

IEEE Action for Industry Progress Report March – October 2024

Date: Oct 10, 2024

A. Executive Summary

Since the Region 8 Meeting in Vienna between March 2 – 3, the Action for Industry Committee has focused on recruiting new members to the network of SIAs, activating the SIA network through online meetings, and organized an in-person workshop meeting that took place in Grenoble between July 17-18, 2024. To date, we have 45 registered SIAs from 35 section around Region 8. Majority of the SIAs are new but we still have a good number of long-time, active members in the network. During the reporting period we have organized 3 online meetings.

The second active theme over the reporting period has been workshops at conferences. In June, we organized an industry workshop (i) at **IEEE MELECON** (Porto, Portugal), where the topic was entrepreneurship, (ii) at **IEEE ESTC** (Berlin, Germany), where the topic was quantum computing, and (iii) at **IEEE RTSI** (Lecco, Italy), where the topic was AI in Manufacturing. All meetings were well attended, and details of the sessions can be found later in this report. In addition to these, we are planning similar workshops at **IEEE IHTC**, in November between 27 - 30, 2024, in Bari, Italy.

The third theme of activity over the reporting period is online outreach to people in industry. We have produced short videos for promotion of IEEE and Action for Industry that we have used in our online campaigns during the second half of this year. In addition to this, we are continuing our Afl online seminars with the idea that each SIA will take a turn in hosting an online event on locally relevant/important topic of their choice.

B. SIA Recruitment

- 45 SIAs in 35 Sections (see more [here](#))

C. Meetings with SIAs

- April 3, 2024: IEEE Region 8 Action for Industry Webinar – An Introduction (Online meeting)
 - o Austria Section: Werner Drexel
 - o Benelux Section: Stoyan Nihtianov
 - o Denmark Section: Sanjeet K Dwivedi
 - o Germany Section: Teng Jiang
 - o Ghana Section: Isaac Kweku Boakye
 - o Italy Section: Gianfranco Chicco
 - o Norway Section: Kiran Raja
 - o Oman Section: Saleh Alkhaldi
 - o Serbia and Montenegro Section: Aleksandar Neskovic
 - o Sweden Section: Anas Dakkak
 - o Türkiye Section: Suat Bengur
 - o UK and Ireland Section: Paul Cunningham
 - o Zambia Section: David Jeevankumar

- April 4, 2024: IEEE Region 8 Action for Industry Webinar – An Introduction (Online meeting)
 - Croatia Section: Dubravko Sabolic
 - Egypt Section: Aida El-Sabban
 - Hungary Section: Mezei Miklós
 - Iran Section: Mohammad Pakravan
 - Israel Section: Shmuel Auster
 - Jordan Section: Samer Zawaydeh
 - Lebanon Section: Hadi Kanaan
 - Lebanon Section: Charbel Zeenny
 - Spain Section: Jose Miguel
 - Tunisia Section: Abir Abid

- June 13, 2024: SIA Workshop – Roundtable of results and preparation for the SIA meeting in Grenoble (Online meeting)
 - BeNeLux Section: Stoyan Nihtianov
 - Ghana Section: Isaac Kweku Boakye
 - Hungary Section: Miklós Mezei
 - Spain Section: Jose Miguel Garcia-Martin
 - Jordan Section: Samer Zawaydeh
 - Egypt Section: Aida Elsabban
 - Tunisia Section: Abir Abid
 - IEEE Uganda Section: Katusiime Moreen
 - Lebanon Section: Charbel Zeenny
 - Nigeria Section: Chidimma Ibeh-Dimnwobi
 - Serbia and Montenegro Section: Aleksandar Neskovic
 - Mauritius Section: Ismael Essackjee
 - South Africa Section: Udochukwu Bola Akuru
 - Austria Section: Werner Drexel
 - Jordan Section: Mousa Al Akhras
 - Türkiye Section: Yavuz Suat Bengur
 - Oman Section: Saleh Alkhaldi
 - Sweden Section: Anas Dakkak
 - Romania Section: Cosmin Moisa

- July 17-18, 2024: SIA Workshop in Grenoble at R8 SYP (in-person meeting)

The purpose of this workshop is to invite all SIA to a physical meeting to discuss execution of the SIA goals, share experiences and get to know one another. The goals of the workshop will be to explore ways to engage industries locally and to discuss practical means of how to engage people from industries. The goal is also to find new ways to provide value from IEEE membership.

Day 1: July 17, 2024 – SIA INTERNAL WORKSHOP PROGRAM

- 3:30 p.m. - 4:00 p.m. Opening session (Toni Mattila)
- 4:00 p.m. - 4:30 p.m. Invited Speaker
- 4:30 p.m. - 5:00 p.m. Break

- 5:00 p.m. - 5:30 p.m.: Industry Engagement Committee Presentation
- 5:30 p.m. - 5:45 p.m.: Romania Section Industry Activities presentation
- 5:45 p.m. - 6:00 p.m.: France Industry Ambassador Report
- 6:00 p.m. - 6:15 p.m.: Hungary Industry Ambassador Report
- 6:15 p.m. - 6:30 p.m.: Ghana Industry Ambassador Report
- 6:30 p.m. - 7:00 p.m. Break
- 7:00 p.m. - 7:15 p.m.: Tunisia Industry Ambassador Report
- 7:15 p.m. - 7:30 p.m.: Lebanon Industry Ambassador Report
- 7:30 p.m. - 7:45 p.m.: Nigeria Industry Ambassador Report
- 7:45 p.m. - 8:00 p.m.: Spain Industry Ambassador Report

Day 2: July 18, 2024 – SIA INTERNAL WORKSHOP PROGRAM

- 1:30 p.m. - 3:00 p.m. AFI Workshop*
- 3:00 p.m. - 3:30 p.m. Break
- 3:30 p.m. - 3:45 p.m.: Egypt Section Industry Activities presentation
- 3:45 p.m. - 4:00 p.m.: BeNeLux Industry Ambassador Report
- 4:00 p.m. - 4:15 p.m.: South Africa Industry Ambassador Report
- 4:15 p.m. - 4:30 p.m.: Austria Industry Ambassador Report
- 4:30 p.m. - 5:00 p.m.: Break
- 5:00 p.m. - 5:15 p.m.: Oman Industry Ambassador Report
- 5:15 p.m. - 5:30 p.m.: Sweden Industry Ambassador Report
- 5:30 p.m. - 6:30 p.m.: Discussion and Closing Remarks
- 8:00 p.m. - 11:00 p.m.: Gala Dinner

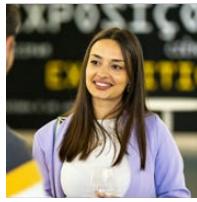
15 SIAs registered to the workshop but only 11 were able to attend after all

- Austria Section
- Benelux Section
- Egypt Section
- France Section
- (Ghana Section)
- Hungary Section
- (Jordan Section)
- Lebanon Section
- (Mauritius Section)
- (Nigeria Section)
- Oman Section
- (South Africa Section)
- Spain Section
- Tunisia Section:
- (Uganda)
- Sweden Section

D. Industry Workshops at Conferences

I. Industry workshop @IEEE MELECON, June 25-27, 2024, Porto, Portugal

- **Organizers:**
 - Sohaib Sheikh (Afl) – *Leader of this action*
 - Toni Mattila (Afl)
 - Hugo Silva (Portugal Section)
 - João Carlos Ferreira (Portugal Section)
- **Title:** From Lab Bench to Launch Pad
- **Goal:** To inspire and motivate young engineers to entrepreneurship. Key takeaways from the session will be: (i) identifying research with commercial potential, (ii) navigating the technology transfer process, (iii) building a strong founding team with complementary skill sets, (iv) securing funding and developing a business plan, (v) challenges and rewards of bringing innovation to market.
- **Format:** Panel Discussion with a presentation format i.e. each panelist has a few minutes to present a case study or opinion, followed by a joint and moderated Q&A session.
- **Date & Time:** June 25, time to be determined
- **Duration:** 2 h
- **Title:** From Lab Bench to Launchpad!
- **Description:** This panel discussion will explore ways to unleash your research's potential and turn it into real-world products and startups. The session will bring together a diverse group of panelists with experience in academic research, technology transfer, and entrepreneurship.
- **Panellists:**
 - Academic with experience in transforming research into a product/start-up
 - Fernando Moreira
 - Investor with experience in funding start-ups
 - Pedro Roseiro
 - Technology Transfer specialist with experience in entrepreneurship support provided by Governments or Universities to academics.
 - João Paulo Cunha
 - Founder / CEO, Mentor & Advisor for Startups
 - Joana Pinto



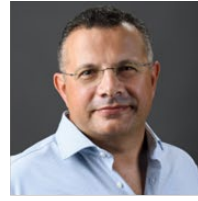
Joana Pinto



João Paulo



Fernando Moreira



Pedro Roseiro



Sohaib Sheikh
(moderator)



II.

III. **AFI Workshop for SYPs @ SYP Congress, July 18, 2024, Grenoble, France**

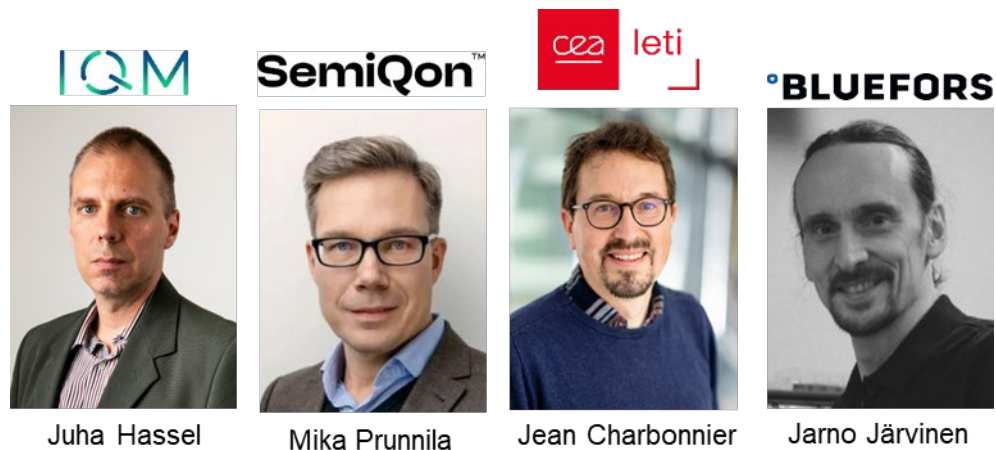
- Description: Region 8 Action for Industry committee invites all SYP participants to a round table. IEEE OU representatives and Industry members will discuss what kinds of support Industries would like IEEE to provide to them and how IEEE OUs could support the IEEE members in this demanding task, to support the industry.
- Schedule
 - 1:30 p.m. - 1:45 p.m.: AFI Orientation (Toni Mattila, AFI chair)
 - 1:45 p.m. - 1:55 p.m.: Educational Activities Tools (Stamatis Dragoumanos, IEEE PreUniversity Education Coordination Committee chair)
 - 1:55 p.m. - 2:05 p.m.: Industry Engagement Committee (Costas Stasopoulos, Industry Engagement Committee past chair)
 - 2:05 p.m. - 2:20 p.m.: IEEE EPS (Cosmin Moisa)
 - 2:20 p.m. - 2:30 p.m.: Ericsson (Anas Dakkak)
 - 2:30 p.m. - 2:40 p.m.: TU Delft, ASML (Stoyan Nihtianov)
 - 2:40 p.m. - 2:50 p.m.: CEA-Leti (Jacopo Cele, CEA-Leti R&D Engineer)
 - 2:40 p.m. - 3:00 p.m.: Q&A

IV. **Industry workshop @IEEE ESTC, September 11 – 13, 2024, Berlin, Germany**

- **Title:** Quantum Chips and Their Packaging
- **Goal:** In this Special Session on Quantum Chips and Packaging, we discuss some of the key aspects of quantum chips and their packaging, highlighting the challenges and advancements in this neighboring field of technology.
- **Description:** Quantum computing is expected to revolutionize the traditional way of numerical problem solving. Quantum computers have the potential to solve certain problems exponentially faster than classical computers that opens new significant opportunities and challenges, for example, in data security, physical/chemical simulations

(e.g. discovery of new materials or drugs), and large-scale data analyses, just to name a few important fields of application. However, the promise of quantum computing lies not only in its potential for computational speed and power, but also in its ability to tackle problems at levels of complexity that are currently not possible with classical methods.

- **Format:** Presentation with a panel conversation i.e. each panelist was provided 10-minutes to present their perspective, and presentations were followed by a discussion session.
- **Date & Time:** September 12, 15:45 – 17:15
- **Duration:** 1,5 h
- **Panelists:**
 - Juha Hassel, VP of Engineering, IQM Quantum computers
 - Mika Prunnila, Chief Research Officer, Co-founder and CTO of SemiQon
 - Jean Charbonnier, R&D Project Leader, CEA Leti
 - Jarno Järvinen, Research and Development Scientist, Bluefors
 - Moderator: Toni Mattila (Afl)
- **Organizers:**
 - Toni Mattila (Afl)



V. **Industry workshop @IEEE RTSI, September 18 - 20, 2024, Milan, Italy**

- **Organizers:**

- o **Toni Mattila (Afl)**
- o **Serge Dos Santos (Afl)**

- **Format:** Roundtable where each panelist will first deliver a presentation on their chosen topic presentation format i.e. each panelist has a few minutes to present a case study or opinion, followed by a joint and moderated Q&A session.

- **Date & Time:** September 18, at 2:00 pm – 4:00 pm

- **Duration:** 2 h

- **Title:** Industry Workshop on AI in Manufacturing

- **Description:** This session will explore the role of Artificial Intelligence in manufacturing industries of tomorrow. The session will bring together a diverse group of panelists with experience in academic research, technology transfer, and entrepreneurship.

- **Speakers:**



▶ **Tom Coughlin** (IEEE President and entrepreneur)

"Making and Maintaining our Connections in Industry" (online)



▶ **Vincenzo Piuri** (University of Milan)

"Artificial Intelligence and Machine Learning for Smart and Sustainable Manufacturing"



▶ **Paolo Gritti** (ABB Smart Power)

"Application of AI to Low Voltage power distribution devices and digital solutions"



▶ **Viviana D'Alto** (ST Microelectronics)

"Distributed Artificial Intelligence for Industrial Applications"



▶ **Serge Dos Santos** (INSA Centre Val de Loire)

"NDE4.0: an optimized merging of Industry 4.0, Nondestructive Testing and Artificial Intelligence"

- **Panelists:**



Paolo Gritti
(ABB)

Viviana D'Alto
(STMicroelectronics)

Serge Dos Santos
(INSA Centre)

Toni Mattila
(Business Finland)

Moderator



VI. Industry workshop @IEEE IHTC, November 27 - 30, 2024, Bari, Italy

- **Organizers:**
 - Mohammad Gallal (Afl)
 - Nihen Ben Youssef (Afl)
 - Toni Mattila (Afl)
- **Format:** Roundtable where each panelist will first deliver a presentation on their chosen topic presentation format i.e. each panelist has a few minutes to present a case study or opinion, followed by a joint and moderated Q&A session.
- **Date & Time:** tbc
- **Duration:** 2 h
- **Title:** tbc
- **Description:** tbc
- **Speakers:** tbc
- **Program:** tbc

October 4, 2024

Toni Mattila