Hybrid Inorganic/Organic Systems for Opto-Electronics

Collaborative Research Centre 951

Special Colloquium Announcement

of the Collaborative Research Centre 951
"Hybrid Inorganic/Organic Systems for Opto-Electronics"

Ivan Aprahamian

Department of Chemistry, Dartmouth College, USA

Hydrazone-Based Switches and Functional Materials

Time: Monday, November 19, 2018, 5 p.m. **c.t.**

Place: IRIS Adlershof, Zum Großen Windkanal 6, Room 007 (ground floor).

Collaborative Research Centre 951
Department of Physics
Humboldt-University of Berlin

Email: sfb951@physik.hu-berlin.de
Tel.: +49 30 2093 66374
www.physik.hu-berlin.de/sfb951

Partners

Hydrazone-Based Switches and Functional Materials

Ivan Aprahamian, Dartmouth College

For the past few years we have been developing structurally simple, easy to make, modular, and tunable hydrazone-based functional materials (*e.g.*, switches, sensors and fluorophores).[1] This presentation will deal with our recent advances with these systems, with an emphasis on newly developed photochromic compounds[2] that exhibit many interesting properties, including emission ON/OFF toggling in solution (see below) and the solid-state.[3] The integration of these photochromic compounds into liquid crystals[4] and liquid crystalline elastomers will also be discussed.

Representative references:

1. I. Aprahamian *ChemCommun* **2017**, *53*, 6674–6684

2. (a) Qian, H.; Pramanik, S.; Aprahamian, I. *J. Am. Chem. Soc.* **2017**, *139*, 9140−9143; (b) Q. Li, H. Qian, B. Shao, R. P. Hughes, I. Aprahamian, *J. Am. Chem. Soc.* **2018**, *140*, 11829–11835

3. B. Shao, M. Baroncini, H. Qian, L. Bussotti, M. Di Donato, A. Credi, I. Aprahamian *J. Am. Chem. Soc.* **2018**, *140*, 12323–12327

4. M. J. Moran, M. Magrini, D. Walba, I. Aprahamian, *J. Am. Chem. Soc.* **2018**, *140*, DOI: 10.1021/jacs.8b09622