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CALL FOR PAPERS

ABSTRACT DEADLINE: JUNE 21, 2005

REMINDER: *In fairness to all potential authors, late abstracts will not be accepted.*

MRS Symposium D: Organic and Nanostructured Composite Photovoltaics and Solid-State Lighting

Organic semiconductor devices can potentially address both sides of the energy equation through organic photovoltaic devices (OPVs) for energy production as well as the efficient use of energy through organic light-emitting diodes (OLEDs) for solid-state indoor lighting. With these applications in mind, this symposium is aimed at bringing together researchers on fundamental and applied aspects of materials and device development of organic molecular and polymeric semiconductors, as well as nanostructured inorganic-organic solid composites. The unifying motivation behind these materials is the goal of low-cost, environmentally sustainable production of high-performance devices.

Papers regarding organic and solid state, hybrid solar cells and light-emitting diodes are solicited in, but not limited to, the following areas:

- Fundamental photophysics and charge transfer mechanisms
- Bandgap tuning
- Charge transport and exciton diffusion studies
- Device physics simulations and models
- Molecular organization and morphology
- Supramolecular assemblies and self-assembly techniques
- Efficient and stable emitters and phosphors
- Molecular and polymeric film-deposition techniques
- Doping of organic semiconductors
- Quantum dots and quantum confined systems
- Oxide semiconductor nanostructures
- Organic-organic and organic-inorganic interfaces
- Conducting polymers for electrodes
- Novel electrode designs
- Device and module design
- Device lifetime and degradation studies
- Industrial-scale device and module manufacturing techniques
- Device encapsulation and packaging
- Device efficiency measurement standards

Invited speakers (tentative) include: **A.P. Alivisatos** (Univ. of California-Berkeley), **H. Arakawa** (AIST, Japan), **C.J. Brabec** (Konarka Technologies, Austria), **J.L. Brédas** (Georgia Inst. of Technology), **V. Dyakonov** (Univ. of Oldenburg, Germany), **J.R. Durrant** (Imperial College London, United Kingdom), **S.R. Forrest** (Princeton Univ.), **J.M.J. Fréchet** (Univ. of California-Berkeley), **S. Fukuzumi** (Osaka Univ., Japan), **M. Grätzel** (EPFL, Switzerland), **N.C. Greenham** (Univ. of Cambridge, United Kingdom), **B.A. Gregg** (National Renewable Energy Lab), **M. Hack** (Universal Display Corp.), **J.C. Hummelen** (Univ. of Groningen, The Netherlands), **R.A.J. Janssen** (Eindhoven Univ., The Netherlands), **Z.H. Kafafi** (Naval Research Lab), **J. Kido** (Yamagata Univ., Japan), **K. Leo** (Dresden Univ. of Technology, Germany), **T. Myer** (Solaronix), **P. Peumans** (Stanford Univ.), **J.R. Reynolds** (Univ. of Florida), **I.D.W. Samuel** (Univ. of St. Andrews, United Kingdom), **N.S. Sariciftci** (Univ. of Linz, Austria), **M. Thelakktat** (Univ. of Bayreuth, Germany), **S.A. Van Slyke** (Kodak), and **K. Yoshino** (Osaka Univ., Japan).

Symposium Organizers

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