



In this issue devoted to Cyber Physical Systems ably edited by our colleague Professor Bharadwaj Amrutur, control of physical objects through software control is addressed. The reviews appearing as 12 articles highlight the challenges faced by researchers to design, control and generate devices for practical applications. The effort of the guest editor in this context is appreciated and the readers will get a full profile of the activities in this area which is in the cutting edge of modern day research in cyber systems.

I must acknowledge the work of our editorial staff to ensure that this issue is brought on time. My sincere thanks to all the contributors and to Professor Bharadwaj Amrutur who has worked overtime to get this issue in proper order. Our next issue will be devoted to “High Performance Advanced Composites”.

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Cyber Physical Systems

Cyber Physical Systems have recently gained a lot of interest from both academia and industry. This has happened mainly due to the dramatic reduction in costs of sensors, computing and communication to a level where it has become cost effective to embed sensors in every day objects. This has led to the concept of Internet of Things (IoT), which envisions a network of objects coupled with software intelligence, to enable smarter systems to aid humans in their various endeavors. Add to this a path way to control the physical objects from the software intelligence, you have Cyber Physical Systems. Needless to say, there are many challenges in engineering robust, safe and secure Cyber Physical Systems and these have been eloquently pointed out in the lead article. The next few articles delve deeply into a few fundamental aspects of such systems: control, timing and formal correctness. Articles articulating the engineering challenges and approaches in the basic hardware and the software of these systems follow these. The final three articles describe various systems: a location sensing systems for first responders, low cost phone based sensing system and finally smart energy systems. These articles will serve as a wonderful guide for further explorations into this fascinating new area.



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