INVITATION

The 19th World Congress of the International Federation of Automatic Control (IFAC) will be held in Cape Town, South Africa from 24th to 29th August 2014. The IFAC President, Prof. Ian Craig, the International Programme Committee and the National Organising Committee warmly invite you to participate in this premier forum of control science and technology.

IFAC has been holding triennial World Congresses since the 1960 Moscow congress and these congresses offer the most up-to-date and complete view of control techniques, with the widest coverage of theoretical and application fields.

FIRST CALL FOR PAPERS

In keeping with the long tradition of IFAC World Congresses, you are invited to submit high quality, original papers covering the broad spectrum of topics in automation and control spanned by the IFAC Technical areas (www.ifac-control.org). Submission will open in June 2013 and papers must be submitted in electronic form using the conference web site assisted by Paper Plaza. All submissions must be in pdf format, written in English, and prepared according to the IFAC format. Templates and style files are available at www.ifac.paperccept.net.

Especially to encourage participation from industry and colleagues outside the traditional academic control community, the congress will accept a limited number of papers based on extended abstracts. These abstracts will typically be 2 pages in length and will be subject to peer review. Authors will present in technical or poster sessions but the papers will not appear in the conference proceedings as published on www.ifac-papersonline.net.
Situated on the south-eastern tip of Africa, at the foot of the iconic Table Mountain, Cape Town is undoubtedly one of the world's most beautiful cities. It is also a melting pot, where East meets West in Africa, and the resulting blend is a fascinating mix of cultures, flavours and history – a diversity that is easily seen in the faces of its people, their languages, architecture and food. It’s easy to see why Sir Francis Drake, when he circumnavigated the globe, described it as "the fairest Cape of them all."

"By any standard, the Cape Town region is one of the most beautiful and compelling places to visit on the planet. Here, in addition to a city with fascinating historical sites, excellent museums, vibrant markets and a handsomely restored waterfront, I encountered mountain wilderness, rugged coastlines, sandy beaches, lush gardens, beautiful wine estates, superior hotels and some of the warmest, most welcoming people I've ever met."

Richard Busch, Travel Editor, National Geographic Traveler

The congress will be held at the Cape Town International Convention Centre (CTICC) which is a modern, top class conference venue ideally located on Cape Town's foreshore, adjacent to the popular V&A Waterfront, the central business district and leading hotels. The CTICC is an exceptional facility that meets the expectations of delegates and organisers alike.

### TECHNICAL AREAS: IFAC 19TH WORLD CONGRESS, CAPE TOWN 24-29 AUGUST 2014

**Systems and Signals:** Modelling, Identification and Signal Processing; Adaptive and Learning Systems; Discrete Event and Hybrid Systems; Stochastic Systems; Networked Systems

**Design Methods:** Control Design; Linear Control Systems; Non-Linear Control Systems; Optimal Control; Robust Control; Distributed Parameter Systems

**Computers, Cognition and Communication:** Computers for Control; Computational Intelligence in Control; Telematics: Control via Communication Networks

**Mechatronics, Robotics and Components:** Components and Technologies for Control; Mechatronic Systems; Robotics; Human Machine Systems

**Manufacturing and Logistics Systems:** Manufacturing Plant Control; Manufacturing Modelling for Management and Control; Enterprise Integration and Networking; Large Scale Complex Systems

**Process and Power Systems:** Chemical Process Control; Mining, Mineral and Metal Processing; Power and Energy Systems; Fault Detection, Supervision & Safety of Technical Processes

**Transportation and Vehicle Systems:** Automotive Control; Marine Systems; Aerospace; Transportation Systems; Intelligent Autonomous Vehicles

**Bio- and Ecological Systems:** Control in Agriculture; Biological and Medical Systems; Modelling and Control of Environmental Systems; Biosystems and Bioprocesses

**Social Systems:** Economic and Business Systems; Social Impact of Automation; Control Education Technology, Culture and International Stability

### CONGRESS PROGRAM OUTLINE

- Pre-congress tutorials and workshops
- Plenary lectures
- Technical sessions (lecture and poster)
- Exhibitions and cultural events

### IFAC CONGRESS PRIZES

- IFAC Congress Young Author Prize
- IFAC Congress Application Paper Prize
- IFAC Congress Interactive Paper Prize

### IFAC COUNCIL AWARDS

- Giorgio Quazza Medal
- Nataniel B. Nichols Medal
- Industrial Achievements Award
- High Impact Paper Award
- Fellow Awards

### IFAC JOURNALS AWARDS

- Automatica Best Paper Awards
- Control Engineering Practice Best Paper Awards
- Journal of Process Control Best Paper Awards
- Engineering Appl. of Artificial Intelligence Best Paper Awards
- Mechatronics Best Paper Awards

### TEXTBOOK AWARD

- Harold Chestnut Control Engineering Textbook Award

### IMPORTANT DATES

- **June 1, 2013** Submission site opens (www.ifac2014.org)
- **October 30, 2013** Deadline for the submission of:
  - full draft contributed/invited/industrial papers
  - invited session proposals
  - pre-Congress Tutorials and Workshops proposals
  - panel discussion session proposals
- **February 14, 2014** Notification of acceptance
- **March 3, 2014** Preliminary program announcement
- **March 31, 2014** Deadline for the final submissions (papers can be uploaded only after the payment of the registration fee)
- **April 18, 2014** Final program announcement
- **August 23-24, 2014** Pre-Congress Tutorials and Workshops
- **August 24, 2014** Congress opening
- **August 25-29, 2014** The 2014 IFAC World Congress