Outside the Box and Across the Interfaces

A Symposium Honoring Professor Charles R. Martin on his 60th Birthday

Center for Research at the Bio/Nano Interface
Department of Chemistry
University of Florida
Gainesville, Florida
November 16, 2013

Charles R. (Chuck) Martin was born in 1953 in Cincinnati, Ohio where he attended excellent public schools. He went to Centre College in Danville, KY—initially as an English major—but switched to chemistry, was elected to Phi Beta Kappa, and graduated with High Distinction honors in 1975. Chuck was the first member of his family to graduate from college.

After Centre, Martin decided to pursue a Ph.D. in analytical chemistry. He chose the University of Arizona not only because of its excellent analytical reputation, but also because Chuck was ready to see and experience something new. The gene for wanderlust runs in the Martin family. He did his graduate work under the direction of Prof. Henry Freiser and received the Ph.D. in 1980. He then moved to the University of Texas at Austin where he was a Robert A. Welch Postdoctoral Fellow with Prof. Allen J. Bard.

Chuck's first faculty appointment was in the department of chemistry at Texas A&M University, a department which had never tenured an analytical chemist. Nevertheless, he got tenure early and was subsequently promoted to full professor. Chuck was at A&M for nine years, and then in 1990 moved to Colorado State University, where he stayed nine years. Motivated by a series of astrological events, Chuck moved to the University of Florida in 1999 where he is The

Colonel Allen R. & Margaret G. Crow Professor of Chemistry and a University Distinguished Professor.

Martin's research interests are in electrochemistry, bioanalytical chemistry and materials science. His energy-related work at A&M helped enable the modern PEM fuel cell. In the early 1980s he became interested in what are now called “nano” electrodes, long before the word “nanoscience” existed. Martin is perhaps best known for the development of the template synthesis method for preparing nanowires and nanotubes, which is now used in laboratories throughout the world.

Martin’s 300+ scientific papers have been cited by other authors over 27,000 times. His H-index is 90. He has received the American Chemical Society Division of Analytical Chemistry Award in Electrochemistry (2010), the Charles N. Reilley Award of the Society for Electroanalytical Chemistry (2009), The Florida Award of the Florida ACS (2005), and the Carl Wagner Memorial Award of the Electrochemical Society (1999). He was recently honored by Thomson Reuters as one of the world's top 100 chemists of the 21st Century based on citation impact score. Prof. Martin is the editor of the journal *Nanomedicine*.

Chuck is also an award-winning songwriter and recording artist. You can see him perform at the ChuckMartinGeniusBoy channel on YouTube.

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Symposium Program: a total of 10 invited talks

Time	Speaker	Title	Place
8:30–8:40a	Dr. Bill Dolbier	Introduction	207 Leigh Hall
8:40–8:45a	Dean	Remarks	207 Leigh Hall
8:45–9:00a	Photo session		Outside at the steps of 130 CLB
9:00a–12:20p	Five invited speakers	Individual talks	207 Leigh Hall
12:20–2:00p	Lunch Break		309 Leigh Hall
2:00–4:20p	Four invited speakers	Individual talks	207 Leigh Hall
4:20–4:40p	Coffee break		309 Leigh Hall
4:40–5:40p	Chuck Martin presentation	Talk by Chuck Martin	207 Leigh Hall
6:00–7:00p	Social hour		Garden Club
7:00–8:15p	Dinner		Garden Club
8:15–9:30p	Comments about Chuck Martin and Chuck’s performance		Garden Club

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Center for Research at the Bio/Nano Interface, Department of Chemistry, University of Florida
8:30 am, Saturday, November 16, 2013
207 Leigh Hall, University of Florida

Morning session

9:00a Introduction by Prof. Lane Barker

Prof. Henry White, (University Distinguished Professor, Department of Chemistry, University of Utah)

Hydrogen Nanobubble

9:35a Introduction by Prof. Punit Kohli

Prof. Reginald M. Penner (Chancellor's Professor of Chemistry and Chair, Department of Chemistry, University of California, Irvine)

Benevolent Viruses Working on Your Behalf, to Detect Cancer

10:10a Introduction by Dr. Heather Hillebrenner

Prof. Isiah M. Warner, (Boyd Professor and Philip W. West Professor, Department of Chemistry, Louisiana State University)

GUMBOS: Tunable Materials for Biomedical Applications

10:45a Coffee break

11:00a Introduction by Prof. Dan Feldheim

Prof. Hitomi Mukaibo (Assistant Professor, Department of Chemistry Engineering, University of Rochester)

Nanopore membranes for biosensors, electro-osmosis and gene delivery

11:35a Introduction by Dr. Fan Xu

Prof. Robert Williams (University Distinguished Professor, Department of Chemistry Colorado State University)

Quinine—A Story of Chemistry, History, Personalities and Ethics

12:10p Lunch (box lunch will be provided at 309 Leigh Hall)
Afternoon session

2:00p Introduction by Dr. Q. Schulte

Prof. Dick Crooks, (Robert A. Welch Chair in Materials Chemistry, Department of Chemistry, The University of Texas at Austin)

Well-defined Nanoparticles Inspired by the Martin Template Method: Synthesis, Characterization, and Electrocatalysis

2:35p Introduction by Dr. Jorge Colon

Prof. Robert B. Moore (Professor, Department of Chemistry, Virginia Polytechnic Institute and State University)

Structured Polymer Electrolytes and Nafion Déjà vu

3:10p Introduction by Dr. Leon Van Dyke

Dr. Debra Rolison (Head, Advanced Electrochemical Materials Section, U. S. Naval Research Laboratory)

Architecturally Rewriting Energy Storage by Borrowing Functionality from Fuel Cells, Batteries, Electrolyzers, and Electrochemical Capacitors: Zinc–Air Batteries

3:45p Introduction by Dr. Nelson Prieto

Prof. Zuzanna Siwy (Professor, Department of Physics and Astronomy, University of California, Irvine)

Biophysics, Physical Chemistry and Biosensing with Nanopores —Mimicking Nature

4:10p Coffee break

4:30–5:30p Introduction by Dr. Lisa Martin

Prof. Charles Martin (Colonel Allan R. and Margaret G. Crow Professor of Chemistry, University Distinguished Professor, Department of Chemistry, University of Florida).

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Symposium organization

Symposium Chair:	*Bill Dolbier*
Symposium organizers:	*Weihong Tan and Reginald M. Penner*
Symposium academic committee chair:	*Henry White*
Symposium local activities and contact person:	*Ms. Beth Eddy* (eddy@chem.ufl.edu; Tel: 352 392 0538)
Symposium organizing committee:	*Bill Dolbier, Weihong Tan, Reginald M. Penner, Henry White, Beth Eddy, Sybil Holt, Zuzanna Siwy, Lane Barker, and Punit Kohli*