

Conference Call

Novel Aromatic Compounds

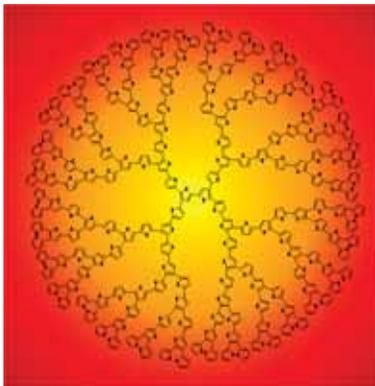
by *Shih-Yuan Liu and Michael Haley*

The 14th International Symposium on Novel Aromatic Compounds (ISNA-14) was held 24–29 July in Eugene, Oregon, USA, on the campus of the University of Oregon. Over 250 participants from 21 countries were present, making this gathering the largest ISNA conference on North American soil. The scientific program consisted of the 2011 Nozoe Lecture presented by Peter Bäuerle (University of Ulm, Germany), 11 plenary lectures, 20 invited lectures, 29 contributed lectures, and 160 posters presented in two sessions. This IUPAC-sponsored symposium was organized by Michael M. Haley (University of Oregon) and Benjamin T. King (University of Nevada, Reno, USA).

The ISNA symposium series was initiated by Tetsuo Nozoe, who hosted the inaugural conference in Sendai, Japan in 1970. In the years since, the series has flourished and is now held biennially at locations across Europe, Asia, and North America. The focus of ISNA is to highlight recent advances in the area of aromatic chemistry, including the synthesis and properties of novel aromatic compounds, applications of π -conjugated systems in materials and devices, and new experimental and theoretical studies of the fundamental concept of

aromaticity. By bringing together the top researchers from across the globe, along with a cadre of young professors and Ph.D. students, INSA aims to be a catalyst for the generation of new ideas, insights, applications, and directions in this exciting and growing field of chemistry.

Because of his stature within the ISNA family of chemists, the memory of the late Prof. Nozoe is honored with the ISNA Nozoe Lecture. The extended community of Nozoe students and friends in Japan, led by Prof. Shô Itô, helped establish the Nozoe lecture at ISNA-9. The Nozoe lecture has been held at every ISNA meeting since. The responsibility for selecting each Nozoe Lecturer currently resides with the International Committee for the Nozoe Lectureship, comprised of some of his former students and friends.



Dendritic Oligothiophenes, courtesy of Peter Bäuerle.

Former presenters of the Nozoe Lecture include such luminaries as Atsuhiko Osuka (ISNA-13, 2009),

François Diederich (ISNA-12, 2007) and Koichi Komatsu (ISNA-11, 2005). Peter Bäuerle from the University of Ulm, Germany was chosen as the 2011 Nozoe Lecturer for ISNA-14. Prof. Bäuerle has been active in the field of aromatic chemistry for many years and his recent research has focused on the development of novel organic semiconducting and conducting materials based on thiophene. Bäuerle is currently the director of the Institute for Organic Chemistry II and Advanced Materials at the University of Ulm. His research results have been published in over 240 peer-reviewed scientific papers, 8 book chapters, and 7 patents, and in 2000 he was awarded the René Descartes Prize of the European Union. For the ISNA-14 Nozoe Lecture, Bäuerle discussed recent progress his group has made on the synthesis and characterization of macromolecular dendritic oligothiophenes, and presented exciting data which indicate that these conjugated materials could find application in high-performance organic solar cells.

In addition to Bäuerle's Nozoe Lecture, the scientific program of ISNA-14 included plenary lectures from 11 noteworthy scientists. To highlight just a handful, Jeffery Moore (University of Illinois at Urbana-Champaign, USA) presented the first plenary lecture, about recent work on shape-persistent arylene ethyn-



Peter Bäuerle, the 2011 Nozoe Memorial Lecturer.



The student poster prize winners with their awards and books (left to right): Mike Haley (ISNA-14 chair), Peter Goelitz (Wiley-VCH), Brian Wall, Rebecca Parkhurst, Hajime Shigemitsu, Bharat Kumar, and Ben King (ISNA-14 co-chair).

ylene macrocycles—discrete molecules whose properties can emulate high polymers with better control of covalent, supramolecular, and condensed phase organization.

Harry Anderson (Oxford University, UK) described Vernier templated porphyrin-based molecular wires, including double-stranded annulene sandwiches that can be regarded as model light harvesting systems. Toshikazu Hirao (Osaka University, Japan) discussed the novel π -bowl sumanene, which feature a C_{3v} symmetric structure present in fullerenes and carbon nanotubes. Finally, as testament to the diversity of topics covered at ISNA-14, Miguel Garcia-Garibay (University of California, Los Angeles, USA) presented the synthesis of crystalline molecular gyroscopes based on trityl derivatives as a primary building block, and their structural and dynamic characterization in the solid state.

The organizers of ISNA-14 made a special effort to emphasize the contributions of young scientists working in the field of aromatic chemistry. To that end, several assistant professors, early in their independent research careers, were featured as invited lecturers. J.D. Tovar (Johns Hopkins University, Baltimore, Maryland, USA) presented his work on tuning aromaticity to promote intramolecular delocalization of charge carriers. Malika Jeffries-El (Iowa State University, Ames, USA) reported her efforts to modify the optical and electronic properties of benzobisoxazoles by systematic substitution at the 4- and 8-positions. To highlight the work of even younger chemists, Nancy Mills (Trinity University, San Antonio, Texas, USA) presented her study of antiaromatic ions as probes of delocalization,

work that has been performed primarily by undergraduate students.

The itinerary for ISNA-14 also included time to enjoy the natural beauty of western Oregon around the Eugene area. A group trip to the Pacific coast, about an hour from town, included stops at the picturesque Heceta Head Lighthouse and the Oregon Coast Aquarium. Oregon is a well-known wine country and the conference banquet was held at Sweet Cheeks Winery,

15 miles south of Eugene. The organizers ensured that the notoriously fickle Oregon weather cooperated with the conference schedule and banquet attendees enjoyed a wonderful summer evening in a beautiful setting, with delicious food and drink.

The banquet was also the site of the poster award ceremony. This year, four graduate students were honored: Bharat Kumar (King group, University of Nevada), Brian Wall (Tovar group, Johns Hopkins), Hajime Shigemitsu (Hisaki group, Osaka University) and Rebecca Parkhurst (Swager group, Massachusetts Institute of Technology).

Lastly, a fond farewell: Reginald Mitchell (University of Victoria, British Columbia, Canada) has been active in the field of aromatic chemistry for four decades and has been a fixture at nearly every ISNA gathering. Mitchell retired from the University of Victoria in 2010 and he delivered a stirring lecture at ISNA-14 summarizing his lifetime accomplishments studying dimethyldihydropyrene. His enthusiasm and charisma are contagious and his scientific prowess is second to none; we wish Mitchell a happy retirement and hope for a cameo appearance at INSA-15.

The next conference in this series, ISNA-15, will be organized by Ken-Tsung Wong (National Taiwan University) and will be held in Taipei, Taiwan, in the summer of 2013 <www.isna15.org>.

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 www.isna14.org