



Inorganic Chemistry Seminar Series

Tuesday, December 4, 2018, 12:30 pm

Seaver Science Library, Room 150

SSC Auditorium next to the library

Professor Seth Marder

Department of Chemistry and Biochemistry

Georgia Institute of Technology

Applications of Molecular Dopants and Interface Modifiers for Electronic and Opto-Electronic Applications

Organic, hybrid, and 2D materials have attracted interest for electronic applications due to their potential for use in low-cost, large-area, flexible electronic devices. Here we will report on recent developments pertaining to surface modifiers and dopants that could impact the charge injection/collection/transport processes in organic light emitting diodes, organic field effect transistors, and photovoltaic devices. In particular, we will examine how N-heterocyclic carbenes assemble on gold substrates, the impact of the surface dipole on the work function of the gold. We will also discuss the development of metallocenes-based dimers as n-dopants and very briefly described metal dithiolene complexes as p-dopants for organic semiconductors and their impact of device performance.

Hosted by Professor Mark Thompson

The scientific community is invited

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