

Polymer Valley News

The Newsletter of the Akron Section of the Society of Plastics Engineers
Our 52nd Year of Education and Service to the Plastics Industry

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Costs, Schedules, Reservations

Member	\$25.00
Guest and Member	\$50.00
Retiree	\$20.00
Student	\$15.00

Cash bar	5:15 p.m.
Dinner	6:00 p.m.
Program	following dinner

Contact Mark Holtman on or before
Mar. 15 - 330/972-6008
holtman@uakron.edu

Vegetarian dinner can be accommodated -
let me know when making reservation

Coming Up:

- Next meeting – Apr. 19
- Board meeting – Mar. 1, 2010,
5:30 p.m. Polymer Eng. Center
Conference Room

Technical Meeting

Monday, March 15, 2010

5:15 p.m.

Martin University Center

105 Fir Hill Street

East Side of University of Akron Campus

Coal and Coal Gas Fuel Cell Technology

By Prof. Steven S.C. Chuang

Presented by Felipe Guzman Moyanez

(Post Doctoral associate working with Dr. Chuang)

Department of Chemical and Biomolecular Engineering, U of Akron

The
University
of Akron

The Fuel Cell & Catalysis Laboratory has demonstrated the technical feasibility of a laboratory coal fuel cell that can economically convert high sulfur coal into electricity with near zero negative environmental impact. Scaling up this coal fuel cell technology to the megawatt scale for our nation's electric power supply requires two key elements: (i) developing the manufacturing technology for the components of the coal-based fuel cell and (ii) long term testing of a kW scale fuel cell pilot plant. This presentation will (i) compare the advantages and disadvantages of conventional coal-fired power generation, clean coal fuel cell power plants, and various alternative energy technologies and (ii) discuss the technical and economic feasibility of building a 250 kW pilot-plant and a megawatt scale fuel cell system.

See page 2 for
Prof. Chuang's biography

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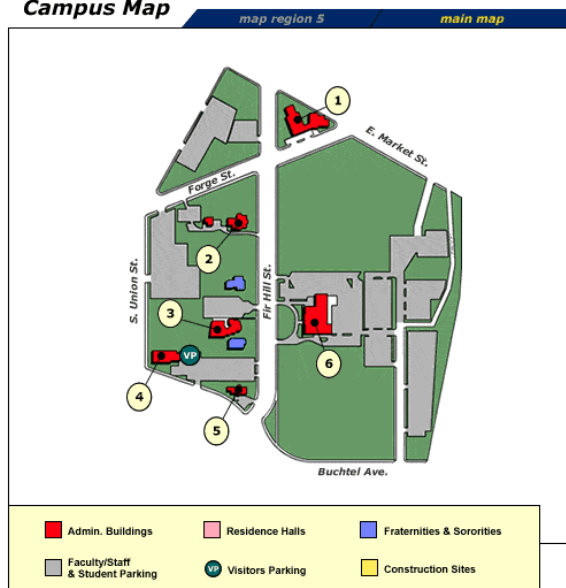
Map to Martin University Center 105 Fir Hill Street Akron, Ohio

Directions: Exit Ohio 8 at Buchtel Street (between Central Interchange with I-76/ I-77 and the high bridge). Go West one block to Fir Hill and turn North. Parking lot is on the north side of Martin University Center.

If the ramp from 76/77 to Route 8 is still closed, traffic from the West should use the Route 59 detour, exit at Cascade Plaza and come up Mill Street past the APTC to Forge and then Fir Hill.

You may zoom in

Campus Map



Biography of Author Steven S.C. Chuang

Steven S. C. Chuang obtained his Diploma in ChE from National Taipei Institute of Tech 1977, MS from New Jersey Inst of Tech in 1982, and Ph.D. from University of Pittsburgh, 1985. He joined Akron in 1986, served as Chair of Chemical Engineering from 1997-2005, and currently is professor of Chemical Engineering. He has published more than 100 papers in Fischer Tropsch Synthesis, hydroformylation, carbonylation, nitric oxide decomposition and reduction, sulfated ZrO₂, CO₂ capture, CH₄ reforming, and solid oxide fuel cell. He currently leads a 27 member research team (3 postdoctoral research associates; one visiting scholar; 15 Ph.D. students, one mechanical engineer, 6 undergraduate assistants, and one program assistant). His team is and has been supported by FirstEnergy, U.S. Department of Energy, Ohio coal development office, U.S. Department of Defense, Babco&Wilcox, U.S. Environmental Protection Agency, and U.S. National Science Foundation.



SPE Pinnacle Award

We have finished review for the 2010 SPE Pinnacle Award program. I am writing to advise you that **Akron** has met the criteria to receive **Gold** recognition. Congratulations on your group's achievement! My special thanks to you for taking the time to capture this information so that your Section could be so recognized.

Formal notification and information about participating at the SPE Leadership recognition event in May is forthcoming. In the meantime, please share this good news with the rest of your Board.

Regards,

Tricia McKnight

Manager, Leadership Services
Society of Plastics Engineers
14 Fairfield Drive
Brookfield, CT 06804 USA

