## Report of TECIS 2018

The 18th conference of the IFAC TC 9.5 (TECIS 2018, formerly "SWIIS") was organised by the Austrian and Azerbaijan IFAC NMO and took place in Baku, a beautiful city on the Caspian sea in Azerbaijan between September 13th to 15th, 2018.

IFAC 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 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 a new IFAC 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 8 plenary talks, 5 invited papers and 25 regular sessions. They covered a very broad field 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 plenary papers were presented by Frank Allgower (DE) "From the Classical Feedback Loop to the New Cybernetics of the 21st Century", T. Aliyev (AZ) "Technologies and Systems of Noise Control of the Beginning and Dynamics of Development of Accidents and their Applications", M. Sarfraz (KW) "Shape Control & Designing Objects", F. Aliev (AZ) "Algorithm For Solving The Problem Of Optimal Stabilization By Output And Their Application" T.Duda (CH) "Addressing challenges in the oil, gas and power industry in the light of industry 4.? and big data. ", P.Groumpos (GR) "Intelligent Control and Cognitive Control for a global coherence and sustainable economic growth for the humankind.", N. Jesse (GER) "Organizational Evolution - How Digital Disruption Enforces Organizational Agility" and L. 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. From 7 finalists for the "Young authors award "the paper of Ines Bula (TU Wien/UBT) was selected for the award by the selection committee.

The modern conference hotel, with a tremendous conference infrastructure, was located at 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 Azerbaijan music (Orchestra with 65 peoples) and traditional dancers and a welcome party at the Ateshgah fire temple. To give the international participants an impression on the landscape and the history of Azerbaijan 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 Organizing Committee (NOC) for the successful organization 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.



Part of the TC 9.5 family Further pictures and videos are available at: <u>https://tecis18.org/news/</u> Peter (Kopacek)