

Minutes of the online meeting at the IFAC WC in Berlin
(many thanks to Anthony who provided the main parts of them)

Significant informal discussion on COVID and the impact on academics teaching duties/practice and how we might support as a TC.

Summary of achievements from past 3 years, general activities, including prizes, survey project, special sessions at conferences. Encouraged members to continue to be proactive in proposed sessions at the conferences they attend to ensure a good profile for control education.

Reported significant contributions to the current World Congress: Demonstrator session (17), benchmarks in control education (13), software in control education (6), automatic control in aerospace (6), virtual and remote labs (8), regular session (11), panel session, 'Girls in Control' workshop. Please keep up the good work in future and continue to propose and organise educational activities.

We have co-sponsored a number of events in the past three years.

- 16th IFAC Conference on Programmable Devices and Embedded Systems PDES 2019.
- 5th IFAC Symposium on "Telematics Application" TA 2019.
- 2nd IFAC Conference on Cyber-Physical & Human-Systems 2018.
- 3rd IFAC conference on advances in PID control, 2018.
- 14th APCA International Conference on Automatic Control and Soft Computing (CONTROLO 2020).
- Advances in Control and Optimization of Dynamical Systems, 2020, Chennai, India, February 16-19.

If you are actively involved in any conferences, consider requesting co-sponsorship and arranging some education sessions.

Brief report from VC for industry (Atanas) on their activities and links to education.

The very first TC9.4 Lifetime Achievement Award was made to Sebastian Dormido at the ACE event in 2019.

Best paper in control education learning tools at the IFAC world congress 2020, Sponsored by Mathworks,

FloatShield: An Open Source Air Levitation Device for Control Engineering Education
Gergely Takács, Peter Chmurciak, Martin Gulan, Erik Mikulás, Jakub Kulhánek, Gábor Penzinger, Marcel Vdolecek, Milos Podbielancík, Martin Lucan, Peter Sálka and Dávid Sroba

Best paper in control education at the IFAC world congress 2020, Sponsored by Emerald Group:

Experience with use of HIL simulators in control engineering course,
Martin Langmajer, Martin Goubej

Summarised the status of the survey project on a 1st course in control, for which the first stage is complete.

A brief discussion on what next where the focus is likely to be on sharing resources. Likely to be a working group looking at how to manage and provide a control repository for education resources.

Hamburg agreed as host for 2022 ACE. NOC will be led by Margret (HAW Hamburg), Steffi (OVGU Magdeburg) and Gerwald Lichtenberg (HAW Hamburg).

Discussion about next IBCE being an internet run conference as this will vastly reduce costs and simplify attendance.

IFAC blog. Roxy agreed to submit something on behalf of TC9.4 linked to the girls workshop.

Workshop for girls was very successful (100 participants) and TC9.4 encouraged this to be extended to more languages and repeated. Core coordinator was: roxanne.jackson@ovgu.de

Also encouraged to contact Mary Doyle Kent - Chair of the Working Group on Diversity and Inclusion in TC9.5 and also linking into the new IFAC D&I Committee: mdkent@wit.ie. Larry agreed to write and make introductions.

Damiano and Steffi would like some support for their project on mapping, modelling and understanding student progress through the curriculum and thus how to give insightful hints and guidance to students based on what they do.

Alexander Fradkov would like a working group on the history of control.

IFAC has now begun an activity fund (deadlines April/Oct) so that you can apply for support to run outreach events, events supporting diversity, competitions and so forth. Nominal limit of 5000E, but each case on its merits.

Bozena made a proposal for structural changes in IFAC to raise the profile of education in the management hierarchy. She believes that IFAC Council is increasingly recognising the achievements and importance of control education.

Antonio has talked to the new IFAC Liaison for Education, Lucy Pao, who is looking forward to working with our TC and we will see together how to increase the role of education in IFAC.

We have a need for remote platforms, remote laboratories and so forth and how we share this information. Cristina proposes to work together on getting some consensus on good practice.