



CeRCaS News Blast 4/18/18

Ring 1: CeRCaS welcomes two new members: Savannah River National Laboratory and GlaxoSmithKline.

We are thrilled to add SRNL and GSK as our latest members. Don Anton and Hector Colon-



Mercado of SRNL have participated in a number of prior meetings as guests, and now as members they will possess a set of reins. Gregg Barcan will represent GSK – welcome to the party! Participation in May's meeting involves the selection of a brand new project slate for the 2018-19 year (see Ring 2), including a Pre-LIFE assessment. Several other companies are in the recruiting pipeline, and UC Berkeley is still interested in becoming a third site.

Ring 2: LIFE before LIFE (the pre-LIFE selection of project proposals).

CERCAS RESEARCH THRUSTS		
THRUST 1 Nanoparticle Synthesis	THRUST 2 Nanoparticle Stability	THRUST 3 Precision site synthesis for specific reactions
POTENTIAL PROJECTS		
1. Novel approach for continuous synthesis of supported transition metals catalysts through X-ray radiolysis (Castano, Rojas, Gupton)	1. Predicting nanoparticle size and shape (Regalbuto, Chen, Heyden, Khanna)	1. Atomic Layer Deposition of Single-Atom Catalysts for Selective Hydrogenation of Alkenes (El-Kaderi, El-Shall, Regalbuto)*
2. Exploring Solid-Liquid Interfacial Chemistry During Catalyst Synthesis (Williams, Regalbuto, Monnier)	2. Engineered defects in graphitic carbon/graphene (Chandrashekar, Williams, Weidner, Gupton, El-Shall)	2. Simple Synthesis of Highly-Active and Stable Pt₃Co/Carbon Oxygen Reduction Reaction Catalyst (El-Kaderi, Regalbuto, Weidner)
3. Determination of degree of hydration as electrostatic adsorption uptake limit (Regalbuto, Khanna)	3. The Influence of Crystallographic Faceting on Self-Reducing Metallic Catalysts in Oxidative Environments (Lauterbach, Sasmaz)	3. Evaluation of Heterogeneous Asymmetric Hydrogenation Catalysts (Gupton, Monnier, Carpenter)
4. Evaluation of Iron-based/Graphene Catalysts for Fischer-Tropsch Synthesis . (El-Shall, Lauterbach)	4. Understanding Active Sites in Bimetallic Catalysts for HDO (Chen, Heyden, Monnier)	4. Evaluation of Heterogeneous Asymmetric Hydrogenation Catalysts (Gupton, Monnier, Carpenter)

As we have grown, our yearly meeting format has evolved. The December meetings feature project reports and focus on our graduate students and IAB members. May meetings are now devoted to new project selection. New projects are being developed now; they will be added to/replace some of the current potential projects (found at <http://www.che.sc.edu/centers/cercas/projects.html>), and our Pre-LIFE assessment will be conducted the week of April 23rd to select the 12 projects for presentation at the May meeting. Members will shortly receive additional instructions on the Pre-LIFE assessment.

➔ Members can access current and past updates at our password-protected site:
www.che.sc.edu/centers/cercas/projects.html

Ring 3: Spring CeRCaS Meeting (May 17-18, 2018) in Richmond at the Jefferson Hotel.

The Spring CeRCaS meeting will be held at the historic Jefferson Hotel in downtown Richmond, VA (101 West Franklin Street, Richmond, VA 23220, phone 804 649-4750 or 888 918-1895). The group rate is \$255; mention that you will be attending the “Center for Rational Catalyst Synthesis” meeting in order to join the block. This discount is available until May 7th.

Additional rooms will be available at the Linden Row Inn (100 E. Franklin Street, 800-348-7424). To make a Linden Row Inn reservation at the Group Rate, please follow these instructions:

1. Go to our Reservations Page at www.reservations.lindenrowinn.com
2. Select your Arrival and Departure Dates and Number of Adults
3. Enter the following Access Code for your Group to view your discounted rate: **CERCAS18**

A full agenda will circulate soon; plan on arriving Wednesday evening (May 16th). The meeting will end with lunch, Friday May 18th.



For more information:

<http://www.che.sc.edu/centers/cercas/>