

CeRCaS News Blast 11/7/19

Ring 1: CeRCaS welcomes two new members: Mitsubishi and Chevron.



As UC Berkeley and UC Davis undergo the process of joining CeRCaS as a third (joint) site, two of their companies have already signed up and will fund projects lead by UCB/UCD researchers. Chevron will be represented by Drs. Stacey Zones and Robert Saxton, and Mitsubishi by Dr. Ryouji Onishi. We look forward to seeing these researchers at our December meeting (see Ring 3 below). And remember, once you join you are privy to ALL project updates, not just those for which you serve as industrial mentor. For updates dates and times for all project



reports, see the homepage of our website at http://www.che.sc.edu/centers/cercas/.

Ring 2: UC Berkeley/UC Davis planning meeting

Profs. Alex Katz and Bruce Gates hosted a great party at UC Davis' Oakville Experimental Vineyard in Napa Valley on Sept. 26-28, where an I/UCRC center planning meeting broke out. Twelve representatives



from nine prospective companies (Johnson Matthey, Shell/Zeolyst, Chevron, PNNL, PQ Corp, Mitsubishi, NICE America, Braskem, W.R. Grace) were introduced to the I/UCRC program, learned how the Industrial Advisory Board operates, and saw ten potential research projects pitched by UCB/UCD faculty. Synergy is already happening; in the course of the presentations, several new inter-site projects came to light. We can't wait to tell you about them in our May meeting, at which the set of projects will be funded.

Prof. Katz is seen at the center of the CeRCaS banner; our NSF evaluator Don Davis is at the far right, and you will recognize many other industrial and faculty researchers around the table, including a strong showing of our current membership.

Ring 3: Make your travel plans for Columbia!

The Fall CeRCaS meeting will be held December 12-13 (Thursday and Friday) at the Hilton Columbia Center, a block away from "restaurant row" and two blocks west of the Capital Building. Superb amenities, comfy rooms. Discounted rates of \$139 are available the nights of Dec. 13-15. You can do this online at https://www.hilton.com/en/hi/groups/personalized/C/CAECCHF-CERC-20191211/index.jhtml?WT.mc_id=POG or you can call 803 744-7800 and mention "CeRCaS" to get the group rate.

The meeting will begin 7:30 a.m. Thursday and conclude at noon, Friday. At the Fall Meeting the overarching theme is for our members to get to know our students and postdoctoral researchers; they will be making the majority of the project updates. Come early Wednesday for a round of golf! A detailed meeting agenda will be distributed soon.





Sideshow: CeRCaS Phase 2 award is imminent.

We expect to get the green light from NSF by mid-November for our next five years of operation. In case funds are burning a hole in your corporate pockets, we must wait until we are officially renewed before we can invoice our members for Year 1, Phase 2 dues, which will begin April 1, 2020. Do have your budgets set and your pens at the ready as our first act after getting renewed will be to share the news with you via an invoice for membership fees! We hope to have all funding in place well in advance of the May meeting.

For those thinking of joining CeRCaS, now would be the best time to do it. If you sign a membership agreement now, payment is not due until January 2020 but you are eligible to come to the December meeting as a member.

Current Project Updates: (Members Only)

See Specific Projects page for all current and concluded projects.

| Update | Project | Principal | Industrial | Next Report Date |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------|--------------------------|
| Links | | Investigators | Mentor(s) | (ET) |
| Project 18 | 3D Printed Catalytic Monolith Year 2: Rational investigation into how catalyst synthesis method affects the nanoparticle surface chemistry and activity on 3dP monoliths | Ferri Gupton (VCU) | (GSK) Opalka (Biogen) Gaffney (INL) | 08/22 11:00 AM |

| Project 19 | Thermodynamic Analysis of SEA Using Metal Adsorption Isotherm Data | Gupton (VCU) Regalbuto (USC) | Barger (UOP) Soykal (BASF) Weiss (ExxonMobil) | 10/15 3:00 PM |
|------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------|--------------------------|
| Project 20 | Hydrogenation Activity on Pd Surfaces Modified by Carbon (Project 13 Year 2) | Chen Regalbuto (USC) Gupton (VCU) | Soled (ExxonMobil) Opalka (Biogen) | 11/01 3:00 PM |
| Project 21 | Macroscopic monolithic Pd/Graphene catalysts for regioselective electrochemical oxidation of alkenes | Gupton Castano (VCU) Weidner (USC) | Opalka (Biogen) Toutov (Fuzionaire) (GSK) | 10/28 1:00 PM |
| Project 22 | Computational and experimental analysis of Ag catalysts with GNP or bimetallic materials on direct propylene oxide synthesis | Gupton Reber (VCU) Monnier (USC) | Gaffney (INL) Barger (UOP) Soykal (BASF) Opalka (Biogen) | 10/25 2:00 PM |
| Project 23 | Bimetallic Indium-Copper Catalysts for Hydrogenation of Syngas-Derived Dimethyl Oxalate to Ethylene Glycol | Williams Regalbuto (USC) Gupton (VCU) | Barger (UOP) Soykal (BASF) Soled (ExxonMobil) | 11/07 11:00 AM |

Online meeting access codes and call-in information will be provided to members via email

| | ŀ | or | more | in | form | ation: |
|--|---|----|------|----|------|--------|
|--|---|----|------|----|------|--------|

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