering*

7 Anion Exchange Membranes Application
*Dr. Scott Husson, Chemical and Biomolecular Engineering*

8 Implement On-line or In-line process Technology
for Analysis of Measurement Points
*Dr. Kenneth Marcus, Chemistry*

9 Radiation Detection Research & Development
*Dr. Timothy Devol, Environmental Engineering and Earth Sciences*

10 Tritium Supply Chain Modeling and Analysis
*Dr. Scott Mason, Industrial Engineering*

11 Fabrication and Characterization of Graphene Membranes
*Dr. Apparo Rao, Department of Physics and Astronomy*

12 Advanced Microanalytical Measurements
*Dr. Laxmikant Saraf, Advanced Material Research Lab*

13 Water Isotope Separation Testing

*Dr. Stephen E. Creager, Chemistry*

14 MDOA and TEA Resin Development
*Dr. Timothy Devol, Environmental Engineering and Earth Sciences*

15 Access to Electron Microscope Facility in ARML
*Dr. Laxmikant Saraf, Advanced Material Research Lab*

16 Two-day Workshop focused on Advanced Nuclear Separation
*Dr. Lindsay Shuller-Nickles, Environmental Engineering and Earth Sciences*

17 Synthesize, Characterize and Test Anion Exchange Membranes
*Dr. Scott Husson, Chemical and Biomolecular Engineering*

18 Solid Waste Encapsulation Microscopy
*Dr. Laxmikant Saraf, Advanced Material Research Lab*

19 SRR Technical Support Provided by Clemson University
*Dr. Brian Powell, Environmental Engineering and Earth Sciences*

## Medical University of South Carolina

20 Employee Wellness Model Options and Surveillance Feasibility
*Dr. Lawrence C. Mohr, Environmental Biosciences*

## South Carolina State University

21 Savannah River Environmental Sciences Field Station
*Dr. Stanley Ihekweazu, Interim Dean Science and Technology*

## University of South Carolina Columbia

22 Expert Assistance in the Study of Historical Earthquakes Affecting the SRS
*Dr. Pradeep Talwani, Earth and Ocean Sciences*

23 Support of the SC Seismic Monitoring Network
*Dr. Thomas Owens, Earth and Ocean Sciences*

24 Ceramics Membrane Characterization
*Dr. Fanglin Chen, Mechanical Engineering*

25 SRNL-USC-Columbia; Introductory Course on Nuclear Safeguards
*Dr. Travis Knight, Department of Mechanical Engineering*

26 Acoustic Emission Sensor Systems - ISD Sensor Network Demonstration
*Dr. Paul Ziehl, Civil and Environmental Engineering*

27 Sunshot Corrosion Numerical Simulation
*Dr. Kevin Huang, Mechanical Engineering*

28 Polymer Development for Pu Anion Exchange Mechanical Array
*Dr. Brian Benicewicz, Chemistry, Biochemistry and Nanocenter*

29 Elucidation of the Fundamental Chemistry for
Glycolic-Nictric Acid Flowsheet
*Dr. Christopher Williams, Chemical Engineering*

30 Develop and Implement Introductory Course in Nuclear Safeguards
*Dr. Travis Knight, Mechanical Engineering*

31 Activities with Microparticles
*Dr. Christopher Williams, Engineering and Computing*

## University of South Carolina Aiken

32 Research of Surface Enhanced Raman Spectroscopy for
Microparticle Detection/Characterization
*Dr. Chad L. Leverette, Chemistry and Physics*

33 Nuclear Non-Proliferation International Sageguards Graduate Fellowship Program
*Dr. William Pirkle, Sponsored Research Office*