



## SPECIAL SESSION (SS1.13)

### ***“Cyber-Physical Systems Paradigm – Challenges for New Generation of Advanced Engineering Systems”***

We invite you to participate in the session entitled Cyber-Physical Systems paradigm – A new challenge for New Generation of Advanced Engineering Systems. The session covers the latest advances in Cyber Physical Systems.

The aim is to stimulate research that will lead to the creation of responsive environments for networking and, at longer-term, the development of Cyber Physical Systems. We envision that the cyber-physical systems of tomorrow will far exceed those of today in terms of adaptability, autonomy, efficiency, functionality, reliability, safety, and usability. Research advances in cyber-physical systems promise to transform our world with systems that respond more quickly (e.g., autonomous collision avoidance), are more precise, work in dangerous or inaccessible environments (e.g., autonomous systems for search and rescue, firefighting, and exploration), provide large-scale, distributed coordination (e.g., automated traffic control), are highly efficient (e.g., zero-net energy buildings), augment human capabilities, and enhance societal wellbeing (e.g., assistive technologies and ubiquitous healthcare monitoring and delivery).

The goal of this session is to bring together representatives from academia and industry to present state of the art research and exchange ideas in the area of Cyber-Physical Systems with applications in: Complex Systems, Internet of Things, Multi Scale Computing, Smart Agriculture, Smart Grid, Smart Transportation, Intelligent Information Systems, Networked Control Systems, Smart Sensors and Automated Detection, Wireless Sensor Networks, a.s.o.

#### Target Attendees

- Academia and Industry

#### Chair:

- Prof.dr. eng. Ioan Dumitrache, Romanian Academy, University Politehnica of Bucharest, Romania

#### Co-Chair:

- Associate Prof. dr. eng. Ioan Sacala ([ioan.sacala@acse.pub.ro](mailto:ioan.sacala@acse.pub.ro)) University Politehnica of Bucharest, Romania

Organizing Committee: