IFAC NEWSLETTER

INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL

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New IFAC Journal Editors:
Changes in 2022

No.1

February 2022

New Editors-in-Chief are appointed for Mechatronics and for Engineering Applications of Artificial Intelligence. Find ou more about the Editorial boards and about the new EiCs Tsu-Chin Tsao and Patrick Siarry.

New editorial teams for *Mechatronics* and *Engineering Applications of Artificial Intelligence* are in place! In January 2022, two IFAC journals saw changes in their editorial teams as the previous editors-in-chief stepped down when their terms of service came to an end. Sincere thanks go to Reza Moheimani (*Mechatronics*, 2016-2021) and Ajith Abraham (*EAAI*, 2016-2021) for their outstanding service to these two journals, and the many impressive developments they drove forward.

We now warmly welcome:

Mechatronics

Editor-in-Chief: Professor Tsu-Chin Tsao (US)

Co-Editor-in-Chief (Robotics): Professor Kristin Y. Pettersen (NO)

Co-Editor-in-Chief (Mechatronics): Professor Bin Yao (US)

Co-Editor-in-Chief (Robotics and Mechatronics Letters): Dr Christian Ott (DE)

Further reading: https://www.journals.elsevier.com/mechatronics/news/farewell-editorial-from-professor-reza-moheimani-editor-in-chief

Engineering Applications of Artificial Intelligence

Editor-in-Chief: Professor Patrick Siarry (FR)

Deputy Editor-in-Chief:
Dr Andries Engelbrecht (ZA)

Further reading: https://www.journals.elsevier.com/engineering-applications-of-artificial-intelligence/news/new-editorial-team-for-2022

All the best of luck to the new editors as they take on their new roles and continue the path of growth and development already well-established for both journals.

Submitted by: Kay Tancock, IFAC Elsevier representative

Mechatronics Editor-in-Chief

Tsu-Chin Tsao (B.S. National Taiwan University, Taipei, Taiwan, M.S., Ph.D. University of California, Berkeley) is a Professor at the Mechanical and Aerospace Engineering Department, Henry Samuelli School of Engineering and Applied Science, University of California Los Angeles, where he directs the Mechatronics and Control Laboratory and conducts research in precision motion, vibration control, mechatronics and control with a broad range of applications.

EAAI Editor-in-Chief

Patrick Siarry received the PhD degree from the University Paris 6 in 1986 and the Doctorate of Sciences (Habilitation) from the University Paris 11 in 1994. He was first involved in the development of analog and digital models of nuclear power plants at Electricité de France. He is a professor in automatics and informatics at University Paris-Est Créteil, France, where he has been since 1995. His main research interests are computer-aided design of electronic circuits, and the applications of new stochastic global optimization heuristics to various engineering fields. He is also interested in the fitting of process models to experimental data, the learning of fuzzy rule bases, and of neural networks. He served as Deputy Editor-in-Chief of the *EAAI* journal from 2014-2021.

The IFAC Journals

Automatica
http://www.journals.elsevier.com/automatica

Control Engineering Practice
http://www.journals.elsevier.com/control-engineering-practice

Engineering Applications of Artificial Intelligence
http://www.journals.elsevier.com/engineering-applications-of-artificial-intelligence

Journal of Process Control
http://www.journals.elsevier.com/journal-of-process-control

Annual Reviews in Control
http://www.journals.elsevier.com/annual-reviews-in-control

Journal on Mechatronics
http://www.journals.elsevier.com/mechatronics

Nonlinear Analysis: Hybrid Systems
http://www.journals.elsevier.com/nonlinear-analysis-hybrid-systems

IFAC Journal of Systems & Control
http://www.journals.elsevier.com/ifac-journal-of-systems-and-control

IFAC-PapersOnLine
http://www.journals.elsevier.com/ifac-papersonline

Harold Chestnut Engineering Textbook Prize:
Call for Nominations

The Harold Chestnut Control Engineering Textbook Prize is presented at each triennial IFAC World Congress for the best control engineering textbook for which the first edition(s) occurred not later than the Congress just prior to the one at which the award is presented. It recognizes the author(s) of the textbook(s) judged to have most contributed to the education of control engineers. The prize consists of a monetary prize and a certificate. This prize was created in 1986 and renamed the Harold Chestnut Control Engineering Textbook Prize in 2002, in honor of IFAC's first president.

Each nomination must be made by a nominator who is responsible for providing full and accurate information. Any person is eligible to serve as a nominator, with the exception of the chair/s and members of the Harold Chestnut Control Engineering Textbook Prize Selection Committee (Chair: Bozenna Pasik-Duncan, Vice-Chair: Antonio Visioli; Members: Ruth Bars, Bonnie Ferri, Miroslav Krstic, Iven Mareels, Henk Nijmeijer) and the IFAC Awards Chair (Janan Zaytoon). Please note that self-nominations are not allowed.

CALL FOR NOMINATIONS FOR THE HAROLD CHESTNUT CONTROL ENGINEERING TEXTBOOK PRIZE

The Harold Chestnut Control Engineering Textbook Prize Selection Committee of the International Federation of Automatic Control (IFAC) calls for nominations for the triennial Harold Chestnut Prize.

The Prize is awarded to the author(s) of a control engineering textbook that has most contributed to the education of control engineers. The Prize, consisting of a monetary award and a certificate, will be presented at the 22nd IFAC World Congress that will be held in Yokohama, Japan from 9-14 July 2023.

To be considered, nominations must relate to books that are:

1. Written in English (the official IFAC working language)

2. Published between 1 September 2014 and 31 July 2020.

3. No more than one IFAC Control Engineering Textbook Prize may be given for any particular textbook.

4. Textbooks (co-) authored by the chair/s and members of the Harold Chestnut Control Engineering Textbook Prize Selection Committee and by the IFAC Awards Chair are not eligible.

Nominations should include

a) A nomination letter that states the full title, name(s) and address of the author(s), name of the textbook, date of publication, and name and address of the textbook's publisher;

b) Evidence of the contribution/s of the textbook to the education of control engineers; and

c) Any additional information that may support the judging process, as per the selection criteria listed below. It is important to note that only those book reviews in IFAC journals (*Automatica*, *Control Engineering Practice*, *Annual Reviews in Control*, *Engineering Applications of Artificial Intelligence*, *Journal of Process Control*, *Mechatronics*, *Nonlinear Analysis: Hybrid Systems*, *IFAC Journal of Systems and Control*) and journals of IFAC NMOs, as well as other reputable academic journals (e.g. *IEEE Transactions*) will be considered.

All nominations will be evaluated using the selection criteria:

• Originality and innovation
• General content in terms of the topics covered
• Clear applications to real problems
• Style:
    - Presentation, readability and clarity in relation to the content
• Meeting educational objectives:
    - Clear statement of what students should be able to do
    - Worked examples and exercises
    - Software support
    - Multi-disciplinary examples (cross-boundary applications of control)
    - Use by practicing engineers

To be considered, nominations must be received by 1 February 2023. All submissions should be sent via e-mail as a single PDF file containing all required information. If the prize-winning textbook is written by more than one author, the monetary component of the prize will be equally split among the authors with each author receiving a certificate.

The winner(s) will be notified well in advance to allow for planning their attendance in Yokohama. Winner/s are kindly requested to not inform anyone of the win prior to the Congress, in particularly the textbook's publisher.

Please submit nominations to: Prof. Bozenna Pasik-Duncan (University of Kansas, US), bozenna@ku.edu

https://www.ifac-control.org/awards/textbook-award

To register as an IFAC affiliate or to update your information please use the IFAC affiliate registration form.
ifac-control.org/about/ifac-affiliate-registration

From the IFAC President

Services to IFAC Affiliates: New! 10€ registration fee reduction.

Dear IFAC Friends and Colleagues,

IFAC Conferences are thriving, despite the various limitations on international travel and in-person gathering opportunities due to the Covid-19 pandemic! But IFAC and IFAC Conferences flourish not only thanks to its many officials serving in their various volunteer capacities, but also and mainly due to the individual "IFAC Affiliates" who throughout the world are interested in IFAC and contribute to the technical areas served by IFAC activities.

In an effort to advertise the IFAC Affiliation program and to reward IFAC Affiliates for registering as such, it was decided in 2021 by the IFAC Council that all IFAC Conferences and IFAC co-sponsored conferences should offer a discounted rate to IFAC Affiliates. Since registering as IFAC Affiliate is open to anyone and free of charge, and with the aim of limiting the impact on conference finances, the conference registration discount was decided to be at a symbolic level.

More precisely, it has been established that each conference registration should in the future be 10€ (or the local monetary equivalent) less for IFAC Affiliates. For example, a conference with a 300€ registration fee would be 290€ for someone who indicates their status as an IFAC Affiliate. If you receive this Newsletter directly from IFAC you are already an IFAC Affiliate and are encouraged to take advantage of the new reduced registration fees for IFAC Conferences.

In addition to the 10€ discount on IFAC Conference registrations the IFAC Affiliates also receive Calls for Papers for technical meetings in their selected areas of interest (these areas are indicated by checking the box for the appropriate areas when filling out the affiliate registration form) and are entitled to a special rate for subscriptions to the IFAC Journals. More information about being an IFAC Affiliate and the benefits of affiliate status is available at:

https://www.ifac-control.org/about/participation

More, free of charge, services to IFAC Affiliates are expected for the near future and will be advertised in due course. Anyone interested in control engineering may register as an IFAC affiliate and is encouraged to do so.

To register as an IFAC Affiliate or to update your current registration (such as changing your email address or area/s of technical interest) please fill out and submit the affiliate registration form:

https://www.ifac-control.org/about/ifac-affiliate-registration

Best regards,

Hajime Asama
IFAC President 2020-2023

Performance of the IFAC Control Orchestra at IFAC 2023

We are proud to announce the comeback of one of the highlights of IFAC 2020 World Congress, Berlin: the IFAC Control Orchestra! Sign up to learn more!

The 21st IFAC World Congress featured the first performance ever by the IFAC Control Orchestra. In this unique event, a virtual orchestra performance was presented including only musicians from the automatic control community. In case you have missed it, you can still enjoy the two pieces that were performed virtually: *"For a lifetime"*, based on *"Ein Leben lang"* by the Swiss group Fäaschtbänkler (https://www.youtube.com/watch?v=ARj3vz7NT6I) and *"Smoke on the Water"*, based on the original song by Deep Purple (https://www.youtube.com/watch?v=fAC78eSjCz8).

The organizers of the 22nd IFAC World Congress 2023 in Yokohama are now planning a comeback of the IFAC Control Orchestra, this time live on stage at the congress site. The idea is to form an orchestra ensemble including only musicians from the automatic control community, to practice on site during the IFAC World Congress, and to put on a live performance during the congress.

IFAC Control Orchestra 2020

For this event, we are looking for interested people from the automatic control community who have some previous musical experience and who are interested in being part of a highly dynamic, distributed, nonlinear, adaptive, fuzzy, MIMO, fault-tolerant, learning-based feedback control system with experimental verification and validation.

If you would like to join the IFAC Control Orchestra, or would just like to be informed about the next steps, then subscribe to our e-mail list at https://www.ifac2023.org/contact/

Submitted by: Julian Berberich

Editor's Note: Further information about the IFAC Control Orchestra 2020 is available at: https://www.ifac-control.org/about/ifac-control-orchestra

IFAC Foundation Award

Recognizing contributions to diversity and inclusion within IFAC

The Foundation starts a new award recognizing contributions to diversity and inclusion within IFAC.

The IFAC Foundation is pleased to announce the creation of a new award, to be given triennially, to an individual or a team that has made outstanding contributions to the scientific promotion and/or the advancement of diversity and inclusion within IFAC (conference/event, technical committee, publications, NMO, etc). The contribution could represent a single activity, or a sustained effort over multiple years. Nominations for the 2023 award must be submitted before June 3, 2022.

The award winner(s) will receive a cash prize of 2000 euro (total) and will be featured in a special session at the IFAC 2023 World Congress. The details of the special session will be developed together with the organizers of the World Congress, after the award winner has been determined.

Nominees should have had sufficient activity within IFAC to demonstrate their contributions to the scientific promotion and/or the advancement of diversity and inclusion within the Federation. The nomination statement should describe the contributions, and what the impact has been within IFAC, and should mention specific outcomes, including qualitative or quantitative metrics. Supporting letters should give specific details about the contributions and their impact. A short video describing the contributions should also be prepared and submitted. Further details on preparing the nomination package can be found at the IFAC Foundation website: https://foundation.ifac-control.org/projects/the-ifac-foundation-diversity-and-inclusion-award

The selection committee for the award will be chaired by Dawn Tilbury (US) and includes members Lidia Auret (ZA), Ian Craig (ZA), Steve Kahne (US), and Francoise Lamnabhi-Lagarrigue (FR). After careful evaluation of candidates and through a dialogue among the committee members, a recommended winner will be selected and forwarded to the IFAC Foundation through the President. The official winner will be determined by a vote of the Foundation Board in July of 2022.

Note that members of the Selection Committee, the Foundation Board or Foundation Group of Experts cannot be nominees or nominators. The names of the IFAC Foundation Board and the Foundation Group of Experts are listed at: https://foundation.ifac-control.org/board

Modeling, Estimation and Control Conference (MECC 2021)
24-27 October 2021
Online

The 1st MECC, co-sponsored by IFAC, consisted of 147 contributions from 20 countries included three plenary talks, four semi-plenaries, 2 tutorial sessions, 4 workshops. 3 best papers and 3 best student papers were awarded.

The inaugural Modeling, Estimation and Control Conference 2021 (MECC 2021) sponsored by the American Automatic Control Council (AACC) and co-sponsored by the International Federation of Automatic Control (IFAC), took place online from 24-27 October 2021. As a brand-new conference, MECC 2021 served the scientific and engineering communities with interests in the modeling, estimation, and control of cross-disciplinary mechanical systems to provide a platform for the dissemination and discussion of the state of the art in relevant research areas; and created opportunities for networking with colleagues.

The conference featured conference awards, contributed sessions, invited sessions, workshops, special sessions, plenary talks, student programs, as well as committee meetings, industry programs, and social functions. Presentations of the accepted papers were made using pre-recorded videos prepared by the authors. Moreover, live Q&A sessions were conducted after each paper's presentation. About 226 attendees from all over the world joined various sessions of MECC 2021.

In addition to the regular and invited sessions, three plenary talks and four semi-plenary talks were organized. The list of plenary talks in chronological order:

-Dr. Domitilla Del Vecchio, Massachusetts Institute of Technology, *"Modeling and Mitigating Molecular Loads for Genetic Circuit Engineering"*

-Dr. Tsu-Chin (T-C.) Tsao, University of California- Los Angeles, *"High-Performance Control for Precision Mechanical Motions"*

-Dr. Rajesh Rajamani, University of Minnesota, Twin Cities, *"Nonlinear Observers and Everyday Applications in Motion Estimation"*

The list of semi-plenary talks in chronological order is:

-Dr. Daniel Abramovitch, Agilent Technologies, *"Bridging the Gap: Using Real World Problems to Unveil Deep Control Principles"*
-Dr. Yue Wang, Clemson University, *"Trust and Risk in Human-Autonomy Interaction: A Systems and Control Perspective"*

-Dr. Nicole Abaid, Virginia Tech, *"Unlost in the Woods: Modeling Lost Person Behavior for Wilderness Search and Rescue"*

-Dr. Iman Shames, Australian National Univer-

sity, *"Computing, Fast and Slow: Dependable Decision Making Across Different Time, Information, and Uncertainty Scales"*

Two tutorial sessions were solicited and included in the program:

•*Modeling, Estimation, and Control of COVID-19*

•*Engaging Your Students with Interactive Exercises, Virtual Labs and Low-Cost Hardware Experiments Using MATLAB and Simulink*

In addition, two full-day and two half-day pre-conference workshops took place on Sunday, October 24, 2021. These workshops were extremely well-received with more than 320 registered participants. The list of pre-conference workshops:

•*Safe Control and Learning under Uncertainty*

•*Advanced Big Data Analytics for Industrial Control Performance Assessment*

•*Practical Methods for Real World Control Systems*

•*Publishing Your Research 101 – Skills for Graduate Students*

The following Special Sessions also took place during the 3-day MECC 2021 programs:

•*Industry-Led Research Roadmap Panel on Control Engineering in the Age of AI*

•*The Impact of Inclusivity on Innovation*

•*An Overview of Modeling, Estimation, and Control Funding Opportunities at NSF*

•*Underrepresented Stories in Controls & Robotics Industry*

A conference paper competition and a student paper competition were organized. The winning papers for the conference paper awards are listed below:

•Best Modeling Paper Award: Maria Castano and Xiaobo Tan, *"Averaged Modeling of Pectoral Fin-Actuated Robotic Fish"*

•Best Estimation Paper Award: Merrill Edmonds and Jingang Yi, *"Learning-Based Near-Surface Modeling for Predictive Multirotor Landing Control"*

•Best Control Paper Award: Seyyed Alaviani and Atul Kelkar, *"Semistability and Stochastic Semistability for Switched Nonlinear Systems by Means of Fixed-Point Theory: Application to Constrained Distributed Consensus Over Random Networks"*

The winners of the student paper awards are:

•Best Student Paper Gold Award (shared): Satya Prasad Maddipatla, Hossein Haeri, Kshitij Jerath, and Sean Brennan, *"Fast Allan Variance (FAVAR) and Dynamic Fast Allan Variance (D-FAVAR) Algorithms for both Regularly and Irregularly Sampled Data"*

•Best Student Paper Gold Award (shared): Mohammed Al-Rubaiai, Xinda Qi, Zachary Frank, Ryohei Tsuruta, Umesh Gandhi, Kwang J. Kim, and Xiaobo Tan, *"Control-oriented Nonlinear Modeling of Polyvinyl Chloride (PVC) Gel Actuators"*

•Best Student Paper Bronze Award: Alejandro Astudillo, Justin Carpentier, Joris Gillis, Goele Pipeleers, and Jan Swevers, *"Mixed Use of Analytical Derivatives and Algorithmic Differentiation for NMPC of Robot Manipulators"*

The organizers also created multiple social networking sessions during the conference, powered by Gather.town, to facilitate interactions among participants.

We would like to thank all the participants, and particularly the authors for their work and for their collaboration during the preparation phase of the conference. Our thanks also go to the reviewers, members of the Organizing Committee and the International Program Committee, and the conference editorial board for their hard work in evaluating the submitted papers.

Submitted by: Junmin Wang, MECC General Chair

13th IFAC Conference on Control Applications on Marine Systems, Robotics, & Vehicles (CAMS 2021)
22-24 September 2021
Online

The 13th CAMS was held online from 22-24 September 2021 and gathered a total of 163 participants from 23 countries. The program consisted of 67 papers and four plenary talks.

The aim of CAMS 2021 was to bring together leading scientists, researchers, students and industry representatives on relevant research topics directly or indirectly related to the broad field of maritime autonomy. In this way, the exchange of ideas and mutual cooperation were promoted.

The joint organizers – the German Institute for Information Technology OFFIS / DLR, the University of Rostock, the University of Oldenburg, and the International Federation of Automation Control (IFAC) – would have very much liked to welcome the participants from 23 countries personally in Oldenburg, Germany, but unfortunately the pandemic situation did not allow for this. Nevertheless, the conference was an interesting, informative and engaging event to which the participants made the greatest contribution. The topics presented were the following:

Autonomous and remotely operated (surface and underwater) marine vessels
Intelligence and autonomy in marine systems and operations
Modeling and simulation of marine systems

Dynamic positioning systems for ships & platforms
Maritime Robotics
Sensors and Actuators in Marine Systems
… and many others

The invited session covered the topic *"Remote Access, Development and Exploitation - A New Era of Advancements."*

The plenary speakers Dr.-Ing. Jeronimo Dzaack, Prof. Dr.-Ing. Peter Liggesmeyer, Prof. Dr. Maarja Kruusmaa and Dr. Dirk Jürgens impressed the audience with exciting presentations on the above-mentioned topics. Despite the fact that the entire conference was held online, a very positive atmosphere was created with the help of a professional tool for exactly this purpose, because these were not – as usual – online lectures where you dial in with a link, but the participants were able to look and walk around and exchange ideas in a virtual conference building with a bus stop, park and vending machines as well as separate meeting rooms, a reception and, of course, the session and plenary rooms. Thus, despite the pandemic, the participants had the feeling of being at a "real"/in-person conference.

Submitted by: David Reiher, University of Oldenburg, Head of Local Organization

16th IFAC Workshop on Time-Delay Systems (TDS 2021)
29 September - 1 October 2021
Online

The 16th TDS was held in virtual format. The workshop had 60 presentations in the program, three plenary lectures, two tutorial sessions, a Young Author Award and the Delay Systems Life Time Achievement Award.

The 16th IFAC Workshop on Time Delay Systems (TDS 2021) continued the long-time success of the workshop series since 1998, which aims to meet the growing interest of the international scientific community in theoretical advances and technological applications of systems and control related to time delay systems. The Workshop was originally planned to take place on the campus of the Guangdong University of Technology in the city of Guangzhou, China with its historical charm and modern metropolitan vibrance, in the format of a hybrid meeting.

Under the leadership of National Organization Committee (NOC) Chairs and Vice Chair Shengli Xie, Guoxu Zhou, Weichao Xu, and after more than one year of planning and preparation, the workshop venue and the university were ready to welcome the TDS 2021 attendees. However, as a consequence of newly reported cases of COVID-19 in the weeks preceding the workshop and the resulting pandemic control measures, the format was eventually changed to a fully online meeting. The International Program Committee chaired by Jie Chen and Wim Michiels worked closely

with the NOC to present a quality workshop program, as well as to secure the smooth operation of the workshop.

In composing the program, a lot of attention was paid to ensuring a high technical quality, a balance in terms of topics, formats and speakers' profiles, and to complementarity. Since the audience of the TDS workshops has traditionally been very multi-disciplinary (all branches of engineering, pure, applied and computational mathematics, physics and biology), contributions were solicited in the form of both papers and extended abstracts, as the latter facilitate participation from fields where conference papers are not typical.

A first highlight of the program consisted of the plenary talks by Guang-Ren Duan, Miroslav Krstic and Silviu-Iulian Niculescu, who presented major recent developments in the domain of time-delay systems. The technical program of the Workshop includes the presentation of 57 contributions in the form of papers (37) and extended abstracts (20), addressing the latest methodological developments and successful new applications. These presentations were organized in six invited sessions, three contributed sessions and, as a second highlight, two invited tutorial sessions, where recent developments in computational methods and software tools were presented through interactive demonstrations and tutorials of publicly available software packages.

A third highlight was the awards ceremony where two awards, established by the IFAC Technical Committee 2.2 (Linear Control Systems), were announced and presented, in the presence of Silviu-Iulian Niculescu, TC 2.2 Chair and M. Elena Valcher, IFAC Technical Board Member in charge of the TC Awards. The TDS 2021 Student Best Paper Award, recognizing excellence in papers whose primary contributor is a student, was presented to Yaopo Li for the paper *"Robust PID Control of Second-Order Uncertain Nonlinear System with Time-Varying Delay: An Input-Output Approach"*, and to Jeanne Redaud and for the paper *"Observer Design for a Class of Delay Systems Using a Fredholm Transform"*. The triennial IFAC TC Award: Delay Systems Life Time Achievement Award was presented to Emilia Fridman, Vladimir L. Kharitonov and Gábor Stépán. The excellence, identified not only in lifetime contributions of established domain experts but also in the work of promising young researchers, and the resilience of the community in difficult times, witnessed by the many original contributions presented at the workshop and enthusiastic participants, promises to foretell a bright future for the ever-growing community of time-delay systems.

Heartfelt thanks goes to all authors and participants who made the workshop a success, to the organizers of the many invited sessions that formed the backbone of the technical program, to the program committee members for organizing a careful review process and composing a high-quality program, and to the many anonymous reviewers for providing timely and expertly evaluations under a tight schedule.

Last but not least, the Workshop owes a special thanks to the local organizers from Guangdong University of Technology, who invested extraordinary efforts to ensure a smooth organization and operation in difficult and unpredictable circumstances. The strong leadership from the sponsoring IFAC Technical Committee 2.2 on Linear Control Systems, and the strong support from the IFAC Secretariat and Paperplaza, are also gratefully acknowledged.

IFAC Technical Lecture

Presented by IFAC President-Elect Dan Cho:
Now Available on
IFAC YouTube Channel

The latest IFAC technical lecture, given online, was by IFAC President-Elect Dan Cho. It is now available on the IFAC YouTube Channel.

https://www.youtube.com/channel/UCLcWo-qbVNxo9rVSS9NKQDeA

The lecture „*High-performance Nonlinear Control Method for Servo Systems in Automation and Robotics: Theory to Practice*" was moderated by IFAC VP of Operations (and the EiC of this Newsletter) Dimitri Peaucelle (FR) and was presented by IFAC President-Elect Dongil "Dan" Cho (KR) on 18 January 2022. More than 100 people were in the online audience and could submit questions, discussion points, etc.

Dongil "Dan" Cho
IFAC President-Elect

IFAC receives an association support subsidy, which is noted in German in the imprint of each issue of this Newsletter. An important component of acknowledging the generous support for many years has been a yearly technical lecture in Austria, which is an opportunity for members of the Austrian control community to meet and interact with internationally-renowned experts and learn from their expert knowledge. Due to the pandemic and various restrictions on travel, in-person gatherings, etc. the Executive officers' meetings in 2020 and 2021 had to be moved online, and the in-person lecture did not take place in those years.

IFAC Newsletter Task Force: Report from the Chair

The Newsletter Task Force recommends some evolutions. One of these, the HTML IFAC expresso including a cartoon, is implemented when releasing the current issue.

The Newsletter Task Force has been established through a motion during the council meeting at the virtual IFAC World Congress 2020. It aims for a new concept and presentation of the newsletter as well as for finding a dedicated "creative" editor. The HTML-based email summary of the newsletter and the novel control cartoons, which are first sent out with this issue, are two major steps towards the goals of the task force.

The task force started its work in October 2020 under the lead of Moritz Schulze Darup from TU Dortmund University (DE). Members are Frank Allgöwer, Anne Koch (both University of Stuttgart, DE), Elske Haberl (IFAC Secretariat, AT), Dimitri Peaucelle (IFAC Secretariat / LAAS-CNRS, FR), Hideaki Ishii (Tokyo Institute of Technology, JP), Marzia Cescon (University of Houston, US), Nils Schlüter, and Philipp Binfet (both TU Dortmund University, DE). While the task force's goals were clear, the group discussed multiple approaches to realize them. As an intermediate result, the members decided to first leave the PDF-newsletter as it is, but to provide the related email in a more informative, attractive, and entertaining form.

The new HTML-based email presents abstracts of the newsletter's articles in a corporate design. In addition, two novel features are now part of the email. First, the IFAC Espresso will briefly inform about current motions, decisions, or events relevant to the majority of IFAC affiliates. Second, each email will come with a control-related cartoon provided by Brian Douglas from Engineering Media. The task force is very happy about this new collaboration and looking forward to many entertaining cartoons. Furthermore, it wants to acknowledge that the implementation of the HTML-email into the "IFAC ecosystem" has been greatly supported by IFAC's IT administrator Harald Albrecht.

Finally, the task force is well aware that HTML-emails are not everybody's cup of tea. As a consequence, a plaintext version is sent out together with the HTML-email and every recipient can freely decide on the preferred version. The members of the task force hope, however, that the new look and the entertaining cartoons are good arguments for the (secure, accessible, and responsive) HTML-version.

Submitted by: Moritz Schulze Darup, Newsletter Task Force Chair

Photo: The Newsletter Task Force meeting virtually: Top L to R: Moritz Schulze-Darup, Marzia Cescon, Nils Schlüter; Middle L to R: Dimitri Peaucelle, Philipp Binfet, Hideaki Ishii, Bottom L to R: Elske Haberl, Frank Allgöwer, Anne Koch

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Calendar of IFAC Conferences

Title	2022	Place	Further Information
14th IFAC Workshop on Intelligent Manufacturing Systems IMS 2022	March 28 – 30	Tel-Aviv Israel	https://ws.eventact.com/IMS2022/ yuvalc@afeka.ac.il
16th IFAC Symposium on Large Scale Complex Systems: Theory and Applications LSS 2022	April 22 – 24	Xi'an China	https://www.ifaclss2022.com/ yuzhao5977@gmail.com
ACA, ICROS, SICE, IFAC et al. Conference on Asian Control Conference (in cooperation with IFAC) ASCC 2022	May 04 – 07	Jeju Island Republic of Korea	http://ascc2021.org/
17th IFAC Conference on Programmable Devices and Embedded Systems PDES 2022	May 17 – 19	Sarajevo Bosnia and Herzegovina	http://pdes-conference.eu/ dejan.jokic@ibu.edu.ba
8th International Conference on Control, Decision and Information Technologies CoDIT 2022	May 17-20	Istanbul Turkey	https://codit2022.com/
2nd IFAC Workshop on Integrated Assessment Modelling for Environmental Systems IAMES 2022	June 01 – 03	Tarbes France	https://iames2022.sciencesconf.org/ francois.peres@enit.fr
11th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2022	June 07 – 10	Pafos Cyprus	https://safeprocess2021.eu/
Conference on American Control Conference (in cooperation with IFAC) ACC 2022	June 08 – 10	Atlanta, GA USA	https://acc2022.a2c2.org/
13th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2022	June 14 – 17	Busan Republic of Korea	http://dycops2022.org/ secretariat@dycops2022.org
6th IFAC Symposium on Telematics Applications TA 2022	June 15 – 17	Nancy France	http://ta22.cran.univ-lorraine.fr/ ta22-contact@univ-lorraine.fr
11th IFAC Symposium on Control of Power and Energy Systems CPES 2022	June 21 – 23	Moscow Russian Federation	https://cpes2021.com/ cpes2021@ipu.ru
10th IFAC Conference on Manufacturing Modelling, Management and Control MIM 2022	June 22 – 24	Nantes France	https://hub.imt-atlantique.fr/mim2022/ contact@mim2022.com
IFAC Workshop on Control for Smart Cities CSC 2022	June 27 – 30	Sozopol Bulgaria	https://csc2022.sai-bg.com/ csc2022bulgaria@gmail.com
14th IFAC Workshop on Adaptive and Learning Control Systems ALCOS 2022	June/July 29 – 01	Casablanca Morocco	http://www.alcos2022.org/ alcos2022@unicaen.fr
9th IFAC Conference on Networked Systems NECSYS 2022	July 05 – 07	Zürich Switzerland	https://necsys22.control.ee.ethz.ch/
11th IFAC Symposium on Intelligent Autonomous Vehicles IAV 2022	July 06 – 08	Prague Czech Republic	https://www.iav2022.eu/ iav2022@guarant.cz
15th APCA International Conference Automatic Control and Soft Computing CONTROLO 2022	July 06 – 08	Caparica Portugal	https://controlo2022.deec.fct.unl.pt/ controlo2022@campus.fct.unl.pt
6th IFAC Conference on Intelligent Control and Automation Sciences ICONS 2022	July 13 – 15	Cluj-Napoca Romania	https://icons2022.utcluj.ro/ icons2022@conference.utcluj.ro

Calendar of IFAC Conferences

Title	2022	Place	Further Information
Conference on European Control Conference (in cooperation with IFAC) ECC 2022	July 13 – 15	London United Kingdom	https://ecc22.euca-ecc.org/ ecc22admin@euca-ecc.org
19th INSTICC, IFAC, et al. International Conference on Informatics in Control, Automation and Robotics (in cooperation with IFAC) ICINCO 2022	July 14 – 16	Caparica Portugal	https://controlo2022.deec.fct.unl.pt/ controlo2022@campus.fct.unl.pt
18th IFAC Workshop on Control Applications of Optimization CAO 2022	July 18 – 22	Gif sur Yvette France	https://cao2022.sciencesconf.org/
13th IFAC Symposium on Advances in Control Education ACE 2022	July 24 – 27	Hamburg Germany	https://ace2022.org/ info@ace2022.org
5th IFAC Workshop on Advanced Maintenance Engineering, Services and Technologies AMEST 2022	July 26 – 29	Bogotá Colombia	https://amest2022.uniandes.edu.co/ amest@uniandes.edu.co
Vienna International Conference on Mathematical Modelling MATHMOD 2022	July 27 – 29	Vienna Austria	https://www.mathmod.at/ mathmod@acin.tuwien.ac.at
19th IFAC Symposium on Control, Optimization and Automation in Mining, Mineral and Metal Processing MMM 2022	August 15 – 18	Montreal Canada	http://ifacmmm2022.org/ ifac-mmm2022@conferium.com
22nd IFAC Symposium on Automatic Control in Aerospace ACA 2022	August 22 – 26	Mumbai India	http://not yet available
9th CACHE/IFAC Conference on Foundations of Systems Biology in Engineering FOSBE 2022	August 28 – 31	Boston (MA) USA	http://fosbe.org/
10th IFAC Symposium on Advances in Automotive Control AAC 2022	August 29 – 31	Columbus (OH) USA	https://car.osu.edu/AAC2022
10th IFAC Symposium on Robust Control Design ROCOND 2022	August/Sept. 30 – 02	Kyoto Japan	http://rocond21.ee.t.kyoto-u.ac.jp/index.html rocond2021-secretariat@googlegroups.com
4th IFAC Workshop on Control of Systems Governed by Partial Differential Equations CPDE 2022	September 5 – 7	Kiel Germany	https://cpde2022.org/ noc@cpde2022.org
9th IFAC Symposium on Mechatronic Systems MECHATRONICS 2022	September 6 – 9	Los Angeles (CA) USA	https://ifacms-movic2022.seas.ucla.edu/ home/
16th IFAC Workshop on Discrete Event Systems WODES 2022	September 7 – 9	Prague Czech Republic	https://wodes2022.math.cas.cz/
15th IFAC Symposium on Analysis Design and Evaluation of Human Machine Systems HMS 2022	September 12 – 16	Santa Clara County (CA) USA	https://www.ifac-hms2022.org/ ifac.hms.2022@gmail.com
25th International Symposium on Mathematical Theory of Networks and Systems (in cooperation with IFAC)	September 12 – 16	Bayreuth Germany	https://www.mtns2022.uni-bayreuth.de mtns2022@uni-bayreuth.de

The IFAC Calendar of Conferences is constantly updated as addditional technical events (Workshops, Symposia, and Conferences) are approved. Due to the Covid-19 pandemic some conferences have had date changes, format changes, cancellations, etc. since their initial approval. Please check back often for the current status. The complete version of the IFAC Calendar of Conferences is available online at:

https://www.ifac-control.org/conferences/@@conference_view

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Calendar of IFAC Conferences

Title	2022	Place	Further Information
7th IFAC Conference on Sensing, Control and Automation Technologies for Agriculture AGRICONTROL 2022	September 14 – 16	Munich Germany	https://www.events.tum.de/frontend/index.php?folder_id=1147 ertug.olcay@tum.de
14th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles CAMS 2022	September 14 – 16	Kgs. Lyngby Denmark	https://www.ifac-cams2022.dk/
2nd IFAC Workshop on Control Methods for Water Resource Systems CMWRS 2022	September 22 – 23	Milan Italy	https://cmwrs2022.deib.polimi.it/ cmwrs2022@polimi.it
8th IFAC Symposium on System Structure and Control (held jointly) SSSC 2022	September 27 – 30	Montreal Canada	http://not yet available
17th IFAC Workshop on Time Delay Systems (held jointly) TDS 2022	September 27 – 30	Montreal Canada	http://not yet available
5th IFAC Workshop on Linear Parameter Varying Systems (held jointly) LPVS 2022	September 27 – 30	Montreal Canada	http://not yet available
13th IFAC Symposium on Robot Control SYROCO 2022	October 17 – 20	Matsumoto Japan	https://syroco2021.com/
21st IFAC Conference on Technology, Culture and International Stability TECIS 2022	October 26 – 28	Prishtina Republic of Kosovo	http://not yet available
16th European Workshop on European Advanced Control and Diagnosis ACD 2022	November 16 – 18	Nancy France	https://acd2022.cran.univ-lorraine.fr/ acd2022-contact@univ-lorraine.fr
1st IFAC Workshop on Control of Complex Systems COSY 2022	November 24 – 25	Bologna Italy	https://eventi.unibo.it/cosy2022 cosy2022@unibo.it
NCACI, IFAC et al. Conference on Australian and New Zealand Control Conference ANZCC 2022	November 24 – 25	Gold Coast Australia	https://anzcc.org.au/ANZCC2022
4th IFAC Workshop on Cyber-Physical and Human Systems CPHS 2022	December 1 – 2	Houston, TX USA	http://not yet available
Title	**2023**	**Place**	**Further Information**
12th IFAC Symposium on Nonlinear Control Systems NOLCOS 2022	January 4 – 6	Canberra Australia	https://nolcos2022.com/ contact@nolcos2022.com
Conference on American Control Conference (in cooperation with IFAC) ACC 2023	May/June 31 – 02	San Diego, CA USA	https://acc2023.a2c2.org/
22nd IFAC World Congress 2023	July 09 – 14	Yokohama Japan	https://www.ifac2023.org/

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