

# The Larry Dahl Symposium

University of Wisconsin-Madison, Department of Chemistry

Friday, May 29, 2009

- 11:00 AM Registration and Informal Lunch in 9341 Chemistry  
1315 Chemistry
- 1:30 PM Ilia Guzei, UW-Madison. Introductory Remarks.  
1:40 PM Robert Hamers, UW-Madison. Welcome from the Chair.  
1:50 PM Bruce Bursten, University of Tennessee. Video Address  
1:55 PM Larry Falvello, University of Zaragoza, Spain. Video Address.
- 2:00 PM Jeffrey Petersen, West Virginia University. Chemistry of Electrophilic Early Transition Metal Complexes featuring Bifunctional Ligands.  
2:30 PM Greg Lewis, UOP LLC. Solution Synthesis of Molecular Sieves.  
3:05 PM Sergei Ivanov, Los Alamos National Lab. From Luminescent Nanoparticles to Luminescent Clusters.  
3:30 PM BREAK  
4:00 PM Heinrich Vahrenkamp, University of Freiburg. Happy Encounters.  
4:30 PM Emily Wixson, UW-Madison. Confessions of a First-Row, Returning Adult Student.  
4:45 PM Charles Szmanda, Rohm and Haas. Kinetics of Acid Generation in Nanofilms: Lessons from Larry's First Year Chemistry Course  
5:20 PM Robert Bedard, UOP LLC. Scientific Opportunities for an Inorganic PhD in Industry: From New Materials and Structures to Engineered Products.  
6:00 PM The official part ends for the day.

**The Nitty Gritty** (223 N. Frances Street, Madison, 608-251-2521)

- 7:00-ish Informal gathering organized by Charles Campana

Saturday, May 30, 2009

1315 Chemistry

- 9:30 AM Richard Holm, Harvard University. Metal Clusters in Biology: An Ongoing Challenge in Inorganic Synthesis.  
10:05 AM Josef Michl, University of Colorado. New Highly Fluorinated and Weakly Nucleophilic Anions of the CB<sub>11</sub> Family.  
10:40 AM Masaki Kawano, Pohang University, Korea. My Life Launched from Madison: a Booster Rocket, Larry Dahl.  
11:10 AM Peter Mlynek: Eckert, Seamans, Cherin & Mellott, LLC. Recent Developments in Patent Protection of Polymorphic Crystalline Products.  
11:30 AM LUNCH BREAK  
1:00 PM Charles Campana, Bruker-AXS. Chemical Crystallography – Then and Now.  
1:30 PM Milton Glick. University of Nevada, Reno. From Student To Faculty To The Dark Side.  
2:00 PM Joseph Calabrese, Central Research, DuPont. Highlights of a Molecular Journey, 1965-2007.  
2:30 PM BREAK  
3:00 PM Giuliano Longoni, University of Bologna, Italy. Have We Something Yet to Learn from the Chemistry of Metal Carbonyl Clusters?  
3:30 PM Evgueni Mednikov, UW-Madison. Large Palladium Carbonyl Clusters - From Beginning to Present.  
4:00 PM Larry Dahl, UW-Madison. Nanosized Carbonyl Clusters of Palladium: Stereochemical, Bonding, and Cluster-Growth Implications.

**Pyle Center - 702 Langdon St.**

- 6:00 PM Reception  
7:00 PM Banquet  
10:00 PM Symposium ends

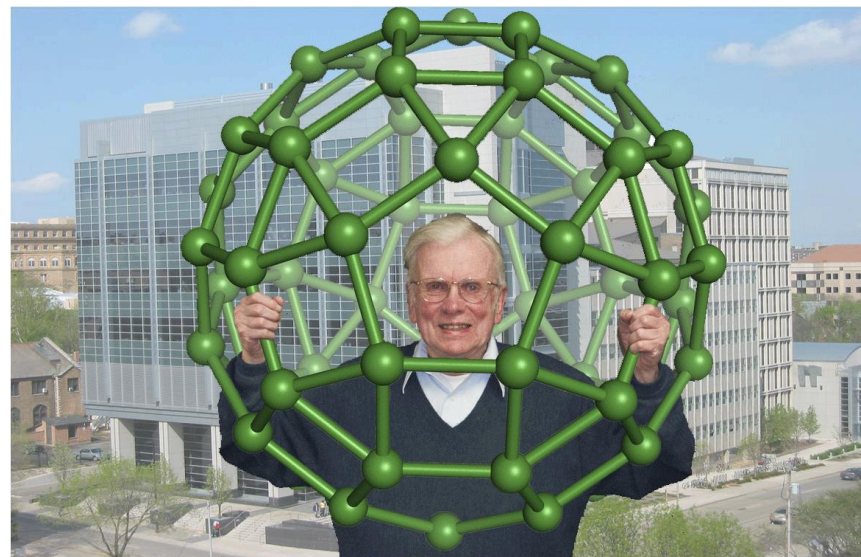
R.E. Rundle and Hildale Professor of Chemistry  
**Lawrence F. Dahl**

Larry Dahl, born on 6/2/29, received his BSc degree (51) from the University of Louisville and his PhD degree (56) from Iowa State University under the late Robert E. Rundle. In 1957, Larry joined the faculty at University of Wisconsin-Madison, where he has emerged as one of the world's pioneers in the synthesis, structure, and bonding of transition metal clusters. Honors include: Sloan (63), Guggenheim (69), N.Y. Acad. Sci (75), and AAAS (80) fellowships along with W. Hieber (65), E.F. Smith (71), R. Nyholm (85), P.C. Reilly (87), H.W. Davis (89), P. Chini (89), J.C.Bailar (90), K. Nakamoto (94), F. Basolo (95), R.A. Welch (95), G. Stone (97), and H.B. Jonassen (98) lectureships. He was included in the list of 1000 most cited scientists, ISI, 64-78. He was the recipient of the ACS Award in Inorganic Chemistry (74), Senior U.S. Scientist Humboldt Award (85), Honorary Doctoral Degree from Univ. of Louisville (91), Willard Gibbs Medal (99), and Pioneer Award (Am. Institute of Chemists, 2000). He was elected to the National Academy of Sciences in 1988 and to the American Academy of Arts and Science in 1992. He has been the R.E. Rundle Professor of Chemistry at Wisconsin since 1978 and a Hildale Professor since 1991. In 1994 he received the Hildale Award in Physical Sciences at UW-Madison.

His group's research in the earlier years extensively involved systematic studies of small-to-large metal clusters whose geometries were governed primarily by changes in valence electronic configuration (i.e., "experimental quantum mechanics"). His group's activities during the last 15 years have focused mainly on *nanosized* metal carbonyl clusters possessing Group 10 (Ni, Pd, Pt) and combined Group 10/Group 11 (Cu, Ag, Au) elements; these include 16 distinctly different close-packed Pd<sub>n</sub> clusters, the largest one possessing a capped three-shell Pd<sub>145</sub> core-geometry, and recently a structurally-related bimetallic Pd-Pt cluster containing a pseudo-icosahedral Pt-centered four-shell 165 metal-atom core.

Former group members consist of 95 PhD, 24 MS, and 45 undergraduate students together with 15 postdoctoral fellows, 10 Visiting Professors, and three Visiting Chinese Scholars. Current coworkers are Dr. Evgueni Mednikov (Asst. Scientist) and one graduate student. Although Larry formally retired last fall, he voluntarily taught first-semester General Chemistry to ~350 students and this spring co-taught Chemical Crystallography with Dr. Iliia Guzei to ~20 students.

Larry hopes to continue research on *nanosized* metal clusters for several years.



The Department of Chemistry  
and  
University of Wisconsin-Madison  
Announce

## **Mini-Symposium on Structural Chemistry**

to celebrate **Professor Larry Dahl's** 80<sup>th</sup> birthday and to honor his contributions to our Department, University, and the fields of cluster chemistry and crystallography.