INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL

NEWSLETTER

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No.3

June 2026

IFAC Major Awards 2023-2026

continuation of a series

High Impact Paper Award

This IFAC Award was introduced in 2009 and first awarded in 2011. It acknowledges the impact of a paper published in any of the official IFAC journals on the broad areas of Automatic Control theory and application. A monetary prize is presented to the recipient together with a plaque.

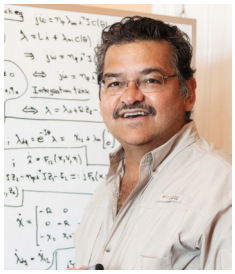
For the 2023 - 2026 triennial period, the High Impact Paper Award Selection Committee has the following composition: Li-Chen Fu (Chair), Members: Hideaki Ishii, Keum-Shik Hong, Maria Domenica Di Benedetto, Edwin Chong, Dawn Tilbury, Ji-Feng Zhang.

Winning paper

"Interconnection and damping assignment passivity-based control of port-controlled Hamiltonian systems," by **R. Ortega, A. van der Schaft, B. Maschke and G. Escobar (MX, NL, FR),** *Automatica*, Vol. 38, pp. 585-596, April 2002.

Information about the authors of the winning paper follows here:

Romeo Ortega



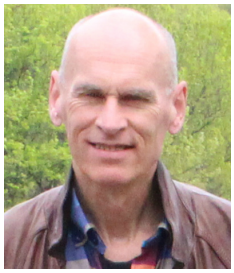
Romeo Ortega was born in Mexico. He obtained his BSc in Electrical and Mechanical Engineering from the National University of Mexico, Master of Engineering from Polytechnical Institute of Leningrad, USSR, and the Docteur D`Etat from the Polytechnical Institute of Grenoble, France in 1974, 1978 and 1984 respectively.

He then joined the National University of Mexico, where he worked until 1989. He was a Visiting Professor at the University of Illinois in 1987-88 and at McGill University in 1991-1992, and a Fellow of the Japan Society for Promotion of Science in 1990-1991.

He was a member of the French National Research Council (CNRS) from June 1992 to July 2020, where he was a ``Directeur de Recherche" in the Laboratoire de Signaux et Systemes (CentraleSupelec) in Gif-sur-Yvette, France. Currently, he is a full time Professor at ITAM in Mexico and a Distinguished Professor of ITMO University in Russia. His research interests are in the fields of nonlinear and adaptive control, with special emphasis on applications.

Ortega has published five books and more than 395 scientific papers in international journals, with an h-index of 99. He has supervised more than 35 PhD thesis. He is a Fellow Member of the IEEE since 1999 (Life 2020) and an IFAC Fellow since 2017. He has served as chair of several IFAC and IEEE committees and participated in various editorial boards of international journals. He is currently Editor in Chief of *Int. J. Adaptive Control and Signal Processing* and Senior Editor of *Asian Journal of Control*.

Arjan van der Schaft



Arjan van der Schaft received the undergraduate and Ph.D. degrees in mathematics from the University of Groningen, the Netherlands. In 1982 he joined the Department of Applied Mathematics, University of Twente, the Netherlands; since 1987 as an associate professor and since 2000 as a full professor in mathematical systems and control theory. In 2005, he was appointed at the University of Groningen as a professor in mathematics.

His research interests include nonlinear systems and control theory, geometric modeling and control of multi-domain physical systems, nonlinear network dynamics, as well as cyber-physical systems; with applications ranging from mechatronics, power systems, chemical reaction networks and thermodynamics, to neuromorphic computing.

IN THIS ISSUE

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/engineering-applications-of-artificial-intelligence

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

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

Journal on Mechatronics
journals.elsevier.com/mechatronics

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

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

IFAC-PapersOnLine
journals.elsevier.com/ifac-papersonline

He has authored the following books: Variational and Hamiltonian Control Systems (Springer, 1987, with P. E. Crouch), Nonlinear Dynamical Control Systems (Springer, 1990, 2016, with H. Nijmeijer), L2-Gain and Passivity Techniques in Nonlinear Control (Springer, 1996, 2000, 2017), An Introduction to Hybrid Dynamical Systems (Springer, 2000, 2024, with J.M. Schumacher), Port-Hamiltonian Systems: An Introductory Overview (NOW Publisher, 2014, with D. Jeltsema), and A Course on Optimal Control (Springer, 2023, with G. Meinsma).

van der Schaft was an Invited Speaker at the International Congress of Mathematicians, Madrid, 2006. He is a Fellow of IFAC (2017), third recipient (2013) of the three-yearly Award on Non-Linear Control Systems of the IFAC Technical Committee on Nonlinear Systems, and Life Fellow of IEEE (2002). Furthermore, he is co-recipient of the SICE Takeda Best Paper Prize 2008, and of the IEEE Transactions on Control Systems Technology Outstanding Paper Award 2020.

Bernhard Maschke

Bernhard Maschke has graduated as engineer in telecommunications from the Ecole Nationale Superieure des Télécommunications, Paris, France, in 1984. He received his Ph.D. degree in Automatic Control in 1990 on the control of robotic manipulators with flexible arms performed at the Advanced Robotics Engineering Unit of the Atomic Energy Commission (CEA) in Fontenay–aux–Roses and the Laboratoire des Signaux et Systèmes (UMR CNRS 8506), in Gif-sur-Yvette, (France). He then received the Habilitation to Direct Research from the University of Paris-Sud, Orsay, France in 1998 on Port Hamiltonian systems.

He has been Associate Professor at the Laboratory of Industrial Automation of the Conservatoire National des Arts et Métiers, Paris, France from 1990 until 2000. From February 1999 until August 2000, he has been invited scientist at the Departement "Signals, Systems and Control" of the University of Twente, (Enschede, The Netherlands). Since September 2000, he is Professor of Automatic Control at the Laboratory of Control and Chemical Engineering and Pharmaceutical Engineering (LAGEPP UMR CNRS 5007) of the University Claude Bernard Lyon 1, Villeurbanne, France.

Maschke's research interests concern the system's theory and control of open and complex multi-physical systems. He has defined with Prof. Arjan van der Schaft, the framework of port-Hamiltonian systems which aims at a physical systems' and control theory encompassing Passivity-based Control, Mathematical Physics and Macroscopic Physics and Thermodynamics. His current research activity mainly concerns the geometric structure of Irreversible Thermodynamic systems, Implicit (port-)Hamiltonian systems defined on Lagrange submanifolds in finite and infinite-dimension, Boundary Port Hamiltonian systems with moving interfaces and the optimal control based on the minimization of the exergy and entropy creation and applications to chemical engineering such as deformable foam bed reactors.

He has founded and directs, with prof. Paul Kotyczka (Tech. Un. München), the Doctoral college of the French-German University (Saarbrücken) on port-Hamiltonian systems https://www.epc.ed.tum.de/rt/cdfa-phs/. He is a member of two IFACs - TC on Nonlinear Control Systems and on Distributed Parameter Systems and is the co-founder of the IFAC Workshop series on Thermody-namical Foundation of Mathematical Systems' Theory, of which the first edition took place in Lyon, FR in 2013.

Gerardo Escobar

Gerardo Escobar Valderrama (M'00, SM'08) received the Ph.D. degree in automatic control from the Signals and Systems Laboratory, LSS-SUPELEC, Université de Paris XI, France, in 1999. From 2008 to 2012, he was a Principal Scientist with the Power Electronics Group, ABB Switzerland Ltd., Zurich, Switzerland. He is currently an Associate Professor-Researcher in the Mechatronics Department of the School of Engineering and Sciences, Tecnologico de Monterrey, Nuevo Leon, Mexico.

He is Senior Member of the IEEE since 2008. He is a member of the National Research Fellows System level 3 (SNII-III), SECIHTI (CONACyT), Mexico. Ranked in the world's top 2% most cited scientist from 2020 to 2024. He served as Associate Editor of the IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, from 2007 to 2016, and also as Associate Editor of the IEEE TRANSACTIONS ON POWER ELECTRONICS, from 2013 to 2020.

Escobar is author of 23 patents, about 90 (JCR) journal papers, about 5440 references to his work, h-index 33 in Scopus.

His research interests include modeling, analysis, and control design of power electronic systems, and their applications in renewable energy systems, power quality, grid integration, active filters, inverters, DC–DC convert-

From the IFAC President

Dear IFAC Friends & Colleagues,

What does a travel grant mean to a young researcher? A single travel grant can change a career. I know this, because it changed mine.

In December 1984, I attended my first conference, the ASME Winter Annual Meeting in New Orleans, presenting a paper from my master's thesis. That paper was accepted and published without revision in an ASME Journal. For a fresh Ph.D. student, it was an unforgettable experience. All this was possible because ASME's Student Technical Paper program gave me a travel grant. That trip changed my trajectory. I hope every young researcher gets a moment like that.

That same spirit drives the IFAC Foundation's support programs for the 2026 World Congress in Busan. The IFAC Foundation, established through a generous donation by Prof. Wook Hyun Kwon (IFAC President 2005-2008) at IFAC's Fiftieth Anniversary in 2002, administers two support programs.

The Developing Countries Young Author Support (DC-YAS) waives registration fees for authors of accepted papers who are citizens of developing countries or regions, not affiliated with high-income institutions, and under 30 years of age during the Congress.The Diversity & Inclusion (D&I) Travel Support, offered jointly by the Foundation and the World Congress Organizing Committee, waives registration fees for authors from underrepresented groups, recognizing that financial barriers should not prevent talented researchers from participating.

For the 2026 Busan Congress, applications increased dramatically compared to previous years. Reflecting my own first-conference experience, the DC-YAS Committee, D&I Committee, and I reviewed all applications in detail and decided to award as many as possible, so that more young and underrepresented researchers can attend and feel that same excitement. Through Foundation funding, 43 DC-YAS and 24 D&I awards were granted, all to those from outside high-income countries and regions. The Korean National Organizing Committee (NOC), noting many deserving applicants currently at high-income institutions, additionally awarded 4 NOC YAS and 22 NOC D&I grants. In total, 93 young and underrepresented researchers will attend the Busan World Congress with this support.

I sincerely hope all 93 recipients arrive in Busan safely, present their work with pride, connect with leading researchers from around the world, and carry that experience forward throughout their careers, just as I have carried New Orleans with me for over forty years.

I extend my heartfelt thanks to the IFAC Foundation for its generous support, and to the Korean NOC for providing additional awards despite the considerable financial commitment required to keep registration fees at a level comparable to those of previous congresses.

Sincerely,

Dongil "Dan" Cho
IFAC President, 2023–2026

ers, multilevel converters, batteries, electrical drives, wind power, photovoltaic systems, and nonlinear control design, adaptive control, repetitive control, and their applications in current control, voltage balance, grid synchronization, and harmonic compensation.

Editor's Note: The winners of IFAC Major Awards/Medals for this and past triennia can be accessed at: ifac-control.org/awards/major-awards

IFAC Executive Officers' Meeting & Technical Lecture

16-18 April 2026
Vienna, AT

The IFAC Executive Officers' Meeting and Technical Lecture for 2026 took place from 16-18 April 2026 at Vienna Technical University (TU) in Vienna, AT. This annual meeting takes place in Austria as it is the host country of the permanent IFAC Secretariat (located in the town of Laxenburg, Lower Austria since 1978). In addition IFAC receives an association support subsidy from the Austrian federal government, which is managed by the BMIMI ministry (noted in German in the imprint of each issue of this Newsletter). This it is a time each year for IFAC and Austria to renew and refresh their ties.

Even in this day and age of online meetings, emails, etc. it is still beneficial for the Executive Officers and staff to gather in-person. In addition to the current IFAC Executive Officers the meeting was attended in-person by Biao Huang (CA) who is slated to become VP, Publications for 2026-2029, as well as Derik le Roux (ZA) who is slated to serve as IFAC Secretary 2026-2029. Hideaki Ishii (JP), slated to become VP, Technical Activities, was unable to attend in-person but joined in some of the sessions via Zoom.

In-person attendees of the annual IFAC Executive Officers' Meeting in Austria L to R: Maria Prandini, Derik le Roux, Sarah Spurgeon, Biao Huang, Hajime Asama, Dimitri Peaucelle, Dongil "Dan" Cho, Richard Braatz, Silvia Mastellone, Carlos Eduardo Pereira

IFAC Cartoon Archive is available!
ifac-control.org/publications/cartoons

In addition to discussions covering topics such as upcoming Congress preparations, preparing the 2026 IFAC General Assembly and the IFAC Council meetings, updates on technical activities, publications, conferences, finances, and operational matters the in-person Executive Officers were able to attend the annual technical lecture at the TU. This year's lecture *"Reliability Control and Decision Making: A case study of E-geared Electric Vehicles"* was given by Silvia Mastellone (CH).

youtube.com/playlist?list=PLLhem8_dLoaoLZPpXlzO0r0Kv0Hp7ALzN

Dimitri Peaucelle introducing Silvia Mastellone at the April technical lecture, Vienna, AT

The President's Dinner, held in Vienna's central 1st district on the evening of 16 April, brought together members of the international "IFAC family" as well as representatives of the local Austrian control community. Two IFAC Advisors were in attendance (Kurt Schlacher- AT and Vladimir Kucera- CZ).

Special thanks go to Andreas Kugi and Maria Ochsenreiter at the TU for accomodating the meeting and lecture space.

Arrangements for the 2027 edition of this meeting are underway.

Written by: Elske Haberl, IFAC Secretariat

IFAC Activity Fund Report: PARC 2025

Empowering the Next Generation of Control Engineers: A Story from PARC 2025

In July 2025, along the coastal shores of Saly, Senegal, something quietly remarkable unfolded. It did not begin with equations or technical sessions, but with anticipation—hundreds of young minds arriving from across Africa and beyond, carrying with them ideas, prototypes, and a shared curiosity about how Robotics systems behave, adapt, and can ultimately be controlled.

The Pan-African Robotics Competition (PARC) 2025 was more than a gathering. It was a living demonstration of how the principles championed by the International Federation of Automatic Control are finding new ground in emerging regions, where the challenges are complex, but the opportunities for innovation are even greater. As an official sponsor of the event, IFAC's support reflected a strong commitment to advancing control education and its real-world applications across all regions of the world.

For months before the event, students worked from their home countries, often with limited resources but with remarkable determination. By the time they arrived in Saly, their projects had evolved into functioning systems—robots capable of sensing their environments, making decisions, and acting with purpose. What stood out was not just the ingenuity of the designs, but the underlying logic that connected them: feedback, adaptation, and control.

As the competition unfolded, it became clear that each project told a story. One team presented a robotic system designed to optimize fertilizer use for smallholder farms, navigating fields with precision and responding dynamically to environmental conditions. Another demonstrated an autonomous solution for resource extraction, carefully balancing efficiency with safety. In a different arena, participants explored how artificial intelligence could enhance industrial processes, embedding learning capabilities into control loops.

In each case, the same fundamental idea emerged—systems are not static. They must respond, adjust, and remain stable under uncertainty. For many participants, this was their first direct encounter with the practical implications of control theory. Concepts that are often introduced abstractly in classrooms became tangible, visible in the movement of a robot, the correction of a trajectory, or the stabilization of a process.

What made PARC particularly compelling was how naturally these technical explorations were tied to societal needs. The problems being addressed were not hypothetical. They reflected real challenges in agriculture, energy, and industry across the continent. In this sense, control engineering was not presented as an isolated discipline, but as an essential tool for development—one that enables systems to function reliably in environments that are often unpredictable.

Throughout the event, conversations extended beyond the competition floor. Researchers, educators, and industry representatives engaged with participants, exchanging ideas and perspectives. These interactions revealed an important shift: a growing recognition that the future of automatic control will be shaped not only in established research centers, but also in regions where new applications and constraints demand fresh approaches.

For IFAC, whose mission has long been to advance the science and application of automatic control globally, initiatives like PARC offer a meaningful avenue for engagement. By sponsoring PARC 2025, IFAC contributed not only to the success of the event, but also to the development of a new generation of engineers who are learning to apply control principles to real-world challenges from an early stage.

As the final demonstrations concluded and teams prepared to return home, the impact of the experience was already evident. Participants left not only with improved technical skills, but with a deeper understanding of how their work fits into a broader engineering landscape. They had seen, perhaps for the first time, how control systems can bridge theory and practice, connecting mathematical insight with real-world impact.

The story of PARC 2025 is still unfolding. Its significance lies not only in what was achieved during those few days in Senegal, but in what will follow—in the projects that will continue to evolve, the collaborations that will grow, and the ideas that will mature into solutions. In many ways, it is a reminder that the future of automatic control depends not only on advancing theory, but also on expanding opportunity. And in places where that opportunity is just beginning to take shape, the results can be both unexpected and inspiring.

Written by: Sidy Ndao and Fatima Kébé, the initiators of PARC and submitted by Mamadou Diagne (US, UCSD)

Editor's Note: IFAC Activity Fund reports can be viewed at: sites.ifac-control.org/activity-fund/reports-of-recent-projects

The IFAC Council and Related Meetings 2026 will take place in conjunction with the 2026 IFAC World Congress in Busan, KR in August 2026.

The schedule is constantly updated and is available at:

ifac-control.org/news/meeting-schedule-busan-korea

IFAC Conference on Control Applications in Marine Systems, Robotics, & Vehicles (CAMS 2025)

25-28 August 2025

Wuhan, CN

The 16th IFAC Conference on Control Applications in Marine Systems, Robotics and Vehicles (CAMS 2025) was successfully held from August 25 to 28, 2025, in Wuhan, China. Hosted by Huazhong University of Science and Technology (HUST), this marked the first time the IFAC CAMS conference was held in mainland China. The conference was led by IPC Chair Craig Woolsey (USA) and IPC Vice-Chairs Andrea Monteriù (IT), Nikola Mišković (HR), and Bart De Schutter (NL), with local organization chaired by NOC Chair Xianbo Xiang (CN), NOC Vice-Chairs Gong Xiang (CN) and Shaolong Yang (CN), NOC Vice-Chair of Industry Lei Gao (CN), and Editor Yang Qu (CN).)

The conference featured 155 high-quality papers from authors representing a wide array of countries, including the USA, Croatia, Denmark, Germany, Italy, Japan, the Netherlands, Norway, Portugal, South Korea, the United Kingdom, Russia, Malaysia, Australia, and China. The conference attracted more than 200 participates worldwide, and was organized into 14 specialized sessions, covering cutting-edge areas such as marine robotics (USV, AUV, UUV, ROV), guidance, navigation and control (GNC) cooperative systems, intelligent autonomous systems, maritime safety, marine renewable energy, and digital twins. .

CAMS 2025 featured invited plenary lectures from internationally renowned experts, including Prof. Carlos Guedes Soares (PT) on maritime autonomous surface ships, Prof. Pan Guang (CN) on manta ray-inspired underwater vehicles, Prof. Martin Ludvigsen (NO) on marine autonomy for scientific applications, and Dr. Zhang Dinghua (CN) on subsea heavy equipment control. Further plenaries were delivered by Prof. Zhang Fumin (Hong Kong, CN) on robot swarm perception, Prof. Nikola Mišković (HR) on maritime robotics centers of excellence, Prof. Roberto Galeazzi (DK) on trust in autonomous ships, and Prof. Ma Yong (CN) on deep reinforcement learning for marine navigation.

A dedicated Workshop on Marine Robots featured presentations from leading international researchers, including Prof. Pedro J. Sanz (ES), Prof. Massimo Caccia (IT), Prof. Huang Hai (CN), Dr. Antonio Vasilijevic (NO), and Prof. Li Huiping (CN). The workshop covered advanced topics such as intervention-AUVs, swarm robotics, intelligent manipulation operations, and the application of marine robotics for ocean science and seabed resident operations.

The conference was primarily sponsored by IFAC Technical Committee 7.2 and co-sponsored by other IFAC Technical Committees (TCs 1.1, 1.2, 3.2, 3.3, 7.4, 7.5), as well as the Chinese Association of Automation (CAA). CAMS 2025 successfully fostered international collaboration and showcased the latest advances in marine control systems and robotics, setting a strong foundation for future innovations in the field.

The dedicated conclusion video of the IFAC CAMS 2025 conference was uploaded in the conference website conferences.ifac-control.org/cams2025/, and can be watched in the Youtube channel via youtube.com/watch?v=VFqvqfjsgwI&t=247s

IFAC is on social media!

Facebook
facebook.com/IFAC.Automatic.Control/

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LinkedIn
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X
x.com/IFAC_Control

Bluesky
bsky.app/profile/ifac-control.bsky.social

YouTube

IFAC Affiliates Statistics

+25% increase

As of June 9, 2026, the IFAC database contained 7579 approved affiliates. Compared to the latest published figures in the December 2025 Newsletter issue, it is a major increase by +25%. With no surprise the growth is in conjunction with the 2026 World Congress registrations and the incentive to benefit from a fee reduction when being affiliate.

Profiles pending approval

472 more profiles are pending. The affiliation approval is done manually to avoid irrelevant registrations (for example some people mistake IFAC with the federation of accountants) and duplicate profiles. The delay in approvals does not impact the 2026 World Congress registration. Colleagues are encouraged to fill all relevant information in their profiles, such as links to their professional webpages. The provided information helps the Secretariat in validating the relevance of the affiliation. Note that as stated in the IFAC Constitution, English is the working language of IFAC. Names written in non-Latin characters are not readable by Secretariat and hence cannot pass validation.

60% ghost profiles

Only 2981 profiles are either 'Web Public' (visible to any visitor) or 'IFAC Public' (visible to any logged affiliate). All others are 'Private'. Unfortunately, these profiles do not benefit from any visibility: people cannot be contacted for their skills in their fields of interest, young researchers are not visible to potential recruiters, brilliant colleagues are ignored for IFAC prizes, potential IFAC volunteers and officials remain unknown. All affiliates are invited to connect to their profile, check that the data is up-to-date, and make public at least their names and fields of interest.

TC member nominations

Incoming TC Chairs are currently nominating TC members for the 2026-2029 triennium. In this task, they browse the 'IFAC Public' database. All 'Private' profiles are disregarded. It is timely to make yourself public. If you have any difficulty in doing so, please contact secretariat@ifac-control.org.

Top 10 Countries/Regions

The countries/regions are listed in the order of number of affiliates. The first figure is the number of affiliates in the database, the second is the number those who are visible for an IFAC affiliate visiting the portal. China (862, 160), United States (786, 143), France (685, 213), Germany (464, 96), Italy (428, 122), Japan (393, 62), United Kingdom (268, 48), Republic of Korea (239, 51), Netherlands (238, 66).

Top 10 Technical Committees

The TCs are listed in the order of number of affiliates having selected that TC in their fields of interest. The first figure is the number of such affiliates in the database, the second is the number of those who are visible for an IFAC affiliate visiting the portal. TC 2.1 Control Design (2100, 562), TC 2.3 Non-linear Control Systems (2075, 553), TC 2.4 Optimal Control (2034, 522), TC 2.2 Linear Control Systems (1765, 478), TC 1.1 Modelling, Identification and Signal Processing (1759, 462), TC 2.5 Robust Control (1664, 423), TC 4.3 Robotics (1649, 429), TC 1.2 Adaptive and Learning Systems (1488, 390), TC 7.5 Intelligent Autonomous Vehicles (1286, 356), TC1.5 Networked Systems (1036, 271).

If you are interested in any statistics for future Newsletter issues, please do not hesitate to suggest a topic on which to focus by writing to newsletter@ifac-control.org.

Check out IFAC's YouTube channel for new and historical IFAC video materials!

youtube.com/@ifacyoutube3132

IFAC World Congress 2023 Update

23-28 August 2026
Busan, KR

Message from the Organizing Committee

We have prepared the most exciting, comprehensive, and enriching program to welcome you and provide rewarding experiences in Busan. At the close of early registration on May 31, 3,350 have registered for the 2026 World Congress. Online registration will be open until August 15. If you have not registered yet, we encourage you to register at your earliest convenience.

Congress Program

The 2026 World Congress received 4,145 submissions, from which 3,200 final technical papers are accepted for presentation. Despite various external disturbances, such as wars and high costs, the final paper submission rate was unprecedentedly high. We thank all of you for your eagerness to participate.

Note that paper types include: regular paper, regular survey paper, regular late-breaking/discussion paper, regular paper with journal option, regular survey paper with journal option, invited session paper, invited session survey paper, invited session late-breaking/discussion paper, open-invited-track paper, open-invited-track survey paper, open-invited-track late-breaking/discussion paper, dissemination paper, demonstration paper, demonstration late-breaking/discussion paper, tutorial session paper, and tutorial session survey paper.

For the first time in IFAC World Congress history, authors were given the option to submit jointly for Congress presentation and journal publication. This new initiative attracted 570 submissions across 14 special issues in 6 IFAC journals - representing nearly 15% of all submissions - a strong indication of its value to the community. Of these, 385 papers are accepted for Congress presentation. Those that are finally accepted for a journal will not be published in IFAC PoL 2026 World Congress Volume.

There will be 37 parallel sessions where these papers, as well as tutorials and many special sessions, will be presented.

In addition to technical papers, the technical program includes pre-Congress workshops, five plenary lectures, six semi-plenary lectures, Kwon Award lecture, and D&I Award presentation. There are also three back-to-basics tutorials by luminaries in the field, two academic forums, six IFAC Forums, and five Industry Forums, offering participants valuable opportunities to engage with leading experts and gain insights into current and emerging topics in automatic control.

Pre-Congress Workshops

A wide range of pre-Congress workshops will be offered on Sunday, August 23, 2026, before the main Congress begins. These workshops will cover advanced and emerging topics in automatic control, including data-driven control, robotics, battery management systems, quantum systems, optimization, safety-critical systems, and industrial applications. During online registration, participants may select a full-day workshop, or two half-day workshops. The final workshop program will be confirmed after the early-bird registration deadline. Visit the official website for the latest details.

Tutorials

Nine tutorials will be featured, covering a wide range of emerging and fundamental topics in control. Held from August 24 to 28, 2026, these tutorials are included in the regular registration and will offer participants valuable opportunities to explore both theoretical advances and practical applications in modern control systems. No additional registration is required, as these tutorials are integral parts of the technical sessions.

Program Update: Interactive Shotgun

All interactive poster papers will present a five-minute summary of their papers. The Congress time slots are A (morning), B (afternoon), and C (late afternoon). Interactive poster sessions are in the C slot. On the same day, all authors of interactive poster papers present their summaries in A and B slots.

Special Program

The Public Lecture, *"Physical Intelligence: AI and Robots in Our Future,"* will be delivered by Prof. Ken Goldberg (UC Berkeley) on Monday, August 24, at 19:30, open to the Busan community. A TED speaker and member of the US National Academy of Engineering, Prof. Goldberg will explore how AI is transforming the physical world through robotics.

A wide range of Special Programs are designed to enrich the Congress experience beyond regular technical sessions. These programs include the Public Lecture, live recording of the *"inControl"* podcast, MathWorks Sessions, Kwon Special Session, Kwon Award Lecture, D&I Award Presentation, and Master the Korean AI-phabet.

In addition, meaningful outreach programs such as KJ-RoboLab: A GiC-X Initiative and IFAC Young Robot Explorers aim to engage young and female students and the local community by offering accessible opportunities to experience control, robotics, and engineering.

Competitions

Hands-on competitions will include the MathWorks Minidrone Competition, the 2026 RoboRacer Grand Prix Competition, and the IFAC Wearable Robot Challenge. Applications for the MathWorks Minidrone

Competition have been successfully completed, while registration for both the IFAC Wearable Robot Challenge and the 2026 RoboRacer Grand Prix Competition remains open until June 30, 2026. Interested teams are invited to review the competition details and register for this exciting competitions at IFAC WC 2026.

Social & Technical Tours

A variety of Social Tours and Technical Tours will be offered during the Congress period. Social Tours will introduce participants to Busan's culture, coastal scenery, local markets, and nearby heritage sites, while Technical Tours will provide opportunities to visit major industrial facilities, including Busan Port, POSCO Steelworks, and Hyundai Motor Company's Ulsan Plant.

Accompanying persons are also welcome to register for the Social Tours. Registration is available on a first-come, first-served basis, and early registration is encouraged.

Control Orchestra

Where control theory meets music: once again after its successful performance in 2020 and 2023, the IFAC Control Orchestra will perform at the Closing Ceremony in Busan. This time Yoonhak Baek will hold the baton. He is Professor of Music at Yeungnam University and Conductor of the Seoul Festa Philharmonic Orchestra. Extraordinarily, he also holds a bachelor's degree in electrical engineering from Seoul National University. This special event will celebrate creativity, collaboration, and musical innovation within the global control community.

Banquet RSVP

As part of our commitment to sustainability and environmentally responsible event management, the Banquet RSVP will help us plan more efficiently and reduce food waste. Participants who wish to attend the Congress Banquet are kindly asked to complete their RSVP once it opens in the registration system in June 2026. Early RSVP is recommended, as banquet seating may be limited.

DC-YAS & D&I Travel Support

For details on DC-YAS and D&I Travel Support, please refer to the President's message in this edition. In total, 93 young and underrepresented researchers will attend the Busan World Congress with this support.

Onsite Childcare Services

Onsite childcare services will be provided at BEXCO to support participants traveling with children. The service will operate from August 24 to 28, 2026, with two time slots (morning, afternoon) offered each day. Note that each time slot requires a minimum number of enrollments to operate.

Transportation Guide Updated

The Transportation page has been updated with information for international participants on how to travel to Busan and reach BEXCO. Hotel reservation information is also available on the official website. Visit the website for detailed guidance on airport access, domestic transfers, transportation options to the Congress venue, and accommodation booking.

Dongil "Dan" Cho, IFAC President
Hyungbo Shim, IFAC 2026 General Chair
Hyo-Sung Ahn, IFAC 2026 IPC Co-Chair
Hyoun Jin Kim, IFAC 2026 IPC Co-Chair

IFAC Activity Fund Report: inControl Podcast

The *inControl* Podcast is a long-form interview series dedicated to systems and control, distributed free of charge across all major podcast platforms. The project supported by the IFAC Activity Fund contributed to the production of new episodes during the reporting period, complementing substantial in-kind contributions from the host and from NCCR Automation, which together sustained the broader production pipeline.

Project Lead: Alberto Padoan, Ph.D., The University of British Columbia, Vancouver, Canada.

IFAC Sponsor: TC 9.4 Control Education

Summary

The *inControl* Podcast is a long-form interview series dedicated to systems and control, distributed free of charge across all major podcast platforms. The project supported by the IFAC Activity Fund contributed to the production of new episodes during the reporting period, complementing substantial in-kind contributions from the host and from NCCR Automation, which together sustained the broader production pipeline.

Activities and deliverables

During the reporting period, the *inControl* Podcast released approximately 40 episodes featuring leading researchers in systems and control, including Jean-Jacques Slotine, Stephen Boyd, John Doyle, and Cleve Moler, alongside emerging voices from across academia and industry. Episodes covered the mathematical foundations of feedback systems, applications of control engineering, and the societal impact of automation. All episodes were produced to a consistent editorial standard and distributed on Spotify, Apple Podcasts, YouTube, and other major platforms.

Reach and impact

Cumulative listenership exceeded 150,000 across more than 150 countries/regions and territories, with over 2,500 monthly listeners at the time of writing. The podcast has helped to broaden public engagement with the field, with particular reach among graduate students, early-career researchers, and listeners outside traditional academic centres. Inclusion and diversity have been a deliberate editorial focus, with explicit attention to representation of women in control, early career researchers, and voices from under-represented regions.

Use of funds

The IFAC Activity Fund award of EUR 5,000 was used in full to engage professional sound-engineering and post-production services. At prevailing rates for the level of editing required, the award covered the full post-production cost of approximately 2.5 episodes out of the 40 episodes produced during the period. The remaining post-production, hosting, recording infrastructure, software subscriptions, equipment, scheduling, guest correspondence, social media, and editorial work were sustained through in-kind contributions from the host and through complementary funding from NCCR Automation, which currently covers a portion of the editing and sound-engineering pipeline. The IFAC contribution thus served as a targeted, episode-level subsidy within a substantially larger production effort.

Acknowledgements

The host gratefully acknowledges the IFAC Activity Fund Committee for its support, TC 9.4 on Control Education for sponsoring the activity, and NCCR Automation for complementary funding. The host also thanks the guests who generously contributed their time, and the listeners whose engagement sustains the project.

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Federal Ministry
Innovation, Mobility
and Infrastructure
Republic of Austria

Calendar of IFAC Conferences

Title	2026	Place	Further Information
EUCA/IFAC Conference on European Control Conference (in cooperation with IFAC)	July 7 – 10	Reykjavik Iceland	hecc26.euca-ecc.org/ ecc26@euca-ecc.org
10th IEEE/IFAC International Conference on Control, Automation and Diagnosis ICCAD 2026	July 7 – 9	Lisbon Portugal	iccad-conf.com/ contact@iccad-conf.com
International Symposium on Mathematical Theory of Networks and Systems (in cooperation with IFAC) MTNS 2026	August 17 – 21	Waterloo, ON Canada	uwaterloo.ca/international-symposium-mathematical-theory-networks-systems
23rd IFAC World Congress WC 2026	August 23– 28	Busan Republic of Korea	ifac2026.org ifac2026@ifac2026.org
17th APCA International Conference on Automatic Control and Soft Computing CONTROLO 2026	September 9 – 11	Coimbra Portuga	controlo2026.apca.pt/ controlo2026@apca.pt
67th SIMS/IFAC International Conference of Scandinavian Simulation Society SIMS 2026	September 16 – 17	Eskilstuna Sweden	scansims.org/events.php?sid=41&src=db1557571001&udpview=show-event
6th AACC/IFAC Conference on Modeling, Estimation and Control MECC 2026	October 25 – 28	Phoenix, AZ USA	mecc2026.a2c2.org/
23rd INSTICC et al. International Conference on Informatics in Control, Automation and Robotics ICINCO 2026	October 26 – 29	Angers France	*icinco.scitevents.org/* *icinco.secretariat@insticc.org*
20th INSTICC et al. International Workshop on Enterprise Integration, Interoperability and Networking EI2N 2026	October 29 – 30	Angers France	in4pl.scitevents.org/Workshops.aspx#EI2N
7th INSTICC et al. International Conference on Innovative Intelligent Industrial Production and Logistics IN4PL 2026	October 29 – 30	Angers France	in4pl.scitevents.org/
9th ACDOS/IFAC Conference on Advances in Control and Optimization of Dynamical Systems ACODS 2026	November 18 – 21	Warangal India	
6th IFAC Workshop on Cyber-Physical Human Systems CPHS 2026	December 11 – 12	Redondo Beach, CA USA	cphs2026.org/
Title	**2027**	**Place**	**Further Information**
19th IFAC Conference on Programmable Devices and Embedded Systems PDES 2027	May 19 – 21	Ostrava Czech Republic	
8th IFAC Conference on Analysis and Control of Nonlinear Dynamics and Chaos ACNDC 2027	June 9 – 11	Monte Porzio Catone (Rome) Italy	conferences.ifac-control.org/acndc2027/
13th IFAC Symposium on Control of Power and Energy Systems CPES 2027	June 10 – 12	Cluj-Napoca Romania	
20th IFAC Workshop on Time Delay Systems TDS 2027	June 27 – 30	Napoli Italy	
19th IFAC Symposium on Information, Control and Optimisation in Manufacturing INCOM 2027	June 28 – 30	Nantes France	hub.imt-atlantique.fr/incom2027/
13th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2027	June/July 29 – 02	Delft Netherlands	conferences.ifac-control.org/safeprocess2027/

Calendar of IFAC Conferences

2027	Date	Place	Further Information
AACC, IFAC, et al. Conference on American Control Conference (in cooperation with IFAC)	July 5 – 9	Philadelphia, PA USA	acc2027.a2c2.org/
21st IFAC Symposium on System Identification - Learning models for decision and control SYSID 2027	July 7 – 9	Lyon France	conferences.ifac-control.org/sysid2027/ sysid2027@services.cnrs.fr
EUCA/IFAC Conference on European Control Conference (in cooperation with IFAC) ECC 2027	July 12 – 16	Brussels Belgium	ecc27.euca-ecc.org/
9th IFAC Conference on Analysis and Design of Hybrid Systems ADHS 2027	July 21 – 23	L'Aquila Italy	
14th IFAC Conference on Fractional Differentiation and its Applications ICFDA 2027	August 23 – 26	Delft Netherlands	conferences.ifac-control.org/icfda2027/

The IFAC Calendar of Conferences is constantly updated as additional IFAC Conferences (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: ifac-control.org/events/

IFAC Activity Fund Report: Seminar Series & Workshop on Biological Control Systems

The IFAC Activity Fund supported a successful Seminar Series and Workshop on Biological Control Systems. The activity aimed to foster interdisciplinary collaboration and knowledge exchange between control engineers and biologists regarding the modeling, analysis, and control of complex biological systems. The series included lectures from leading experts and a hands-on workshop, attracting a diverse group of participants and initiating new research collaborations in this emerging field.

Project Lead: Christian Cuba Samaniego, Carnegie Mellon University; ccubasam@andrew.cmu.edu

IFAC Sponsor: TC 2.1 Control Design

Activity details

During 2024 and 2025, supported by the IFAC Activity Fund grant, we organized monthly online seminars and an annual online workshop at the intersection of Control Theory and Biological Systems. We coordinated the logistics to identify and invite early-career researchers from both theoretical and experimental backgrounds. Each seminar was promoted through our social media channels and Slack community, and recordings of the talks were uploaded to our YouTube channel. We also fostered engagement within the Slack community by hosting discussions on recent papers related to biocontrol. For the annual workshop, we managed all organizational aspects, including defining the program structure, inviting and selecting speakers, and promoting the event. During the workshop, we also organized an online poster session to create an interactive space for members of the community to connect and discuss their work. Accomplishments. The Activity Fund support played an important role in enabling the development of this community initiative. Key outcomes include the establishment of a sustained international seminar series, the organization of large-scale online workshops attracting hundreds of participants, the creation of an active Slack community with more than 500 members, and engagement of researchers across control theory, systems biology, and biotechnology. Importantly, the initiative has helped expose researchers in biology and biotechnology to control-theoretic approaches, while also highlighting new theoretical challenges to the control community.

youtube.com/@BiocontrolSeminars/videos

IFAC Council / Related Meetings Reply Form
(please submit no later than the end of July 2026)

cloud.ifac-control.org/apps/forms/s/qZ-RRdzJtBHcKQLdSz42ewLzf

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

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

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
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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.

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.