

IFAC NEWSLETTER

E-MAIL: NEWSLETTER@IFAC-CONTROL.ORG | PHONE +43 2236 71447

www.ifac-control.org

Call for Nominations 2023-2026 IFAC Fellows & Major Awards

With this issue of the IFAC Newsletter, the nomination procedure for the 2023-2026 IFAC Fellows and Major Awards is officially open. Please note that the IFAC Fellows and Major Awards are awarded on a triennial (NOT yearly) basis!

Please check the IFAC website <u>ifac-control.</u>
org for further updates about the procedure, and for the nomination and reference material submission links.

Call for 2023-2026 IFAC Fellow Nominations

IFAC is seeking nominations for 2023-2026 IFAC Fellows. The IFAC Fellow award provides a distinction of excellence in the Federation and is conferred on a small number of outstanding scientists or engineers by the IFAC Council, based on the proposal of the Fellow Selection Committee. With the appointment as an IFAC Fellow, IFAC honors outstanding contributions with a high impact in the fields of interest of IFAC in the role as a Scientist, Engineer, Technical Leader or Educator. These contributions may be technical publications, patents, control solutions, products, software, and leadership in research, development and education.

Any IFAC affiliate being control scientist or engineer can be nominated for the title of an IFAC Fellow, with the exception of current members of the IFAC Council, Fellow Search Committee and Fellow Selection Committee. Past involvement in IFAC activities, publications and events is desirable and an asset but not absolutely mandatory. For a list of IFAC Fellows elected so far, please go to the IFAC website at:

ifac-control.org/awards/ifac-fellows

IFAC Fellow candidates must be proposed by a separate Nominator and receive from 3 to 5 reference forms from Referees.

Nominators

Any IFAC Affiliate is eligible to serve as a Nominator with the exception of members of the IFAC Council, Fellow Search Committee or Fellow Selection Committee. The nominator is responsible for the information provided about the candidate. The nominator is asked to read the Nominator Information, complete the Nomination Form according to the requirements given below, and inform the persons indicated as referees that they have been named as such.

If you plan to submit an IFAC Fellow Nomination, please find instructions on the IFAC website to assist you in this nomination process. Strict adherence to procedure is essential; otherwise, a candidate may be placed at a serious disadvantage and possibly excluded from consideration this triennium.

.....

Fellow Nominations need to be uploaded electronically by February 1, 2025

References

Each nomination must be supported by at least three, but not more than five references from IFAC affiliates being internationally reputed experts in the field who are aware of the candidate's contributions. These referees need not be IFAC Fellows themselves. Note that the choice of referees is important for the success of the candidate's nomination. Members of the IFAC Council, Fellow Search Committee or the Fellow Selection Committee are not eligible to serve as referees.

Reference forms need to be uploaded electronically by March 1, 2025

The announcement of the newly elected Fellows will be made shortly after the completion of the vote taken by the IFAC Council in July 2025.

The new elected IFAC Fellows will be honored in a ceremony at the 2026 IFAC World Congress (scheduled to take place in Busan, Korea from 23-28 August 2026).

Call for Nominations for the IFAC Major Awards

The IFAC NMOs, the IFAC Technical Committee Chairs as well as other IFAC affiliates are invited to nominate candidates for one or more of these awards.

The nominations need to be uploaded electronically no later than February 15, 2025

The nominations should in general contain a curriculum vitae of the candidate, a summary of his/her/their major contributions and a proposed citation. Each nomination must be supported by at least three, but no more than five references from IFAC affiliates being internationally reputed experts in the field who are aware of the candidate's contributions. Specific details for the awards are listed below. Nominations should be submitted as a single pdf file.

No.5

October 2024

IN THIS ISSUE

IFAC Fellows and Major Awards 2023-26 Calls

IFAC President's Column

Transition: Irena Kahne

Distinguished Lecture Report (PK)

IFAC Distinguished Lecturers (continuation of a series)

IFAC Social Media

Report from IFAC Conferences: AMEST (IT) & PID(ES)

Portal Statistics

Upcoming IFAC Conferences + IFAC X

The IFAC Journals

Automatica

journals.elsevier.com/automatica

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

Engineering Applications of Artificial Intelligence

journals.elsevier.com/engineeringapplications-of-artificialintelligence

Journal of Process Control

journals.elsevier.com/journal-ofprocess-control

Annual Reviews in Control

journals.elsevier.com/annualreviews-in-control

Journal on Mechatronics

journals.elsevier.com/mechatronics

Nonlinear Analysis: Hybrid

Systems journals.elsevier.com/nonlinearanalysis-hybrid-systems

IFAC Journal of Systems & Control journals.elsevier.com/ifac-journal-

of-systems-and-control

IFAC-PapersOnLine journals.elsevier.com/ifac-

<u>papersonline</u>

October 2024

It is the nominator's role to inform the people listed as referees to send in an reference form with an assessment of the candidate(s).

The reference forms need to be uploaded by March 15, 2025

For each of the Major Awards, a selection committee has been appointed. All awards will be presented by the IFAC President at the Opening Ceremony of the 2026 IFAC World Congress in July 2026 in Busan, Korea.

Every IFAC affiliate can act as nominator or referee, with the exception of members of the corresponding Major Award Selection Committee, the Major Awards Search Committee, and members of the IFAC Council. Self-nominations are not allowed. It may be useful to consider the list of past winners on the IFAC website at ifac-control.org/awards

Please note that it is possible to resubmit a nomination that was made in the past.

A more detailed description of the several Awards, including selection criteria, follows below.

GIORGIO QUAZZA MEDAL (Created 1979)

This IFAC award recognizes lifetime achievements in science and engineering in any of the technical fields covered by IFAC. The contributions should be manifested in technical publications. A nominee should have served IFAC in some capacity, formally or informally. The selection criteria are:

- Quality of publications
- Impact of publications
- Engineering significance
- Service to IFAC
- International recognition

Nominations should contain a curriculum vitae of the candidate, a summary of his/her/their major contributions and an account of their impact, a proposed citation and the names of three to five referees.

NATHANIEL B. NICHOLS MEDAL (Created 1996)

This IFAC award recognizes industrial leadership, outstanding contributions of an individual to design methods, software tools and instrumentation, or significant projects in major applications and advancement of control engineering. The award is given for contributions in any of the technical fields of IFAC. The contributions should be manifested in technical publications, patents or publicly-available reports documenting completed projects or developed products. The selection criteria are:

- Quality of publications
- Impact of publications
- Innovation level of patents
- Impact of patents
- Engineering significance of products and projects
- International recognition

Nominations should contain a curriculum vitae of the candidate, a summary of his/her/their

major contributions and an account of their impact, a proposed citation and the names of three to five referees.

MANFRED THOMA MEDAL (Created 2015)

This is an IFAC award for early career achievements that recognizes outstanding contributions of a young researcher and/or engineer under the age of 40 to the field of systems and control in its widest sense. For the award to be given at the 2026 World Congress candidates are eligible that were born after January 1, 1986. (Age verification, such as passport copy may be requested.)

Candidates are assessed by their scientific and technical contributions to the field of systems and control.

The selection criteria are:

- Quality and impact of publications
- Engineering significance
- International recognition

Involvement in IFAC is not part of the criteria. Nominations should contain a curriculum vitae of the candidate, a summary of the major achievements in terms of the selection criteria above, a proposed citation and the names of three to five referees.

INDUSTRIAL ACHIEVEMENT AWARD (Created 2000)

The IFAC Industrial Achievement Award is given to an individual, or a team of individuals, who has made significant contributions to industrial applications of control in any of the technical fields covered by IFAC. The award can be given for a single achievement (an invention or the leadership of a major project) or a record of achievements over a period of time. There is no requirement that the nominated candidates must have been involved in IFAC.

The selection criteria are:

- Inventions in the control area
- Engineering significance of products and projects
- Industrial leadership
- Promotion of control technology in industry
- Impact of patents
- International recognition

Nominations should contain a curriculum vitae of the candidate(s), a summary of the major achievements in terms of the selection criteria above, a proposed citation and the names of three to five referees.

HIGH IMPACT PAPER AWARD (Created 2009)

This award is to acknowledge the impact of a paper published in any of the official IFAC journals on the broad areas of automatic control theory and applications. At most two such awards will be made in any triennium.

Eligible papers must have been published in any of the official IFAC Journals (Automatica, Control Engineering Practice, Annual Reviews in Control, Journal of Process Control, Engineering Applications of Artificial Intelligence,

From the IFAC President

Dear IFAC Friends and Colleagues,

......

IFAC holds nearly 100 conferences in a triennium. Typically, most of them are scheduled in the two years between the World Congresses, which occur every three years. Out of the 100 conferences, about 65 are IFAC's main events, while 35 are cosponsored events. No IFAC main events are allowed to take place during the World Congress years. This leads to many IFAC conferences placed into a few months, making travel arrangements for those attending several conferences quite challenging.

To address this, the IFAC Technical Board has encouraged the joint hosting of multiple conferences at the same location and time. Colocating or jointly hosting IFAC conferences not only offers logistic advantages such as streamlined venue and hotel arrangements and shared financial responsibilities, it also provides opportunities for scientific exchanges between diverse topics. Although there are some drawbacks, such as fewer opportunities for plenary speakers and challenges in scheduling a variety of topics, the benefits far outweigh the disadvantages.

As examples of good practice, next year 2025, we have 10 conferences participating in this effort:

- -SSSC (Symposium), TDS (Workshop), and COSY (Workshop): 30 June- 2 July 2025, Gifsur-Yvette, FRANCE
- -ROCOND (Symposium) and LPVS (Workshop): 2-4 July 2025, Porto, PORTUGAL
- -MECHATRONICS (Symposium) and RO-BOTICS (Symposium): 15-18 July 2025, Paris, FRANCE
- -TA (Symposium), ICONS (Conference), and EAAS (Workshop): 15- 18 September 2025, Padova, ITALY

As illustrated, different types of conferences—namely symposia, conferences, and workshops—can be held together. It is also possible to have a unified branding; for instance, the joint TA, ICONS, and EAAS conferences are collectively referred to as J3C (Joint Conference on Computers, Cognition and Communication).

There are certain requirements for this initiative:

- -Each conference must apply separately (online via the IFAC portal).
- -Each conference requires a distinct program committee.
- -Each conference will have a different IFAC PapersOnLine volume, necessitating the retention of unique series names.
- -An author registered for one conference should be granted the privilege to submit papers to other co-located or joint conferences.
- I believe this joint conference initiative provides rich cooperations between topics and can help maintain sustainability for IFAC while reducing travel requirements. I hope IFAC will see many more joint conferences in the future.

With best regards,

Dong-II "Dan" Cho, IFAC President 2023-2026



Mechatronics, Nonlinear Analysis: Hybrid Systems, Systems and Control). For the award(s) to be given at the 2026 Congress, only papers published within the time period from 1 January 1996 through 31 December 2017 are eligible.

The selection criteria are:

- Evidence of high number of citations, as obtainable from either (or both) the engineering databases: Thompson ISI's Web of Science and Elsevier's SCOPUS.
- Evidence that the work under consideration has been actually used by others in their research/professional activity.
- Opinions expressed by three references from internationally reputed experts in the field who are personally aware of the contributions of the nominated paper.

Nominations should include:

- A statement specifying the number of citations, as obtainable from either (or both) the engineering databases: Thompson ISI's Web of Science and Elsevier's SCOPUS;
- Excerpts of technical papers documenting work and progress made possible due to the prior contributions of the nominated paper. Papers (co)authored by one of the authors of the nominated paper cannot be used for this purpose.
- A description (if appropriate) of industrial achievements made possible due to the prior contributions of the nominated paper.
- The names of three to five internationally reputed experts that can serve as referees.

Submitted by: Frank Allgöwer (DE), IFAC Awards Committee Chair 2023-2026

The IFAC Story E-book is available!
ISBN 978-3-902823-73-1

ifac-control.org/about/the-ifac-story

IFAC Privacy Policy

IFAC - the International Federation of Automatic Control - values the privacy of its members, af-filiates and visitors to its website and is strongly committed to each visitor's right to privacy. The privacy policy explains IFAC's information gathering and handling practices. It describes how we gather and protect individually identifiable information ("Personal Information"), how we use, process, transfer, and share personal information, and sets forth your personal data privacy rights.

The full IFAC privacy policy is available on the IFAC website at: https://www.ifac-control.org/ privacy-policy

This Newsletter may be reproduced in whole or in part.

We encourage electronic distribution of this Newsletter, as well as reprinting in national and local automatic control periodicals.

Acknowledgement to IFAC would be appreciated.

Transition: Irena Nowacka Kahne

Irena Nowacka Kahne passed away peacefully at her home in Prescott, AZ, US in July 2024.

She was the daughter of IFAC's 5th President Pawel Nowacki (PL) and the wife of IFAC's 14th President Stephen Kahne (US). Born in Poland during World War II, she earned her MFA in Warsaw (PL) and established her artistic career there until 1970 when she and her daughter immigrated to the United States.

In the mid-1970s she created a hand-woven tapestry which she gifted to IFAC. This tapestry was accepted by IFAC to become the formal IFAC Presidential Tapestry that has been used at the Closing Ceremony of all succeeding IFAC Congresses to signify the transfer of power and hangs in the home country of the incoming President. A second tapestry made by Irena hangs permanently in the IFAC Secretariat.



IFAC President 2014-17 Janan Zayton (right-FR) handing over the IFAC Presidential tapestry to IFAC President 2017-20 Frank Allgöwer (left- DE) at the 2017 IFAC World Congress in Toulouse, FR.

Congress photographers Angelos Detsis (angelosdetsis. com), Lilie Pinot (iiliepinot.com), & Myrtille Visscher (myrtillevisscher.com).

Copyright @CNRS/IFAC2017, used with permission

All material proposed for publication in the IFAC Newsletter should be sent to NEWSLETTER@IFAC-CONTROL.ORG.

Emails to this email address are seen by Dimitri Peaucelle (Newsletter EiC) and Elske Haberl (IFAC Secretariat).

The latest edition of the IFAC Newsletter is available on the IFAC homepage, as well as an online archive dating back to the early 2000s.

IFAC Distinguished Lecturer Report Hyungbo Shim "Coordination of Heterogeneous Multi-agent Systems" 21 August 2024

Hyungbo Shim, one of IFAC's Pawel J. Nowacki Distinguished Lecturers, delivered a lecture on 21 August 2024 at the International Bhurban Conference on Applied Sciences & Technology (IBCAST) in Pakistan. IBCAST is an annual multidisciplinary conference typically held in the scenic Murree Hills near Islamabad, Pakistan.

Hosted by the Centers of Excellence in Science and Applied Technologies (CESAT), the conference covers a wide range of topics, including Advanced Materials, Fluid Dynamics, Control & Simulation, Wireless Communication & Radar, Aerostructures, Artificial Intelligence, Software Technologies, Biosciences, Cyber Security, Medical Sciences, and Underwater Technologies.

In his talk, Hyungbo Shim discussed networked dynamical systems, focusing on fundamental properties of consensus and their applications to the coordination of heterogeneous multi-agent systems. He also explored decentralized control, distributed state estimation, and distributed optimization. During his stay, Hyungbo Shim engaged with numerous Pakistani students, researchers, and faculty members, discussing both control systems and the International Federation of Automatic Control (IFAC), of which Pakistan is an Associated Member Organization (AMO) with plans to expand its involvement.

This event was made possible through the invitation of Prof. Ghulam Mustafa (Pakistan Institute of Engineering and Applied Sciences) and the hosting of Prof. Sajjad Asghar (Deputy Director of CESAT).

Hyungbo Shim's travel to Pakistan was supported by the IFAC Distinguished Lecturer Program (DLP), which aims to foster knowledge exchange and promote advancements in control systems globally. Organizers from developing countries can reach out to the DLP chair, Hideaki Ishii, to inquire about hosting distinguished lecturers.

Editor's Note: More information about the IFAC Associated Member Organizations is available at: <u>ifac-control.org/structure/associated-member-organizations-amos</u>

The IFAC Council and Related Meetings 2025 are scheduled to take place from 16-19 July 2025 in Paris, FR!

The meetings are being held in conjunction with Mechatronics and Robotics Symposia. ifac2025-msrob.com/

Please note that at this time there are expected updates to the entry requirements for France and other European Union countries, so please check often to make sure that your travel documentation and authorization is in order! travel-europa.eu/etias_en

IFAC Launches New Social Media Strategy to Connect the Global Control Community

IFAC is pleased to announce a new social media strategy aimed at enhancing connections among our global community of control engineers, researchers, industry professionals, and students. This initiative seeks to strengthen our digital presence, foster deeper engagement, and highlight the vital role of automatic control across various sectors.

Why a New Social Media Strategy?

Social media has become an essential tool for bringing people together and sharing knowledge. Recognizing this, IFAC developed a strategy that aligns with our mission to advance the science and technology of automatic control. Our goal is to build a vibrant online community that embodies the collaborative spirit of "The IFAC Family," focusing on creating meaningful connections rather than merely increasing follower counts.

Key Elements of the Strategy

- 1. Engagement and Community Building: We aim to foster engagement within the control community by creating spaces for professionals, researchers, and students to exchange ideas, participate in discussions, and collaborate. This includes highlighting member contributions, featuring insights from thought leaders, and sharing interactive content like quizzes and polls.
- 2. Raising Public Awareness: Increasing public awareness about automatic control and its impact in areas such as robotics, Al, sustainable energy, and smart cities is a key focus. Through stories, research highlights, and educational content, we hope to demystify the field and demonstrate its relevance in addressing global challenges.
- 3. Showcasing Research and Conferences: Our social media channels will serve as hubs for promoting IFAC conferences, workshops, and technical meetings. Expect more event announcements, recaps, and live coverage where leading minds come together to shape the future of automatic control.
- 4. Strengthening Industry Connections: We emphasize building stronger ties between academia and industry. Through targeted content, we aim to ensure that academic research aligns with real-world applications and industry needs.

Who Is Behind the Strategy?

The strategy is led by Derik le Roux, Technical Board Social Media Chair. The IFAC Secretariat (Elske Haberl and Katharina Willixhofer), supported by the HUMANBRAND agency (Lisa Dreischer and Christian Haberl), manages the main IFAC social media channels on LinkedIn, X (formerly Twitter), Facebook, and Instagram. They create and post content, engage with the

community, and ensure consistent branding across platforms.

The Social Media Vice Chairs of each Technical Committee are dedicated volunteers who assist in creating content for the Coordinating Committee (CC) showcase pages on LinkedIn and the Technical Committee (TC) channels on platforms like X. Working closely with Derik le Roux and the agency, they contribute valuable insights and content that represent their specific areas of expertise within IFAC.

We also incorporate valuable input from IFAC partners, including our publisher Elsevier, National Member Organizations (NMOs), Affiliate Member Organizations (AMOs), and conference organizers.

A Multi-Platform Approach

Our strategy leverages multiple platforms, each chosen for its unique audience and strengths:

- •LinkedIn: Our primary platform for professional networking, featuring content relevant to our community, including updates from technical committees, researchers, and industry leaders. The main IFAC LinkedIn page is managed by the Secretariat and the agency, while the CC showcase pages are supported by the TC Social Media Vice Chairs, Prof. Derik le Roux, and the agency.
- •X (formerly Twitter): For timely updates, industry news, and live event coverage. The main IFAC account is handled by the Secretariat and the agency, while TC-specific accounts are managed by the TC Social Media Vice Chairs with support from Prof. Derik le Roux and the agency.
- •Facebook and Instagram: For broader outreach efforts, showcasing the human side of IFAC and engaging the general public. Managed by the IFAC Secretariat and the agency.
- •YouTube: To host video content such as recorded lectures, webinars, and event highlights.

To help differentiate the main IFAC brand and its social media activities from the TCs and CCs, especially for content on the main IFAC pages where content from all areas is posted, sub-brands have been created for each CC and its corresponding TCs.

Each CC has additional colours that should be used for all CC/TC specific communications. In addition, each TC now has a representative icon in its CCs colours to be used for TC-specific social media communications.

The content of the CC pages is much more focused on pre- and post-conference reporting, as well as creating a deeper connection

To register as an IFAC affiliate or to update your information please log in to the IFAC Portal.

affiliates.ifac-control.org/

between academia and industry. Where the Secretariat deems it appropriate, content from the CC pages can be re-posted on the main page. On the other hand, content relevant to a TC that is published on the main page can also be published on the relevant CC page.

.....

Looking Ahead

We are excited about this new chapter in IFAC's online presence. By leveraging social media, we aim to unite our global community dedicated to advancing control engineering. Whether you are a long-time member of the IFAC family or new to the world of automatic control, we invite you to follow our social media channels to stay informed, get involved, and be inspired!

Get Involved!

"This initiative is motivated by our vision to create a global community of professionals, researchers, and enthusiasts dedicated to advancing automation and control technologies."

-Derik le Roux, IFAC Technical Board, Social Media Liasion



Links to IFAC's social media channels can be found at the top of the IFAC website: <u>ifac-control.org/</u>

If you're not yet following IFAC on social media, we encourage you to join, subscribe, and connect with our community. Engage with thought leaders in your field, network with researchers, and stay up to date with all the opportunities IFAC offers.

Submitted by: Christian Haberl (AT), Human Brand social media agancy

IFAC Cartoon Archive is available!

ifac-control.org/publications/cartoons

The IFAC Conference App is available!

The App is paid for by IFAC and can be used free of charge by IFAC conference organizers and attendees.

How to download: App Store apple.co/3mpaER7 Google Play bit.ly/3lazFjx Web version ifac.floq.live

You can also search for 'IFAC' in the Apple App Store or in the Google Play Store.

Log in is shared with the IFAC Affiliates Portal. There is no need for double registration.



Who's Who in IFAC: **Distinguished Lecturer Program Lecturers**

continuation of a series

Kristen Morris

Kirsten Morris is a professor in the Applied Mathematics Department at the University of Waterloo and a Faculty of Mathematics Research Chair. She has held visiting positions at ICASE (NASA Langley), the Fields Institute, the Institute for Mathematics & Applications, and the Institut de Mathematiques in Bordeaux. She served as a vice-president of the IEEE Control System Society from 2013-2016, vicechair of the SIAM Control & Systems Theory group 2016-2017 and chair 2018-2019.

She was an associate editor with the IEEE Transactions on Automatic Control the SIAM Journal on Control & Optimization. She is currently an advising editor for Mathematics of Control, Signals & Systems, a member of the editorial boards of the Asian Journal of Control and the SIAM book series Advances in Design & Control and a member of the SIAM Book Committee. Kirsten Morris is a Fellow of IEEE, IFAC and SIAM and has received other honors in recognition in her accomplishments, including the IEEE Control Systems Society Distinguished Member Award.



Kirsten Morris' research interests are control and estimation of systems modelled by partial differential equations and also systems, such as smart materials, involving hysteresis. Her recent research has focused on improving performance through attention to actuator location as part of controller design, and sensor location as part of estimator design. She has written several books "Controller Design for Distributed Parameter Systems" and "Introduction to Feedback Control", and was editor of the book "Control of Flexible Structures".

Possible lecture topics:

- -Estimation of complex systems
- -Control of partial differential algebraic equations
- -Exponential decay of port-Hamiltonian systems with boundary dissipation

Optimal actuator/sensor location

Bruno Siciliano

Bruno Siciliano is Professor of Control and Robotics, Chair of the Scientific Council of the Interdepartmental Center for Advanced Robotics in Surgery (ICAROS) and Coordinator of

the PRISMA Lab in the Department of Electrical Engineering and Information Technology at University of Naples Federico II (IT). He is also Honorary Professor of Óbuda University, where he holds the Kálmán Chair. He is a Board Director and Head of the Robotics Department at CREATE Consortium.

Bruno Siciliano has co-authored/co-edited 19 books, more than 130 journal papers and more than 300 conference papers/book chapters; his book Robotics: Modelling, Planning and Control is one of the most widely adopted textbooks worldwide and has been translated into Chinese, Greek and Italian. He has delivered more than 30 keynotes, more than 150 invited lectures and seminars at institutions worldwide, and he has been the recipient of several awards, including the recent IEEE RAS Pioneer in Robotics and Automation Award (2024). He is a Fellow of IEEE, ASME, IFAC and AAIA. He is co-editor of the Springer Tracts in Advanced Robotics series, the Springer Proceedings in Advanced Robotics series, and has served on the Editorial Boards of several journals as well as chair or co-chair for numerous international conferences.



He co-edited the Springer Handbook of Robotics, which received the AAPPROSE Award for Excellence in Physical Sciences & Mathematics and was also the winner in the category Engineering & Technology (2009). His group has been granted twenty-five European projects, including a Synergy Grant and an Advanced Grant from the European Research Council.

Bruno Siciliano has served the IEEE Robotics and Automation Society as President, as Vice-President for Technical Activities and Vice-President for Publications, as a member of the AdCom, and as a Distinguished Lecturer. He has been a Board Director of the European Robotics Association. Bruno Siciliano is currently a member of the International Foundation of Robotics Research Board and a member of the Advisory Board of Rovial Space.

Research interests

Bruno Siciliano's research interests include robot manipulation and control, human-robot cooperation, and service robotics. The emphasis of his work has always been on methodologies and technologies that address the intricate dynamic nature and complex physical structure of robotic systems to evaluate and develop the capabilities needed for their action and interaction with the environment, and cope with their real-time requirements. A remarkable feature of his contributions to the field lies in the fundamental and rigorous way he has tackled the research challenges, the experimenta-

tion of original techniques and algorithms on both lab prototypes and commercially available set-ups, the impact and technology transfer to real-world applications.

Bruno Siciliano's team at PRISMA Lab is carrying out research in robotics since more than 35 years. The team is internationally recognized in the community for their achievements in aerial, assistive, cognitive, cooperative, industrial, service and surgical robotics. The record of the team can be measured by more than 900 publications in terms of books and articles in book chapters, peer-reviewed journals and conference proceedings, cooperation with more than 150 foreign institutions and companies, as well as by several awards and an average annual funding of 1.4M Euro received during the last 15 years.

Lecture topics

- -Robot Manipulation and Control: Scenarios and Challenges
- -Force and Visual Control for Human-Robot Interaction
- -Aerial Robotics for Inspection and Maintenance Towards Autonomous Surgical Robotics
- -A Revolutionary Theranostics Technique for Robotized Colonoscopy
- -Robotics Meets AI & 5G: The Future is Now! Al & Robots for a Sustainable Environment

The full list of Distinguished Lecture lecturers as well as further information about the committee and program is available at: ifac-control. org/areas/ifac-distinguished-lecturer-program

IFAC is on social media!

Facebook facebook.com/IFAC.Automatic.Control/

Instagram control/

LinkedIn linkedin.com/company/international-federation-of-automatic-control/

x.com/IFAC Control

YouTube www.youtube.com/@ifacyoutube3132

Check out IFAC's YouTube channel for new and historical IFAC video materials! https://www.ifac-control.org/

IFAC Affiliates Statistics

As of 29 September 2024, the IFAC database contains 7933 affiliates. 37% of these (2958) have registered in the new IFAC Portal and thereby provide useful data about IFAC volunteers around the globe:

15% are female, 7% from industry, 28% in early stage of their career. Top countries of registered affiliates are USA (326), France (299), Germany (214), Italy (199), Japan (160), China (136), Spain (122), Brazil (106), UK (103).

6th IFAC Workshop on Advances Maintenance Engineering, Services & Technology (AMEST 2024) 12-14 June 2022 Cagliari, IT

The 6th IFAC Workshop on Advanced Maintenance Engineering, Services, and Technology (AMEST 2024) was held in Cagliari from 12-14 June 2024, bringing together international experts from academia and industry to discuss the latest advances in Maintenance and Asset Lifecycle Management, aligned with Industry

The event was organized by Simone Arena from the University of Cagliari serving as Chair, and Irene Roda from Politecnico di Milano as Cochair. The organizing team included the IFAC TC 5.1. AMEST Working Group chair Christos Emmanouilidis from the University of Groningen, serving as IPC Chair, the working group secretary Ajith Parlikad from the University of Cambridge (UK) and Alexandre Voisin from the University of Lorraine as IPC Vice Chair. Industry was represented by IPC Vice Chair from industry Riccardo Cozza from SARAS.

Keynote speakers Dimitris Kiritsis (École Polytechnique Fédérale de Lausanne and University of Oslo), Birgit Vogel-Heuser (Technical University of Munich), and Adolfo Crespo Marquez (University of Seville) delivered inspiring talks on digital transformation in maintenance and asset management, modular and adaptive field-level automation architectures, and ontology-based asset information modeling for predictive maintenance. The workshop featured 69 paper presentations on topics including Digital Twins, Al for Maintenance, Maintenance Strategies, Reliability, Industry 5.0, and Sustainability. AMEST 2024 successfully fostered collaboration and knowledge exchange, paving the way for future innovations in maintenance engineering and asset management.

AMEST 2024 was fully supported and sponsored by the IFAC TC 5.1. Manufacturing Plant Control, and co-sponsored by TC 5.2. Management and Control in Manufacturing and Logistics, TC 5.3. Integration and Interoperability of Enterprise Systems (I2ES), and TC 6.4. Fault Detection, Supervision & Safety of Technical Processes – SAFEPROCESS. The workshop also received support from the International Federation for Information Processing (IFIP) WG5.7 Advances in Production Management Systems, the Prognostics and Health Manage-

ment (PHM) Society, and the European Safety and Reliability Association (ESRA).

The workshop saw significant participation from industry professionals, providing a valuable platform for the exchange of practical insights and real-world applications. An industrial tour of the SARAS refinery was a notable highlight, offering attendees a first-hand look at cutting-edge maintenance practices in the energy sector.

The workshop concluded with a warm farewell reception, during which three awards were announced to honor outstanding research presented at the workshop: Best Paper Award, recognizing overall excellence in research, Best Student Paper Award, recognizing overall excellence in research; reserved for papers where a student was the leading author and presenter and Best Industry Application Paper Award, honoring papers showcasing outstanding applications in industry.

In summary, AMEST 2024 not only showcased cutting-edge research but also strengthened the bonds within the IFAC AMEST Working Group community. We extend our heartfelt thanks to all participants, sponsors, and organizers for making AMEST 2024 a memorable and impactful event. We look forward to continuing this journey towards excellence in maintenance and asset management at future IFAC workshops and conferences.

Submitted by: Simone Arena, AMEST 2024 NOC Chair. Irene Roda, AMEST 2024 NOC Co-Chair, Christos Emmanouilidis, AMEST 2024 IPC Chair, Ajith Kumar Parlikad, AMEST 2024 IPC Vice Chair, Alexandre Voisin, AMEST 2024 IPC Vice Chair, & Riccardo Cozza, AMEST 2024 IPC Vice Chair from Industry

4th IFAC Workshop on Advances in Proportional-Integral-Derivative Confrol (PID 2024) 12-14 June 2022 Almería, ES

The 4th IFAC Conference on Advances in Proportional-Integral-Derivative Control (PID 2024) was held in Almería, Spain, from 12-14 June 2024. A total of 147 participants attended the conference from more than 30 different countries from all around the world.

A total of 93 papers were accepted by the International Program Committee and presented during the conference with an one-single track format. The program consisted of 3 keynote talks (by Sigurd Skogestad - NTNU, Norway;

Daniel Abramovich - Agilent Technologies, USA; and Liuping Wang - RMIT University, Australia), 8 regular sessions with only one single track, 2 technical visits, and a panel discussion related with academy-industry connections.

In this new edition of the IFAC PID conference, a different style of the conference was performed, where there was only one single track for all presentations. In this way, attendees were able to follow all the conference contributions. Each regular session was a duration of 1 hour, divided in 25 minutes for oral presentations plus 35 minutes for discussions. The contributions were presented as oral presentations of 2-min duration under a Pecha-Kucha format, and the discussions were celebrated at the coffee break session in a specific area dedicated for that. This new conference style helped to increase the interaction and relationships among all of the participants and contributed to exploiting the impact of the authors' contributions. Feedback from the attendees has shown a very good acceptance of this new format, which we strongly believe can help in the celebration of new IFAC conferences.

The Young Author Award was proposed as part of the conference with 14 nominations, being Frida Norlund from Lund University (Sweden) the winner. Moreover, a PID tuning competition was also run during the conference with more than 50 participants, being the winner the PhD student Guzmán González Mateos (University of León, Spain).

In summary, the conference was plenty of technical activities and social events to stimulate the research on this field and contribute to reduce the gap between academia and industry. We had a very friendly atmosphere focused on stimulating the cooperation in the international community for the development of new contributions on PID control.

Submitted by: José Luis Guzmán (ES), PID 2024 NOC Chair

Applications for the next round of IFAC Activity Fund awards are still open!

Deadline: October 31, 2024

Further information available at: sites.ifac-control.org/activityfund

The IFAC Calendar of Conferences is constantly updated as addditional technical events (Workshops, Symposia, and Conferences) are approved. Please check back often for the current status. The complete version of the IFAC Calendar of Conferences is available online at:

www.ifac-control.org/conferences/@@conferences/ence_view

Impressum

Medieninhaber und Herausgeber: International Federation of Automatic Control (IFAC), Zurich Schlossplatz 12, 2361 Laxenburg, Austria

Verlagsort und Redaktion: Dr. Dimitri Peaucelle, Schlossplatz 12, 2361 Laxenburg newsletter@ifac-control.org Editor: Dimitri Peaucelle Deputy Editor: Moritz Schulze Darup Layout: Elske Haberl published bimonthly ISSN 0254-3109

Das Sekretariat der IFAC befindet sich seit 1978 aufgrund eines Übereinkommens mit der Österreichischen Bundesregierung und mit der Österreichischen Akademie der Wissenschaften in Laxenburg und wird derzeit aus Mitteln des Bundesministeriums für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie "BMK" gefördert.

Bundesministerium

Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technolog

Calendar of IFAC Conferences

Title	2024	Place	Further Information
7 th IFAC Conference on Engine and Powertrain Control, Simulation and Modeling E-COSM 2024	Oct./Nov. g30 – 01	Dalian China	ecosm2024.dlut.edu.cn/
21st INSTICC International Conference on (in cooperation with IFAC) Informatics in Control, Automation and Robotics, ICINCO 2024	nNovember 18 – 20	Porto Portugal	icinco.scitevents.org icinco.secretariat@insticc.org
18 th INSTICC/IFIP IFAC Workshop on Enterprise Integration, Interoperability and Networking EI2N 2024	November 21 – 22	Porto Portugal	in4pl.scitevents.org/EI2N.aspx in4pl.secretariat@insticc.org
5 th INSTICC et al. International Conference on Innovative Intelligent Industrial Production and Logistics IN4PL 2024	November s 21 – 22	Porto Portugal	in4pl.scitevents.org/Home.aspx in4pl.secretariat@insticc.org
5 th IFAC Workshop on Cyber-Physical-Human Systems CPHS 2024	December 12 – 14	Antalya Turkey	cphs2024.org/
Title	2025	Place	Further Information
8 th Conference on Australian and New Zealand Control Conference (in cooperation with IFAC) ANZCC 2025	January 30 – 31	Gold Coast City Australia	anzcc.org.au/ANZCC2025/ I.vlacic@griffith.edu.au
IEEE, IFAC International Conference on Control, Automation, and Instrumentation IC2AI 2025	February 11 – 13	Beirut Lebanon	<u>lreee.org/ic2ai/</u>
11 th Vienna International Conference on Mathematical Modelling MATHMOD 2025	February 19 – 21	Vienna Austria	mathmod@acin.tuwien.ac.at
12 th IFAC Symposium on Intelligent Autonomous Vehicles IAV 2025	May 08 – 10	Phoenix, AZ USA	
1 st IFAC Workshop on Engineering Diabetes Technology EDT 2025	May 08 – 09	Valencia Spain	conferences.ifac-control.org/edt2025/ edt25@upv.es
14th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2025	June 16 – 19	Bratislava Slovakia	www.dycops2025.org/ miroslav.fikar@stuba.sk
5 th IFAC Workshop on Control of Systems Governed by Partial Differential Equations CPDE 2025	June 18 – 20	Beijing China	cpde2025.bjut.edu.cn/index.html#/home jyzhan@bjut.edu.cn
IFAC Workshop on Smart Energy Systems for efficient and sustainable smart grids and smart cities SENSYS 2025	June 18 – 20	Bari Italy	conferences.ifac-control.org/sensys2025/
2 nd IFAC Workshop on Control of Complex Systems COSY 2025	June/July 30 – 02	Gif-sur-Yvette France	
9 th IFAC Symposium on System Structure and Control SSSC 2025	June/July 30 – 02	Gif-sur-Yvette France	
19 th IFAC Workshop on Time Delay Systems TDS 2025	June/July 30 – 02	Gif-sur-Yvette France	
11th IFAC Conference on Manufacturing Modelling, Management and Control MIM 2025	June/July 30 – 03	Trondheim Norway	conferences.ifac-control.org/mim2025/ mim2025@mtp.ntnu.no
11 th IFAC Symposium on Robust Control Design ROCOND 2025	July 02 – 04	Porto Portugal	conferences.ifac-control.org/rocond2025/ rocond2025@ifac-mail.org



Calendar of IFAC Conferences

Galoridai			CHOCO
6 th IFAC Workshop on Linear Parameter Varying Systems LPVS 2025	July 02 – 04	Porto Portugal	conferences.ifac-control.org/lpvs2025/
15th IFAC Workshop on Adaptive and Learning Control Systems ALCOS 2025	July 02 – 04	Mexico City Mexico	alcos2025.itam.mx alcos2025@itam.mx
5 th IFAC Workshop on Thermodynamics Foundations of Mathematical System Theory TFMST 2025	July ns13 – 16	Hangzhou China	
14th IFAC Symposium on Robotics ROBOTICS 2025	July 15 – 18	Paris France	<u>ifac2025-msrob.com</u>
10 th IFAC Symposium on Mechatronic Systems MECHATRONICS 2025	July 15 – 18	Paris France	ifac2025-msrob.com
13 th IFAC Symposium on Nonlinear Control Systems NOLCOS 2025	July 23 – 25	Reykjavik Iceland	
23 rd IFAC Symposium on Automatic Control in Aerospace ACA 2025	August 02 – 06	Harbin China	
15 th IFAC Symposium on Intelligent Manufacturing Systems IMS 2025	September 11 – 12	Koszalin Poland	
7 th IFAC Symposium on Telematics Applications TA 2025	September 15 – 18	Padova Italy	j <u>3c.org/</u> info@j3c.org
1st IFAC Workshop on Engineering and Architectures of Automation Systems EAAS 2025	September 15 – 18	Padova Italy	j <u>3c.org/</u> info@j3c.org
7 th IFAC Conference on Intelligent Control and Automation Sciences ICONS 2025	September 15 – 18	Padova Italy	j <u>3c.org/</u> info@j3c.org
5 th AACC Conference on Modeling, Estimation and Control MECC 2025	October 5 – 8	Pittsburgh, PA USA	
3 rd IFAC Workshop on Control Methods for Water Resource Systems CMWRS 2025	November 6 – 7	Douai France	
Title	2026	Place	Further Information
23 rd IFAC World Congress WC 2026	August 23– 28	Busan Republic of Korea	ifac2026.org ifac2026@ifac2026.org

IFAC X Conferences

Since 2023 IFAC provides a new service for NMOs named "IFAC X" (pronounced "IFAC-ex"). This service allows NMOs to give an IFAC label to some domestic technical events organized under their supervision. More precisely, inspired by the TED (international) and TEDX (local) examples, the label is "IFACX NAME_OF_YOUR_COUNTRY/REGION" and you will be provided with a personalized logo.

IFAC X is not IFAC:

The IFAC X COUNTRY/REGION events are not IFAC sponsored/co-sponsored conferences. As such they are not granted access to the full range of IFAC benefits and services such as the usage of the submission management system ifac.papercept.net, the IFAC Conference App, IFAC centralized website hosting, etc.

All IFAC NMOs should have received the call which was distributed in October 2024 for the next round of IFAC X applications, which are due by 30 November 2024.

Info concerning the most recent IFAC X conferences can be found at: ifac-control.org/conferences/copy_of_ifacx-labeled-conferences-2024