

This article was downloaded by:

On: 29 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Supramolecular Chemistry

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713649759>

Preface to the Special ISMSC Issue of Supramolecular Chemistry

To cite this Article (2007) 'Preface to the Special ISMSC Issue of Supramolecular Chemistry', *Supramolecular Chemistry*, 19: 1, 7 – 8

To link to this Article: DOI: 10.1080/10610270601068232

URL: <http://dx.doi.org/10.1080/10610270601068232>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Preface to the Special ISMSC Issue of Supramolecular Chemistry

We are honoured to introduce the expansive and insightful collection of publications featured in this special issue of Supramolecular Chemistry. This collage of reviews and articles that span macrocyclic and supramolecular chemistry stem from the first joint International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC) [1] that was held in the idyllic setting of Victoria, British Columbia, Canada from June 24th until June 28th 2006. Indeed, Victoria was home to 500 researchers for five intense days of scientific discourse and discovery, as these two major symposia joined forces under the expert guidance of Tom Fyles, Cornelia Bohne, Frank van Veggel, and Fraser Hof. Plenary and invited lectures, more than 300 posters and a full day of tutorials filled the schedule with excitement and learning. The breadth of science was remarkable, linking the themes of macrocycles and supramolecular chemistry by mutually targeted structures, properties and functions.

The Symposium was divided into four broad sub-themes, *Molecular recognition*, *Physical supramolecular chemistry*, *Supramolecular functions*, and *Self-assembly and complexity*. There were obvious overlaps between these themes. This ISMSC issue provides a cross-section of the symposium and all of its diversity. The multifaceted nature of the symposium is highlighted by the biological background, in the work of Hamilton and Smith. Hamilton [2] uses DNA base pairing in a combinatorial approach to identify bidentate binders for proteins. Smith [3] provides an update on recent developments concerning synthetic transporters of ions and neutral molecules across bilayer membranes.

Through the use of transition metals ions, several contributors have introduced novel properties into their systems, e.g., Brooker [4] has developed head-to-head macrocycles with novel magnetic properties, Loeb [5] has examined the catenation of metal-containing molecules, and Pikramenou [6] the photophysical properties of luminescence light switches. Dalla Cort [7] presents a review of metalloreceptors from uranyl salophen ligands and the application of these complexes in recognition and catalysis.

Receptors for small molecules are also discussed, with the work of Inoue [8] focussing on the novel receptor properties of cucurbiturils and Dalcalnale [9] examining pyridine containing cavitands. Nau [10] reviews cucurbituril complexes of fluorescent dyes, and presents perspectives for applications. Gale [11] reports solution and solid state characterization of new anion receptors from bis-urea hosts. Several papers deal with control of infinite supramolecular architectures and the properties of these systems. Crego-Calama and Reinhoudt [12] present a review of their work in generating and amplifying supramolecular chirality in H-bonded rosette systems. Shinkai [13] uses self-assembled polysaccharide to form a chiral and insulating host for a conjugated polymer. Harris [14] presents an overview of controlling structure and targeting function in urea and thiourea assemblies. Kitagawa [15] offers an overview of ongoing efforts to define and control pores in coordination solids.

Although the concept of a joint macrocyclic and supramolecular symposium had been around for a while, justifying such an endeavour is simply a matter of gauging the enthusiasm of the participants. The scope of the conference, broad and encompassing, held true to the diversity of macrocyclic and supramolecular chemistry, and will hopefully chart an equally fulfilling course to the next ISMSC.

Garry Hanan and George Shimizu

References

- [1] View the website at www.ismsc.org.
- [2] Tagore, D. M.; Sprinz, K. I.; Hamilton, A. D. *Supramol. Chem.* **2007**, *19*, 129.
- [3] McNally, B. A.; Leevy, W. M.; Smith, B. D. *Supramol. Chem.* **2007**, *19*, 29.
- [4] Brandt, C. D.; Kitchen, J. A.; Beckmann, U.; White, N. G.; Jameson, G. B.; Brooker, S. *Supramol. Chem.* **2007**, *19*, 17.
- [5] Hoffart, D. J.; Loeb, S. J. *Supramol. Chem.* **2007**, *19*, 89.
- [6] Pereira Silva, M. J. J.; Bertoncello, P.; Daskalakis, N. N.; Spencer, N.; Kariuki, B. M.; Unwin, P. R.; Pikramenou, Z. *Supramol. Chem.* **2007**, *19*, 115.
- [7] Dalla Cort, A.; Pasquini, C.; Schiaffino, L. *Supramol. Chem.* **2007**, *19*, 79.

- [8] Rekharsky, M. V.; Ko, Y. H.; Selvapalam, N.; Kim, K.; Inoue, Y. *Supramol. Chem.* **2007**, *19*, 39.
- [9] Pirondini, L.; Melegary, M.; Pinalli, R.; Dalcanale, E.; *Supramol. Chem.* **2007**, *19*, 67.
- [10] Koner, A. L.; Nau, W. M.; *Supramol. Chem.* **2007**, *19*, 55.
- [11] Brooks, S. J.; Gale, P. A.; Light, M. E.; *Supramol. Chem.* **2007**, *19*, 9.
- [12] Vázquez-Campos, S.; Crego-Calama, M.; Reinhoudt, D. N.; *Supramol. Chem.* **2007**, *19*, 95.
- [13] Numata, M.; Fujisawa, T.; Li, C.; Haraguchi, S.; Ikeda, M.; Sakurai, K.; Shinkai, S.; *Supramol. Chem.* **2007**, *19*, 107.
- [14] Harris, K. D. M. *Supramol. Chem.* **2007**, *19*, 47.
- [15] Higuchi, M. Horike, S.; Kitagawa, S. *Supramol. Chem.* **2007**, *19*, 75.