

18th Conference on Technology, Culture & International Stability (TECIS 2018)

13-15 September 2018
Baku, Azerbaijan

The 18th conference of the IFAC TC 9.5 (TECIS 2018, formerly known as "SWIIS") was organised by the Austrian and Azerbaijan IFAC NMOs and took place in Baku, a beautiful city on the Caspian Sea in Azerbaijan from 13-15 September 2018.

TECIS 2018 provided a forum for professionals, researchers, experts, and practitioners from industry, non-governmental organizations (NGOs) and academia to give an overview of the state of the art, to present new research results and to exchange ideas and experiences in the field of the role of control and automation technologies and its praxis in promoting international stability. A related goal of this conference was to propose new approaches in dealing with globalization effects, and investigating international system complexity and the management of knowledge in that context.

As one of the first IFAC events after 38 years in this new IFAC national member country and according to the scope of TECIS, this event offered scientists from Azerbaijan, Kazakhstan, Russia and across the Caspian Sea region generally the opportunity to present their research results at an IFAC sponsored international event.

The 170 contributions included eight plenary talks, five invited papers and 25 regular sessions. They covered a very broad field of subjects including Social Aspects of Technology Transfer, Globalisation Impact of International Stability, Control Education and International Stability, Engineering Ethics, Cultural Effects, Knowledge Management and Intelligent Systems, Complex Adaptive Systems, Technology and Environmental Stability, Cost Oriented Automation (COA) and End of Life Management (EoL).

The plenaries were presented by:

- IFAC President Frank Allgower (DE) *From the Classical Feedback Loop to the New Cybernetics of the 21st Century*
- Telman Aliyev (AZ) *Technologies and Systems of Noise Control of the Beginning and Dynamics of Development of Accidents and their Applications*
- Muhammad Sarfraz (KW) *Shape Control & Designing Objects*
- Fikret Aliev (AZ) *Algorithm For Solving The Problem Of Optimal Stabilization By Output And Their Application*
- Thomas Duda (CH) *Addressing Challenges in the Oil, Gas and Power Industry in the Light of Industry 4.0 and Big Data*
- Petros Groumpos (GR) *Intelligent Control and Cognitive Control for a Global Coherence and Sustainable Economic Growth For the Humankind*

- Norbert Jesse (DE) *Organizational Evolution - How Digital Disruption Enforces Organizational Agility*
- Larry Stapleton (IE) *New Hope through Advanced Control and Automation Systems: Delivering e-Citizen Services in a Post-Conflict, Transition Region - The Case of PBC and PASS*

Many students, mostly from local universities, attended the event. Out of seven finalists for the Young Author Award the paper of Ines Bula (TU Wien/UBT) was selected for the award by the selection committee.



Left to right:
NOC Chair Bahadur Ibrahimov (AZ),
YAP winner Ines Bula (XK),
IPC Chair Peter Kopacek (AT)

The modern conference hotel, with a tremendous conference infrastructure, was located on the Caspian Sea promenade of Baku. A technical visit was organised to the (historical) oil fields of Bibiheybat and the brand new building of the Oil University. The social program included a banquet dinner at the Elite Events Hall, in the Elite Polo Club with famous Azerbaijani music (including a 65 member orchestra) and traditional dancers, as well as a welcome party at the Ateshgah fire temple. To give the international participants an impression of Azerbaijan's landscape and history some cultural visits were also organized.

We are extremely grateful to the International Program Committee (IPC) members for reviewing of the papers, the members of the National Organising Committee (NOC) for the successful organisation of the event and especially to all attendees for participating in and contributing to this event and we hope that you enjoyed the familiar atmosphere which stimulated intensive and successful discussions.

Submitted by: Peter Kopacek (IPC chair, AT) and Bahadur Ibrahimov (NOC chair, AZ)

IFAC is on social media!
Direct links to IFAC's presence on Facebook, LinkedIn, and Twitter can be found on the IFAC website.

In addition check out the IFAC Blog at <http://blog.ifac-control.org/>

From the IFAC President

Dear IFAC Friends and Colleagues,

Change. Some find it scary. Others necessary. And in IFAC we obviously believe that a rapidly changing environment is reason enough to also adjust how our old friend IFAC should operate.

The Federation is over 60 years old and was founded in times when the Iron Curtain was dividing the world into two parts. All? Well not entirely! One small community of indomitable control engineers held out, decided to stand together founding the Federation of Automatic Control. But let me not lecture you about IFAC history (even by using Asterix quotes). The point is that while some grown traditions, operations and values are most essential to IFAC, other structural circumstances need to be updated from time to time. Just imagine that the original constitution was written in a time where every correspondence had to be written by letter, officially translated and sent around the globe by horse (ok, the last one is an exaggeration).

These days, the changes have accelerated, not only concerning the structural environment, but also with respect to our field. Systems engineering, automation and control are more timely, more relevant and more needed than ever. For IFAC, this means change. IFAC needs to once more rethink its executive structure, its meeting cycle and agility to adapt to the challenges and possibilities of the future. This was one important theme during the Council and Related Meetings in Florianópolis, Brazil, early September 2018.

One outcome of the discussions in Council, as already hinted towards, is the executive structure. After long time planning, discussion and revisions, we presented a new executive structure for IFAC to Council, which is designed to be better suited to IFAC's needs and goals and to make IFAC more efficient. The key elements of the new structure are a flat hierarchy, more flexibility with an additional Vice-President and Board, and an emphasis on the most important topics within IFAC. Furthermore, to increase the agility of IFAC, an accelerated meetings cycle was implemented in the last year, where an additional Fall Officers Meeting complements the Spring Officers Meeting and the annual Council and Related Meetings.

Other most timely discussions included measures to decrease registration fees for IFAC events, an IFAC Conference App to improve the experience of our conference participants, but also to introduce a more sustainable solution with respect to natural resources, the initiation of an inclusion and diversity strategy for IFAC and many more ideas. The discussions in the IFAC Council were very forward and goal oriented and I want to compliment and thank the Council Members very much.

For many of the above-mentioned items that were initiated in Florianópolis, the hard work has just started. There are a lot of issues and yet open questions that need careful consideration, but I will keep you posted!

Wishing you all a merry holiday season and all the best for a healthy, happy and successful year 2019.

With warm regards from cold Stuttgart,
Frank Allgöwer