

## THE YEAR 2021



Dear IMEKO community,

Shortly before Christmas and at the end of the year, it's time to look back. A lot has happened for IMEKO in the past year.

For the first time since IMEKO's foundation in 1958, our World Congress had to be held virtually. It was a great challenge for our Japanese colleagues, who mastered it with flying colours. Within a very short time, they cancelled the face-to-face event planned to take place in Yokohama and organized an online conference with excellent keynote speakers and presentations. I would like to explicitly include the TCs in my thanks for providing a very interesting program again.

The personnel change in the Presidential Board has been part of the World Congress. First of all, I would like to thank Professor Ishikawa, during whose term the Presidential

Board too changed to virtual meetings. This resulted in meetings once per month rather than once a year to lead IMEKO into a modern future. Due to the time difference, this meant many nocturnal working hours for Mr Ishikawa. My thanks also go to Professor Grattan for his service as Advisory President. His excellent contributions and exceptional commitment have made him actively support the Presidential Board meetings beyond his term of office. Assuming the role of the President-Elect, Professor Carbone has moved up to the Presidential Board. I wish him every success in his interaction with the Technical Committees.

In the Technical Committees, there were many changes too. Two new TCs were founded: TC6 "Digitalization" under the leadership of Dr Sascha Eichstädt (PTB) and TC25 "Quantum Measurement and Quantum Information" headed by Dr Barbara Goldstein (NIST). This took account of two essential developments which will significantly change metrology in the years to come.

Further changes concerned TC10 "Measurement for Diagnostics, Optimization Control" led by Dr Zsolt Viharos (Institute for Computer Science and Control of the Hungarian Academy of Sciences), TC11 "Measurement in Testing, Inspection and Certification" under the management of Professor Álvaro Silva Ribeiro (National Laboratory for Civil Engineering) and finally TC24 "Chemical Measurement" headed by PhD Tatjana Tomić.

My best wishes of success with your work go to all former and new leaders as well as all active members in the Technical Committees.

Besides establishing new TCs, working groups have been set up after a workshop in May dealing with questions concerning timeliness and more precise specification of the Constitution and By-Laws. The amended Constitution has been adopted, and the working groups "TC functioning",

"TC events", "IMEKO publishing activity", and "TB functioning" are now in the process of revising the existing documents.

Special thanks are due to our very active Secretariat with Kristine and Zoltán Zelenka, who handle the extensive daily business with extraordinary great commitment and professionalism. You can contact them anytime, and they have also brought the external presentation of IMEKO to a modern state. The periodic newsletter is just one example. In the near future, all the documents accumulated since the foundation of IMEKO will be available in digital formats.

I certainly haven't listed everything that was initiated and accomplished this year. Therefore, I would like to thank you all for your excellent support of our organization. I'm looking forward to continuing the successful cooperation in 2022.

Dr.-Ing. Prof. Frank Härtig

## IMEKO SHORT NEWS

The Metrology Institute of the United Arab Emirates and of Bosnia and Herzegovina joined IMEKO. (Observer status until the next GC).

## IMEKO EUROLAB NEWS

The Memorandum of Understanding with EUROLAB has been renewed. There will be close cooperation on future events. Such is a series of "45 Minutes Seminars" planned by the Technical Committees TC11 Measurement in Testing, Inspection and Certification, and TC24 Chemical Measurements. EUROLAB also supports the conferences in September 2022 of TC23 Metrology in Foods and Nutrition and TC6 Digitalisation. The two organizations will explore further opportunities.

## NEW ACTA SPECIAL ISSUE

A new Special Issue is now open for submission in Acta IMEKO! The IMEKO TC24 promotes a Special Issue related to 'Measurements in Cultural Heritage'. Have a look at the Call for Paper to know more about possible topics! **Deadline for manuscript submission:** 1<sup>st</sup> of March 2022. **Publication in Acta IMEKO:** September 2022. **Guest Editors:** Tatjana Tomić, Leonardo Iannucci, Leila Es Sebar. <https://www.imeko.org/index.php/tc24-homepage/tc24-documents>



## LUDWIK FINKELSTEIN

Ludwik Finkelstein had a distinguished career in measurement and instrumentation, having served for two terms as Vice-President and then as President (in 1980-1) of the UK member organization of IMEKO, the Institute of Measurement & Control.

He also had served as Honorary Secretary and Honorary Treasurer. He was elected as an Honorary Fellow, as well as being a Liveryman of the Worshipful Company of Scientific Instrument Makers of London.

He was very international in his outlook and worked through IMEKO, as the International Measurement Confederation for many decades, having been a member of its General Council, Chairman of its Technical Committee on Higher Education, and Editor of its journal, *measurement*, where much of the publication of his work has been through IMEKO publications.

Ludwik Finkelstein served for a term as the Vice-President of IMEKO.

By Professor Kenneth Grattan

## FINKELSTEIN MEDAL TO THE IMEKO PRESIDENT

Dr.-Ing. Prof. Frank Härtig, Vice President of the Physikalisch-Technische Bundesanstalt (PTB), has been distinguished with this Medal.

In 2021 the UK Member organization, the Institute of Measurement & Control (InstMC), made the award of the Finkelstein Medal, which is given 'for notable contributions to measurement internationally' to the IMEKO President. The InstMC makes a series of prestigious awards that recognize excellence and achievement in measurement and control each year.

The 2021 Award recognizes Professor Härtig's contribution to the field of measurement, both through his international work at PTB in Germany and IMEKO and on the new kilogram definition using the X-ray crystal density method in the Center for Measurement Standards at PTB.

By Professor Kenneth Grattan

## AN INTERVIEW WITH THE IMEKO PRESIDENT PROFESSOR FRANK HÄRTIG

*When did you get involved with IMEKO?*

I have known IMEKO since 1995. At that time, I attended my first IMEKO Conference in Zaragossa and got to know people with whom I have been in close scientific contact ever since.

*What kind of plans do you have for IMEKO?*

IMEKO has to face several challenges, and we have to prepare the organization for this. During the past years, many new topics emerged within metrology. I see areas of focus that we need to address: Quantum Technology, environmental and energy measurement technology, measurement technology for medicine and digitalization. Quantum Metrology has gained enormous importance with the introduction of the new System of Units (SI). Our most precise measurements since then have been based on quantum standards.

Environmental and energy measurement technology will help us to record the climate on our earth more precisely and thus, for example, to get a grip on global warming. Digitalization will take up a lot of space across all sectors, where artificial intelligence processes, networked sensor systems or even self-learning systems will find application. Last but not least, basic principles must also be established that enable communication without media discontinuity within the measurement processes and quality systems.

What is more, we have to improve and partly change the communication concept within IMEKO.

The pandemic has forced us to reorganize our conferences. We must make an effort that IMEKO remains interesting for new members and will also be accessible via multimedia platforms.

*How do you look back at the last three years as President-Elect, Chair of the Technical Board?*

The past three years have already been very trendsetting. Several Technical Committees (TCs) have been reorganized, and two new TCs for Digitalization and Quantum Metrology have been established. The use of virtual formats for conferences

has also contributed to more frequent meetings to discuss strategic and organizational issues in workshops and working groups. This has created a lot of momentum and a new drive in the TCs and the Technical Board.

*How would you describe your "regular day at work"?*

Work, eat, sleep - repeat.

*How do you fit IMEKO into your busy schedule?*

The IMEKO presidency is very important to me, and I take this task very seriously. With its 42 member states and 25 TCs, this means a lot of responsibility. Therefore, I'm trying to answer all inquiries in a timely manner. The monthly meetings with the Presidential Board are a must for me and also include proper preparation and rework. As far as it is possible for me, I also try to attend IMEKO conferences. In addition, I am already working regularly on the organization of the upcoming IMEKO World Congress, which will be held in Hamburg in 2024. All this is only possible thanks to the fabulous support of the IMEKO secretariat and the core team from PTB consisting of Rolf Kümme, Katja Rossignol and Katharina Lehrmann. I would like to take this opportunity to express my special thanks for their support.



## SECRETARIAT'S GLIMPSE ON 2021

This year was unlike any other in the history of IMEKO. It was full of new activities and intense collaborations in which the Secretariat played a passionate role and, most importantly, thanks to all of you.

As one used to hear, "the Covid situation has an unfortunate effect on the organization's performance...", well, not in our case! IMEKO may be proud of doing well, taking advantage of the new technologies under a dynamic leadership.

All started with a recently established Presidential Board, which took an active lead by introducing monthly meetings. Various topics were discussed, and vital decisions were made, leading IMEKO to a much swifter life. The Board decided to renew the IMEKO regulations. A Workshop on the Constitution and Bylaws were organized. The outcome was discussed at the two General Council sessions. IMEKO now has a fresh Constitution and flexible By-Laws.

Having two General Council sessions in a year itself indicates this year.

The other life-changing decision was to initiate the first Workshop on Technical Committees. Based on the information and topics gathered via a survey, the participants had numerous ideas and vivid discussions on enhancing IMEKO's technical life. Working groups have been formed to elaborate the objectives and shape the functioning of IMEKO in all vital areas. Since May, these groups have been continuously working.

The Secretariat thanks all the members of the working groups for their dedication and for letting us witness their exciting dialogues and good progress.

The upcoming second Workshop on the 25<sup>th</sup> of March facilitates the harmonization and synergy discussing overlapping topics.

## SOME DRY FACTS

The Secretariat improved the communication with personalized emails and six newsletters this year. We reached 316 followers on LinkedIn, with weekly news. The Facebook site is up, awaiting visitors for those who don't have a LinkedIn account.

Numerous meetings took place using Zoom, the new video conferencing tool that will be utilized even more frequently in the future.

The IMEKO office has moved to a new location; however, we prefer to be contacted by email [imeko@hunmeko.org](mailto:imeko@hunmeko.org) - (General email of the IMEKO Secretariat)

## INTERESTING PLANS

Talking about moving and modernizing IMEKO, the old proceedings (from the seventies up to 2012) were scanned and soon catalogued and available. The same is planned with the photos of the same era. It is so good to have the history of IMEKO documented and preserved. The new IMEKO conference system is set up, thanks to our Information Officer, Dirk Röske.

The essential "How to organize TC event ..." guide is under revision. It will appear sometime next year with several new templates and forms. Most importantly, there will be a master template for the abstract and papers for TC events.

## A PEEK INTO THE NEW YEAR

The Secretariat invites you to our (planned) regular "Coffee Hours" for a spontaneous meet and chat.

Our best wishes to you all, and Happy New Year!