

# UPCOMING IES SPONSORED CONFERENCES IN 2023



## ICIT 2023

[2023 IEEE International Conference on Industrial Technology](#)

Orlando, FL, USA | 4-6 April 2023

## ICM 2023

[2023 IEEE International Conference on Mechatronics](#)

Loughborough, UK | 15-17 March 2023

## ICPS 2023

[2023 IEEE Sixth International Conference on Industrial Cyber-Physical Systems](#)

Wuhan, China | 8-11 May 2023

## ISIE 2023

[2023 IEEE 32nd International Symposium on Industrial Electronics](#)

Helsinki, Finland | 19-21 June 2023

## INDIN 2023

[2023 IEEE 21st International Conference on Industrial Informatics](#)

Lemgo, Germany | 17-20 July 2023

## IESES 2023 (postponed from 2022)

[2023 IEEE Third International Conference on Industrial Electronics for Sustainable Energy Systems](#)

Shanghai, China | 26-28 July 2023

## ETFA 2023

[2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation](#)

Sinaia, Romania | 12-15 September 2023

## IECON 2023

[49th Annual Conference of the IEEE Industrial Electronics Society](#)

Singapore | 16-19 October 2023

[Explore More IES Sponsored Conferences](#)

# IES MAJOR SPONSORED CONFERENCES IN 2022



## CATALOG

- 1 IECON 2022**  
Brussels, Belgium | 17-20 October 2022
- 2 ICIT 2022**  
Shanghai, China (virtual) | 22-25 August 2022
- 3 ISIE 2022**  
Anchorage, USA | 31 May - 3 June 2022
- 4 AMC 2022**  
Padova, Italy (virtual) | 18-20 February 2022
- 5 ETFA 2022**  
Stuttgart, Germany | 6-9 September 2022
- 6 ICPS 2022**  
Coventry, United Kingdom (virtual) | 24-26 May 2022
- 7 INDIN 2022**  
Perth, Australia (virtual) | July 25-28 2022
- 8 PEMC 2022**  
Brasov, Romania | 25-29 September 2022

# IECON 2022

**The 48th Annual Conference of the Industrial Electronics Society was held in Brussels, Belgium, 17-20 October, 2022.**

The 2022 edition of our annual flagship society conference IEEE IECON 2022 was the first face-to-face version after two years of online events. Despite active travel restrictions, about 800 experts, academic and industrial, joined the event.

Again held in conjunction with IEEE ICELIE conference, a full week of activities started on Monday with 10 tutorials and two workshops, where more than 300 people attended.



The conference was kicked off by an opening speech from IES President Mariusz Malinowski and VUB Vice-rector on Research Pieter Ballon and a welcome by the conference chairs Abdellah Touhafi and Peter Palensky. A keynote was given by Dr. Kathrine Jensen from the European Commission, titled “Towards a Green and Digital Future.”

Besides the conference sessions, the event also hosted the Interop Plugfest and the IES Industry Forum, to large industrial activities and a vibrant Women in Engineering event with seven invited speakers.

As the tradition with IECONs, educational activities of the Industrial Electronics Society such as the Associate Editor Training Day or the Fellow Nomination Training Day were organized as well.

The gala dinner featured a beautiful and festive award ceremony celebrating 8 IES awards and 44 winners of the Students and Young Professionals (SYPA) Awards.



The final day was started by keynote speakers Christof Schernus and Joeri Van Mierlo who highlighted the industrial and academic perspective of the role of transformation of Mobility in the EU. Later in the afternoon, an inspiring plenary session was given by Jorgen D’Hondt, covering the fundamentals of our universe and how they get discovered by large particle accelerators.

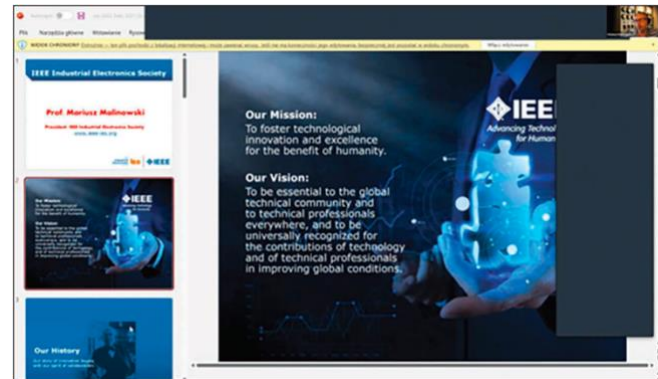
We celebrated the end of the conference with a party, featuring international food and nice jazz music, a perfect moment to meet friends.

# ICIT 2022

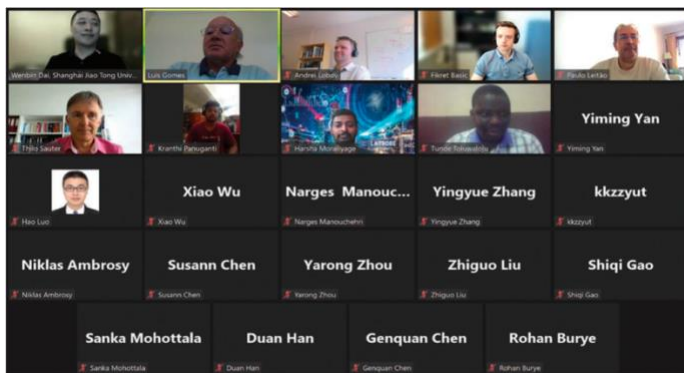
**The 23rd IEEE International Conference on Industrial Technology (ICIT 2022), was held virtually in Shanghai, China, 22 – 25 August 2022.**

ICIT is one of the IEEE Industrial Electronics Society’s (IES’s) flagship annual conferences that travels in a rotation scheme around Asia/Australia, the United States, and Europe. This year, ICIT conference visited Shanghai, China, for the first time, hosted by Shanghai Jiao Tong University, the Shanghai Association of Automation, and the IES Shanghai Chapter. As the conference was open to the public for free, ICIT 2022 attracted an online audience totaling 463 invited speakers and presenters from more than 30 countries across 12 different time zones.

During the opening ceremony, IES President Prof. Mariusz Malinowski gave a comprehensive introduction to the IES’s history. IES Vice President for Technical Activities and General Cochair of ICIT 2022 Prof. Valeriy Vyatkin provided the basic information and 24 TCs of the IES. Following that, three keynotes were given. The first keynote was presented by Prof. Ren Luo on a hot topic: “Digital Transformation and AIoT Enhance Robotics Integrated Resilient Manufacturing Ecosystem”. Prof. Thilo Sauter gave the second keynote “Energy Communities—Empowering Decentralized Prosumers of Renewable Energy,” which provided a novel concept of energy communities. The final keynote was delivered by Dr. John Conway from Schneider Electric, which introduced “UniversalAutomation.Org: The Missing Link to Industry 4.0.”



The accepted and scheduled papers were presented in 20 oral sessions, including eight special sessions over four days. Along with the technical tracks, the Industry Forum, Women in Engineering session, and three tutorial sessions were also presented. In addition, there was a full-day event of training and promoting of IEEE standards.



ICIT22 closed as an exciting conference with a remarkable audience. At the closing ceremony, General Cochair Prof. Luis Gomes presented awards to winners of best paper, best student paper, and best paper presentations of ICIT 2022. A total of 17 papers received awards. The next edition of ICIT will be held in Orlando, Florida, USA, from 8 to 10 March 2023. We wish success to next year’s ICIT conference.

# ISIE 2022

**The 31st IEEE International Symposium on Industrial Electronics was held in Anchorage, USA, 31 May – 3 June, 2022.**

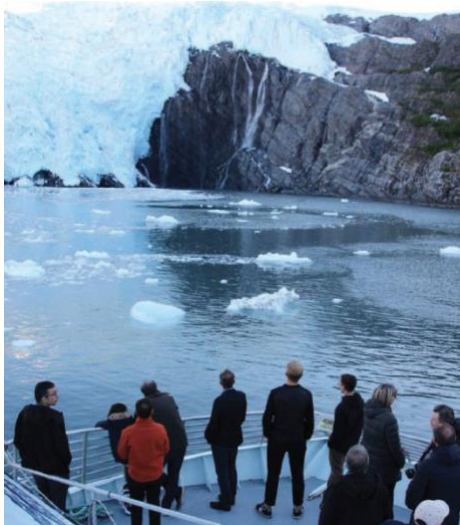
The 31st IEEE International Symposium on Industrial Electronics (ISIE 2022), held between 31 May and 3 Jun, is one of the flagship conferences of the IEEE IES, continued building on the theme of “Sustainable Development Goals” in all its sessions, keynotes, and special events, encouraging an increased focus on technologies for diverse applications.

The conference attracted 288 paper submissions, of which 172 papers were accepted, resulting in a 60% acceptance rate with careful consideration for novelties, contributions, and supporting results, and offered 15 sessions in regular tracks, 16 in special sessions, and 2 in “Work-in-Progress” session. Consequently, the ISIE 2022 was attended by more than 125 in-person and more than 150 online participants from 46 different countries.

There were 4 keynote speeches in total. Given by Prof. Karl Johansson, Dr. Dawn Tilbur, Dr. Stan Atcitty, and Prof. Marija Ili respectively. It is worth mentioning that all keynote talks are available for all ISIE participants through the QiqoChat site for 60 days.



The conference also hosted five colorful workshops, which were carefully scheduled to avoid any parallel sessions to allow for increased participation. The plan worked as expected and resulted in highly interactive sessions. In addition, the Women in IES workshop, organized by Prof. Morgan Kiani, and the Young Professionals and Students forum, organized by Prof. Marek Jasinski, were offered as a combined session because of the relevance of the invited talk given by Ayda Akbele.



The banquet was the highlight of our social events and took place on a glacier tour boat after an hour-long beautiful coastal ride between Anchorage and Whittier. The guests were then taken out on a 3-h boat ride to view the splendid glaciers as they enjoyed their filet mignon and crème brûlée and took photos of the wildlife.

In summary, ISIE 2022 was the first in-person event to bring the IES community together after a three-year break and the first hybrid event for IES, offering author presenters, speakers, tutorials, and session chairs the flexibility to participate in person or online seamlessly. Best of luck to ISIE 2023, and we hope to meet with you all in Helsinki!

## ■ AMC 2022

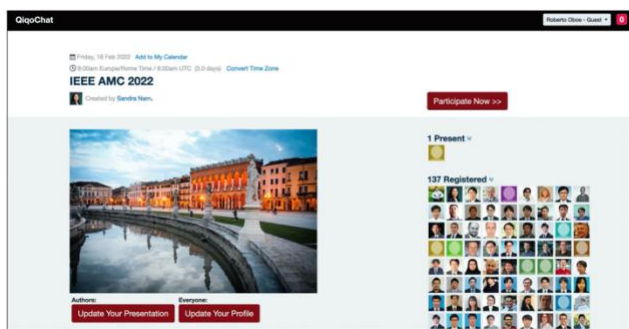
**The 17th IEEE International Conference on Advanced Motion Control took place virtually on 18–20 February, 2022.**

The first AMC conference took place in 1990 in Yokohama, Japan. Since then, IEEE AMC workshops were traveling around the world with a two-year cycle and visited the University of Padova this year. Originally planned to be in person, AMC 2022 changed over to a fully online event due to the COVID-19 pandemic. Despite this challenging conversion, the conference was still very attractive and was attended by more than 130 delegates, about 10% of them from the industry. The attendees were from different regions of the world (about 40% from Europe, 50% from Japan, and 10% from other countries).



More than 100 papers were submitted, and 75 of them were selected for oral presentations. The conference was organized around nine regular tracks plus five special sessions. A special track was also added for the presentation of articles that were recently published in IES journals and transactions.

All three days of the conference were additionally enriched by three excellent plenary talks delivered by three invited speakers. On the first day, Prof. Xiaobo Tan made a presentation titled “Modeling and Control of Hysteresis in Smart Material Actuators with Minimal Representations”. On the second day of the conference, Prof. Luca Zaccarian gave the talk “To Stick or to Slip: Lyapunov-based Reset PID for Positioning Systems with Coulomb and Stribeck Friction”. Finally, on the last day, the plenary talk “Practical Motion Control Approaches for Industrial Positioning Devices with Strain Wave Gearing” was provided by Prof. Makoto Iwasaki.



In contrast to traditional conferences in presence, the online conference platform QiqoChat also allowed for an additional online and offline dialog between the presenting authors and the audience. All sessions saw a high attendance in total. All pre-recorded presentations were made available to participants, while the live talks and discussions found a place in the scheduled

digital session rooms with organized moderation and technical assistance.

In sum, AMC 2022, in spite of the challenging conditions due to the global pandemic, has been a very successful event, helping the IES communities research and work in the areas of motion control to maintain and reinforce the strong ties they built over the years.

## ETFA 2022

**2022 IEEE 27th International Conference on Emerging Technologies and Factory Automation was held in Stuttgart, Germany, 6–9 September, 2022.**

The 2022 IEEE 27th International Conference on Emerging Technologies and Factory Automation (ETFA 2022) was held in Stuttgart, Germany, between September 6–9 2022 at the University of Stuttgart, which is one of the oldest technical Universities in Germany with highly ranked programs in Mechanical, Industrial and Electrical Engineering, among others.



The ETFA 2022 focuses on the latest developments and new technologies in the field of industrial and factory automation, aiming to disseminate novel ideas and emerging trends, research results and practical achievements. The event was sponsored by the Industrial Electronics Society and co-sponsored by University of Stuttgart, Germany. The general chairs Prof. Michael Weyrich and Prof. Marco Porta spearheaded the organization and coordinated the event.

During the four-day event presented fully on-site, there were 4 keynote speeches, delivered by Prof. Detlef Zuehlke, Dr. Kirsten Matheus, Dr. Jens Ottnad, and Dr. Andrea Dunbar. The accepted 277 papers were presented in 11 technical tracks and 10 workshops over the four days. Besides the conference sessions, the Women in IES workshop was held during the event, in the form of technical presentations and an insightful panel discussion. Four invited female speakers presented their cutting-edge work and shared their views on new research opportunities about AI, automation, and robotics. The workshop further fostered women’s broader and deeper involvement in future scientific and technical activities of IES.

The conference was additionally enriched by a variety of social events. There was a welcome coffee for all the participants of the industry day on the first day of the conference. The welcome reception is hosted at the White Hall of the New Castle at the beginning of the second conference day. At the end of the third day, a gala dinner took place at the magnificent Mövenpick Hotel Stuttgart Airport. These exciting social activities provided unique opportunities to network, build up partnerships and exchange ideas with both industry leaders and a variety of experienced researchers, developers and practitioners from several industries, research institutes, and academia.



In summary, ETFA 2022, bringing together experts from industry and academia in the area of automation to disseminate and discuss novel ideas and emerging trends, research results and practical achievements, has been a very successful event.

## ■ ICPS 2022

**The 5<sup>th</sup> IEEE International Conference on Industrial Cyber-Physical Systems was held in Coventry, United Kingdom, 24-26 May, 2022.**



The 2022 edition of our annual flagship society conference IEEE ICPS 2022 was successfully held online hosted by the University of Warwick in Coventry. During the conference events, industry experts, researchers, and academics shared their ideas and experiences surrounding frontier technologies, breakthroughs, research results as well as initiatives related to industrial cyber-physical systems and their applications.

The academic activities for ICPS 2022 lasted for three days starting on Tuesday with two tutorials and two industry forums where more than 100 people attended.

The conference was kicked off by an opening ceremony by the conference general chair Prof. Robert Harrison and Prof. Yang Shi. A keynote talk was given by Prof. Alan Norbury from Siemens plc, titled “Adoption of Digitalisation in Practice”. Insightful and thought-provoking research ideas related to the digital revolution and industrial cyber-physical systems were shared from academic and application perspectives.

In addition to the total 12 technical sessions, the industry forum on smart manufacturing was also held in ICPS. The forum invited industry leaders to give talks on the vision, technology, and engineering solutions enabling the efficient digital transformation of the manufacturing industry. In parallel to the industry forum, a number of exhibitors have demonstrated the latest technologies and solutions for smart factories. Both in-person and virtual participants have joined this exhibition.

The second day started with the keynote speech by Prof. Christian Diedrich from Magdeburg University, titled “interoperability, semantics and digital twin in industrial cyber-physical systems”. Furthermore, A final day’s plenary talk was given by John Whitbread from ABB Ltd, titled “Looking forward with lessons from the past”. Both these two talks highlighted the latest accomplishments and emerging trends in the broad area of industrial cyber-physical systems.

We celebrated the end of the conference in the closing ceremony, and we appreciated the tremendous support from the ICPS community and IES. With the experiences acquired, we are looking forward to ICPS 2023, which is scheduled to take place in Wuhan, China, 8-11 May 2023.



# ■ INDIN 2022

*The 20th Annual Conference of the Industrial Electronics Society was held in Perth, Australia, July 25-28, 2022.*



The 20<sup>th</sup> IEEE International Conference on Industrial Informatics was held virtually in Perth, Australia. Over 200 industry experts, researchers and academics gathered to share ideas and experiences surrounding frontier technologies, breakthroughs, innovative solutions, research results, as well as initiatives related to industrial informatics and their applications.

INDIN 2022 received 164 submissions from 36 countries with 528 co-authors across six continents and 117 papers were finally accepted. The accepted and scheduled papers will be presented in 12 oral sessions over a 4-day period. 22 of the accepted papers were submitted to 4 special sessions of the conference.



Along with the conference sessions, 4 tutorial sessions, one industry forum, one Joint Students, Young Professionals and Women in Engineering Forum, and 3 keynotes were also presented. The first keynote was presented by Prof. Xinghuo Yu on the topic: “Dealing with Spatial and Temporal Complexity: Simple

Solutions for Complex Problems”. Prof. Ren C. Luo gave a keynote on the hot topic: “AI Enhanced Multi-Model Knowledge Image Caption for Robotics and Intelligent Manufacturing Systems”. The final Keynote, “Intelligent Energy Supply to Meet the Ever-Growing Secure Energy Demand with Industrial Power Electronics Converters Having Flexible Intelligent Control and Communication Systems”, was delivered by Prof. Kamal Al-Haddad, which contributes to Carbon-free environments.

The edition of INDIN will be held in Lemgo, Germany, from 17 – 20 July 2023. We wish success to next year’s INDIN conference.

# PEMC 2022

***The 20th IEEE International Power Electronics and Motion Control Conference was held in Brasov, Romania, 25-29 September, 2022.***

2022 IEEE 20th International Power Electronics and Motion Control is the biennial conference initiated by the PEMC Council, focusing on contemporary research topics of power electronics, controls, electrical drives, robotics, and related topics. This exciting event connects more than 140 researchers and industry experts to share ideas and experiences surrounding frontier technologies, breakthroughs and innovative solutions and applications.



The 4-day long conference started on Sunday, containing 11 technical tracks, 8 tutorials, and 8 special sessions. 134 papers were well presented therein.

The conference was kicked off by an opening ceremony from PEMC Executive Committee Members Dr. Pavol Bauer and Dr. Mihai Cernat. Keynotes were given by the General Chair of Continental Automotive Christian von Albrichsfeld, titled “Current Megatrends in Automotive Industry and Its Effects on Vehicle Architecture,” and Prof. Remus Teodorescu from Aalborg University, titled “Smart Battery, a New Technology.”

In addition to the conference sessions, the event also included Special Sessions, which are organized on highly specialized topics within the conference scope.

Especially, two exciting technical tours are also involved. The first one is to visit the Research and Development Institute of Transilvania University of Brasov and the Bran Castle. The former aims at becoming a major pillar of research, development, and innovation in the field of sustainable development, while the latter is now a museum containing art and furniture collected by Queen Marie. The second tour mainly contains mountain hiking in Poiana Brasov and Postavarul Massif, with lunch at the SKV cottage.



After the last keynote titled “Unlocking the Hidden Capacity of the Electrical Grid through Smart Transformer and Smart Transmission,” the closing ceremony began. Chaired by Dr. Pavol Bauer and Dr. Mihai Cernat, we celebrated the end of the conference with a party and featuring international food. At last, looking forward to the successful holding for PEMC 2024!