



FOR IMMEDIATE RELEASE

FY10-23

March 1, 2010

CONTACT

Pam Bonee

Pam.Bonee@orau.org

(865) 576-3146

**ORAU Announces Six Project Teams as Recipients
Of More Than \$2M in TVA-Funded Coal Ash Research Grants**

OAK RIDGE, Tenn.—Oak Ridge Associated Universities (ORAU) is pleased to announce that six project teams—representing nine universities and one federal institution—are the combined recipients of more than \$2 million in coal ash research grants over the next three years. The research grant is funded by the Tennessee Valley Authority (TVA) and administered by ORAU with the intent to develop effective strategies for addressing the by-products of coal combustion processes.

ORAU solicited proposals from applicants interested in conducting basic and applied research on (1) identifying alternative ways to beneficially re-use and/or process coal combustion products (CCP), and (2) examining the effects of coal fly ash releases into the environment.

“Although 40 percent of CCPs are beneficially reused nationwide, the entire coal combustion industry can benefit from the research supported through these grants,” said Robb Turner, peer review manager at ORAU. “Whether it’s concrete, cement, wallboard, highway construction or other applications, the bottom line is that with alternative uses and greater understanding of environmental effects, smaller amounts of the by-product can be better managed and stored for the long term.”

In addition to the request for proposals, ORAU also managed an independent proposal review in which 48 subject matter experts reviewed the applications and provided comments and recommendations for awarding the grants.

ORAU received 172 pre-proposals and 68 full grant proposals, from which the six recipients were selected. Winners of the research funding include:

Kejin Wang, Iowa State University, and Surendra Shah, Northwestern University
\$449,938—Increasing Use of Fly Ash in Concrete Through Nanomaterial Modification, Multiscale Characterization, and Improved Processing

Avner Vengosh and Heileen Hsu-Kim, Duke University, Jim Hower, University of Kentucky, and Thomas Johnson, University of Illinois at Urbana-Champaign
\$357,114—Geochemical and Isotope Characterization of TVA Coal Combustion Products: Identification of Contaminants and Modeling Their Fate in the Environment

Joseph Ryan, University of Colorado at Boulder, and George Aiken, U. S. Geological Survey
\$299,874—Effects of Dissolved Organic Matter on the Release of Trace Elements of Coal Ash in Natural Waters

Dean Hesterberg, David Buchwalter and Owen Duckworth, North Carolina State University
\$363,397—Predicting Mobilization and Bioaccumulation of Trace Elements of Coal Ash Using Speciation Analysis

Peter Sedwick and Gregory Cutter, Old Dominion University
\$298,924—A New Approach to Quantifying the Release of Bioactive Trace Elements from Coal Combustion Products to Natural Waters

Gregory Cutter, Old Dominion University
\$275,228—Selenium Biochemistry in Rivers Receiving Direct Coal Ash Inputs

ORAU will disseminate first year funding to the recipients with a statement of understanding that succeeding years will be funded pending demonstrated research progress and the availability of funds from TVA. The majority of the research will be conducted at the project team's institution.

All six project teams are encouraged to present poster abstracts at the first **TVA Kingston Fly Ash Release and Environmental Research Symposium** [link to: <http://www.orau.org/media-center/news-releases/2010/fy10-17-orau-accepting-poster-abstracts-for-tva-fly-ash-research-symposium.aspx>] March 11-12, 2010, at Roane State Community College in Harriman, Tenn. Ultimately, research findings will be published in peer-reviewed publications, providing useful information to power companies, environmental scientists and regulatory agencies.

ORAU is also currently soliciting proposals for commercial coal ash management, processing, and marketing services at <http://www.orau.org/flyashcommercialization>. Deadline for pre-proposals is March 14, 2010.

Oak Ridge Associated Universities (ORAU) is a university consortium leveraging the scientific strength of 98 major research institutions to advance science and education by partnering with national laboratories, government agencies, and private industry.

###