DATE: January 2015

The University of Kentucky Center for Applied Energy Research (CAER), anticipates adding a postdoctoral researcher position in the CO₂ capture area. The position’s primary responsibility will be in catalyst development and evaluation. A summary of the position is listed below:

**Postdoctoral Scholar**
The Power Generation and Utility Fuels group at the University of Kentucky, Center for Applied Energy Research (CAER), is seeking to fill an immediate full-time postdoctoral opening in catalysis. The successful applicant will develop homogeneous, transition metal catalysts to enhance CO₂ capture processes. The primary focus of research is the development of novel coordination and/or organometallic complexes that function effectively for CO₂ hydration in post-combustion CO₂ capture solvents. There is also significant opportunity for the development of new and creative technologies relating to power generation, CO₂ sequestration, environmental protection, or utility delivery.

The position requires a Ph.D. in chemistry from an accredited college or university. Prior experience in CO₂/small molecule activation, bioinorganic chemistry, organometallics, or related catalysis is highly desirable.

The ideal candidate should:

- Possess a good understanding of chemical kinetics and mass transfer properties.
- Have significant experience with organic synthesis and the ability to synthesize transition metal-containing complexes.
- Have experience with a variety of instrumentation for chemical analyses (i.e. NMR, IR, UV-vis, mass spec, SEM, etc.).
- Be able to work both independently and as a member of a research team.
- Have excellent oral and written communication skills and ability to present work at scientific meetings and to publish in peer-reviewed journals.
- Experience with computational simulations is also desirable.

Successful candidates will be offered competitive salary and benefits based on their experience and accomplishments. The Center for Applied Energy Research is a prestigious, highly interdisciplinary research center affiliated with The University of Kentucky and located in Lexington, KY.

The University of Kentucky is an Equal Opportunity University.

Interested individuals are encouraged to submit their resume/CV and a 1 page proposal summary relating to any aspect of CO₂ activation or transformations to: Leland Widger (leland.widger@uky.edu). Please include the position for which you are applying in the subject line.

Examples of proposal ideas include (but are not limited to):

- CO₂ polymerization or reduction.
- Enzyme mimics for CO₂ utilization.
- Utilization of CO₂ as a low carbon feedstock.

Once the position is officially open, the full job description will be listed on the University of Kentucky employment web page (http://www.uky.edu/HR/UKjobs/). At that time, the candidates must submit an application online.

CAER Website: [http://www.caer.uky.edu](http://www.caer.uky.edu)
Power Generation Research Group Website: [http://www.caer.uky.edu/powergen/home.shtml](http://www.caer.uky.edu/powergen/home.shtml)

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