

The Second International Workshop on Nonlinear Dynamics and Synchronization (**INDS'09**) is a two-day international workshop bringing together international researchers, developers and practitioners from different horizons to discuss the latest advances in nonlinear dynamics and synchronization. INDS'09 will serve as a forum to present current and future works as well as to exchange research ideas pertaining to various aspects in the field of nonlinear dynamic systems and synchronization. INDS'09 will feature contributed as well as 6 key note speeches and will include poster and demo sessions. (P.S.: according to participant's feedback, INDS'08 has been a great success. IND'09 should be as well !)

The major focus of this inter-disciplinary workshop lies on the following areas:

- Theoretical fundamentals of synchronization
- Nonlinear systems and synchronization
- Experiments of nonlinear dynamics and synchronization
- Simulation of nonlinear dynamics and synchronization
- Applications of nonlinear dynamics and synchronization:
 - o Self-organized traffic management systems
 - o Self-organized intelligent supply chains and logistics systems
 - o Cybernetics
 - o Systems control
 - o Robotics
 - o Self organized transportation systems (logistics, supply chains, traffic management)
 - Pattern recognition
 - Computational intelligence models (Soft computing and machine learning)
 - o Cellular neural networks and applications
 - Image processing (incl. scene analysis)
 - Signal processing (incl. speech processing and recognition)
 - Self-reconfigurable systems
 - Self-healing systems
 - o Self-testing systems
 - Coupled oscillatory systems
 - o Chaos control
 - o Communication (wired and wireless), networking and sensor networks
 - o Cryptography and security
 - o Social sciences, psychology, business and management

Camera-ready full papers will be included in the workshop proceedings, which will be published either by "Shaker Verlag" (Germany) or World Scientific Publisher and distributed to the participants at the workshop. The accepted papers will be published with the IEEE Conference Publications Program through IEEE Xplore[®] digital library.

Post-Conference publications: The best contributions, based upon the quality, novelty and relevance, will be invited to submit a longer paper (15 pages). After undergoing a thorough review process selected high-quality papers will be published in a special book (by SPRINGER) and in a journal special issue.

Key Dates -- Submission Deadlines Extended abstract submission: <u>06.03.2009</u> Acceptance letter: 15.04.2009 Full paper submission: 30.04.2009