

## International Symposium "From Open-Shell Conjugated Molecules to Graphene: Theory and Experiment"

International symposium on electronic properties in graphene, nanographene, and open-shell conjugated systems, will be held in the conference: "Seventh International Conference of Computational Methods in Sciences and Engineering" (<http://www.iccmse.org/>) at Hotel Rodos Palace, Rodos, Crete, Greece. The conference period will be September 29 - October 4, 2009. Submission of the short abstract is welcome for interested persons. See the details at the Web site: <http://www.iccmse.org/>.

### *Scope*

"Graphene" – a new carbonaceous material – is distinguished from conventional electronic systems such as graphite due to its exceptional features, e.g., a large magnetic moment around the zigzag edges and massless Dirac fermion, stimulating development of future electronic/spintronic devices. Several unique features of graphene are closely connected with the "open-shell character", which originates in the "instability of chemical bonds" in  $\pi$ -conjugated system with unconventional spin states and strongly correlates with the topology of  $\pi$ -electron array, especially aromatic sextet formation. This symposium focuses on recent hot topics regarding unique physical and chemical properties derived from pseudo and real spins in  $\pi$ -conjugated compounds, toward collaboration between theory, computational modeling and experiment. A wide range of compounds from small conjugated/aromatic molecules and inorganic metal complexes to nano- and large-size graphenes will be covered, and origin of the open-shell character as well as functional properties such as electron conductivity, optical and magnetic properties will be concentrated as important domains in the symposium.

### *Organizers*

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