



**DEAR FRIENDS, DEAR COLLEAGUES,**

The end of the year is approaching, and reflecting on 2022, so much happened in IMEKO worth talking about. A definite change to previous years is the increasing number of IMEKO events, most of which occurred in person again. We also had several successful online workshops organized by the IMEKO Technical Committees. In the December issue, Professor Frank Härtig, the IMEKO President, reflects on a very successful year. Leonardo Iannucci shares Acta IMEKO, our online Journal's, progress in 2022. From the industrial contacts, meet Radwag. APMP, the Asian Pacific Metrology Programm, is IMEKO's new external partner. TC8 had a very successful online workshop. Finally, the Secretariat reports some interesting figures for this year's activities. IMEKO wishes you a wonderful 2023!

**GREETING FROM THE IMEKO PRESIDENT**



After a two years break, many of us could meet again in person. We have all found out again how important those encounters on the sides of an event are.

Many times, we also have the chance to address strategic topics. Personal meetings make it possible to consolidate old acquaintances and build new ones.

A rolling stone gathers no moss. Therefore, the Presidential Board will focus more strongly on making IMEKO more modern. In the future, we want to find new communication channels to spread information and take on new metrological topics. This is not only important to hold on to present members, but also and foremost to attract new young members as well. I am trusting here on the foresight of the TCs to also take care of timely re-filling lead positions with qualified and motivated scientists.

As communication and information is

concerned, we have started formidably. Due to the major and competent support of our Secretariat, we now receive the IMEKO newsletter regularly. There were also extensive collaborations in the working groups: TB Functioning, TC Functioning, TC events and Publishing. Furthermore, we are working on new contacts with other organizations. We have already successfully connected with EUROLAB, and other regional organizations like AFRIMETS, APMP, EURAMET, GULFMET, and SIM are now signing MoUs with us. I, myself, see big potential in trying to spark enthusiasm for our work in new potential member states from Asia, Africa and America. Therefore, I frequently get into conversations with potential candidates.

A vital point is also the scientific topics we offer. We constantly have to ask ourselves what we have to include in our portfolio and what we might have to give up on. You can observe more frequently now that TCs could lose attractivity due to their covering classical measuring categories.

In the future, however, systemic metrology will gain more importance. It will inspire the following generations of metrologists to involve themselves. The General Conference on Weights and Measures (CGPM) that was held in November 2022 for the 27<sup>th</sup> time in Versailles has laid out a general direction for us. The responsible authorities have distinctly recognized and defined that metrology has to find its place among the great challenges: climate change, health & life science, food safety, energy, advanced manufacturing, etc. All of this is in the context of digitization and sensor networks.

As the end of the year approaches, I would like to thank you all for your excellent work. With your commitment to all the different TCs, building new networks and organizing conferences and events, you are part of the moving engine in a network of scientists acting worldwide under the quality seal of IMEKO.

In the name of the Presidential Board, I wish you, your family and your friends a good start to the New Year in which we will work together peacefully as in past years.

*(Written by Professor Frank Hartig, IMEKO President)*

### SHORT NEWS FROM THE SECRETARIAT

We had a very busy and good year.

Let's look at some interesting figures to view what happened in 2022.

In 2022 the Secretariat: welcomed 106 membership applications and reported 38 IMEKO events.

On social media: There were close to 70 posts on LinkedIn. We had 7 newsletters with 48 contributions. 6 came from industrial contacts with ties to the Technical Committees 5 from TCs introducing their work through past and present events, which is a great opportunity to preserve the IMEKO history. We also had the contribution of several remarkable IMEKO community members.

Talking about that, Professor Tilo Pfeifer celebrated his 50 years with IMEKO. (February issue), and Professor Eric Benoit received the Finkelstein award (November issue).

This year the Working Groups, formed at the first IMEKO Workshop (2021), continued with their activities and had 17 meetings. Also, a very successful and well-attended second IMEKO Technical Committee Workshop took place with 50 participants in March 2022. The Working Groups presented their impressive findings at the General Council Sessions 2022 and will continue in 2023.

With this, a big thanks to everyone who collaborated on small and big projects and helped us achieve all we could for IMEKO in 2022.

We shall continue our work in 2023 with much enthusiasm and care.

With our best wishes for 2023 to you, the IMEKO Community,

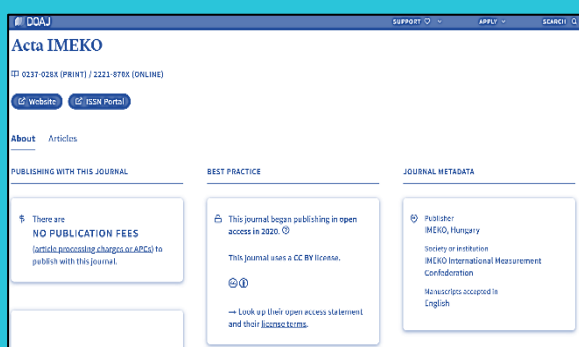
*Kristine and Zoltan from the IMEKO Secretariat*

### ACTA, THE IMEKO ONLINE JOURNAL

This year has been really intense for Acta IMEKO and for all the people that, as volunteers, work to support the activities of this Journal directly published by IMEKO.

Relevant improvements were achieved, and some of them can be considered milestones in the story of this editorial product.

In February, Acta IMEKO was included in the Directory of Open Access Journals (DOAJ), an online database that indexes the most relevant Open Access scientific and scholarly journals from around the world. Considering the DOAJ's strong commitment to promoting best practices in open-access publications, this recognition is an important achievement that will surely improve Acta IMEKO's reputation and visibility in the field of Measurement Science.



### *Acta IMEKO page on DOAJ*

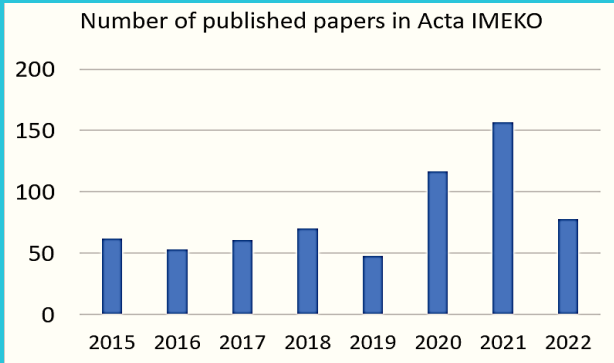
Since June 2022, the editorial workflow has been enhanced by adding the similarity check performed on all manuscripts submitted to the Journal before starting the peer-review process. This step is commonly performed in all major scientific journals to prevent plagiarism and keep a satisfactory quality of published materials. In the case of Acta IMEKO, considering its commitment to promoting Open Access policy for the dissemination of scientific results, respecting copyright and avoiding the fraud of plagiarism is an issue of paramount importance that can not be underestimated.

Since the implementation of this check, only minor cases of similarity were found, and they have been solved thanks to the cooperation of the Authors. Indeed, often the cause of plagiarism (and self-plagiarism) is not related to a voluntary intention to breach the rules of copyright but rather to a lack of awareness about intellectual property in scientific publications. For this reason, this initiative will surely benefit our scientific community.

From a technical point of view, November has been the time for a complete change in the Acta IMEKO submission system. The Journal website, previously based on a quite outdated platform, has been updated to the newest version of the Open Journal System, a free platform to manage the editorial process created by the Public Knowledge Project and released under the GNU General Public License. Even though for the Authors, this is just a change in the website's visual appearance, it will be an important improvement to support the editorial activities and to provide a high-quality service in publishing activities.

As far as the editorial activities are concerned, lots of news came also from the composition of the Acta IMEKO Editorial Board. In order to underline the intrinsic relation between this Journal and IMEKO, the Editor in Chief invited the IMEKO Technical Committees (TC) Chairs to join the Acta IMEKO Editorial Board. In this way, they will give their valuable contribution as eminent experts in their specific field of Measurement Science, and they will be able to promote better the editorial activities related to IMEKO TC's events. After this initiative, the number of Editorial Board members raised to 53, reflecting the different expertise present in IMEKO and the wide geographical distribution of our Organisation.

All these initiatives are part of a bigger frame, in which the number of published articles has continuously increased during the last years, going from about 60 papers to more than 100. Moreover, the Acta IMEKO reputation has improved, and, looking at the metrics published by Scimago in 2022, it passed from the 4<sup>th</sup> to the 3<sup>rd</sup> quartile both in the field of 'Electrical and Electronic Engineering' and 'Mechanical Engineering'. Even though there is still room for improvement, this is a good starting point to increase the Journal's attractiveness.



All these advances were made possible by the continuous work made by the Acta IMEKO Editorial Team, composed of the Editor in Chief Francesco Lamonaca, the Associate Editor Dirk Röske, the Layout Editors Dirk Röske, Leonardo Iannucci and Domenico Luca Carnì, the Copyeditors Egidio De Benedetto, Luca Rossini, and Silvia Sangiovanni and all the members of

the Editorial Board (the complete list of the Editorial Team is available here: <https://acta.imeko.org/index.php/acta-imeko/about/editorialTeam> ).

Moreover, a special thank you goes to the Special Issues Guest Editors and to all the reviewers who served during the year to ensure the high quality of the published papers. In order to recognize their fundamental work, the complete list of 2022 reviewers (more than 100 people!) will be published in the December Issue of Acta IMEKO.

To conclude, our ‘take-home message’ is that if you are looking for a Journal to disseminate your latest scientific results or stimulate fruitful and constructive debate in the measurement science community, Acta IMEKO is probably the right option!

*(Written by Leonardo Iannucci Layout Editor of Acta IMEKO)*

## COLLABORATION WITH APMP



IMEKO and APMP, the Asia Pacific Metrology Program, signed a Memorandum of Understanding for the coming five years, initiating closer collaboration between the two organizations. The APMP Chairperson, Mr Fang Xiang, signed the document with the IMEKO President, Professor Frank Hartig.

“APMP is an association of National Metrology Institutes (NMIs) from the Asia-Pacific region, among others with the aim to improve regional metrology capability. One of the six Regional Metrology Organizations (RMOs) to implement the CIPM MRA for the worldwide mutual recognition of measurement standards and of calibration and measurement certificates. APMP is also one of the Specialist Regional Bodies (SRBs) working with APEC to facilitate the development and implantation of standards and conformance infrastructures that address APEC goals.

APMP has 12 Technical committees (TCs) responsible for coordinating technical activities for each field covered by the CIPM's Consultative Committees, and 1 Developing Economies' Committee (DEC) responsible for initiating and coordinating work programs to address the needs of APMP member Developing Economy NMIs (DENs). APMP also established 5 Focus Groups (for Clean Water, Climate Change and Clean Air, Energy Efficiency, Food Safety, and Medical Metrology) to promote liaison with and provide measurement support to stakeholders in identified priority fields.

INTRODUCING RADWAG

Laboratory Balances & Industrial Scales by RADWAG  
Electronic Weighing Devices



<https://radwag.com/en/laboratory-balances,4,101>

Where to begin? Maybe from the hardships and drudgery, we lived in when RADWAG was founded. From a flashback to a time when everything was sad, grey and average? Or perhaps from the success we nevertheless managed to achieve? From innovative designs, technologically advanced devices and satisfied customers? Let's start from the beginning.



Industrial Loads, Laboratory Precision

<https://radwag.com/en/industrial-scales,4,102-124>

1984. A one-person craft business starts its activity in Radom, Poland. It operates in a rented detached house and manufactures ceramic kitchen scales. Its name is RADWAG.

2022. RADWAG is the largest manufacturer of electronic balances in Poland and one of just a few leaders worldwide. It employs over 400 people. Apart from the headquarters located in Radom, it has 8 subsidiaries in Poland and 6 representative offices abroad. It manufactures over 4,000 electronic balances a month.



Robotic Weighing Systems

<https://radwag.com/en/environmental-protection,4,119>

Since 2002, we have been operating in accordance with an implemented and documented **quality management system, ISO 9001:2015**. We have established our own Measuring Laboratory, which in 2004 received accreditation from the Polish Centre for Accreditation. The **AP 069 accreditation** referred to confirms the competence of our laboratory and the compliance of the implemented quality system with the requirements of the **international standard PN-EN ISO/IEC 17025:2005**.

Our product range includes laboratory balances,

scales for hazardous areas, control, PGC, and automatic scales, weighing terminals and indicators, robotic and automatic weighing systems, devices and accessories for environmental protection, pipetting, pharma & biotech solutions and stent weighing, mass standards, weighing tables, metal detectors, weighing platforms,



Fully Automated Comparison of Mass Standards

<https://radwag.com/en/mass-comparators,4,110>

software, and last but not least, mass comparators.

Mass comparators of RADWAG design allow comparison of mass standards in accordance with OIML R111 from 1 mg to 50 kg in the E1 class and up to 2000 kg in the F2 class. The comparators establish a connection with RMCS software which effectively helps to manage the whole calibration process, from the moment the order is placed, through its realization, to calibration certificate issuing. RMCS system significantly improves productivity, guarantees reliable measurement results, offers complex documentation and reduces the labour cost.

In its almost 40 years of business activity, RADWAG has come a long way from a local craft business to a global manufacturer of electronic balances.

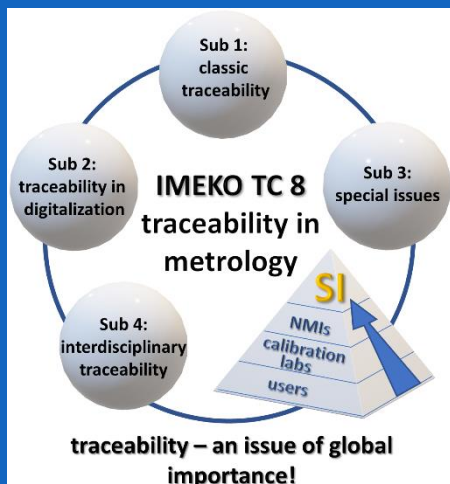
Isn't it worth dreaming?

Write to us using the [contact form here](#).

We kindly invite you to visit our website: [radwag.com/](http://radwag.com/)

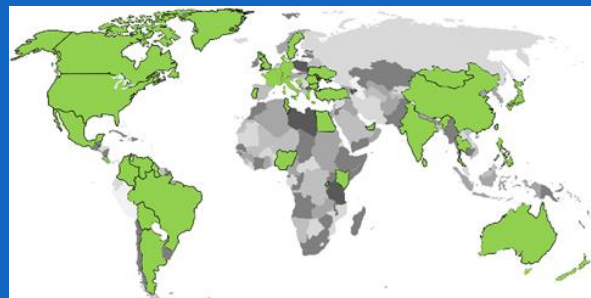
## THE SUCCESS OF THE TECHNICAL COMMITTEE 8 WORKSHOP

IMEKO TC8 “Traceability in Metrology” - New Needs and Demands



IMEKO TC 8 organized and hosted the international online workshop “Traceability

the backbone of metrology” on the 8<sup>th</sup> of November 2022.



*(120 workshop participants from 47 countries)*

Participation was limited to 120 persons. The great resonance of the workshop underlined once again how traceability is an issue of global importance.

The aim of the workshop was the unbiased identification of needs, demands and new approaches in all fields related to traceability. In addition, a workshop-like session was chaired at the IMEKO TC 6 conference on “Digitalization” in September 2022, where specific needs regarding digitalization have been derived.

A great need for support was clearly articulated in both events and all topics covered by the 4 sub-committees of IMEKO TC8: Classic Traceability, Digitalization, Special Issues, and Interdisciplinary Metrology.

To bring together questions and answers addressed in the workshop, IMEKO TC8 is planning to organize a conference by the end of 2023.

A first rough evaluation revealed the desire to provide more in-depth information in the following fields:

- Digitization (digital calibration certificates, digital-SI, virtual devices and virtual worlds, AI and self-learning systems, terminology and harmonization of approaches, sensor networks, FAIR data and data storage)
- Domain-specific issues from pharmacy, IT, finances, climate, dimensional or mass metrology, as well as traceability-related issues in legal metrology or handling of non-physical aspects as in human science.

Additional to this are some special topics on how to handle non-traceable data or questions regarding regulatory strategies.

If you would like to contribute your expertise on the above subject, we welcome you to our rapidly growing committee on Traceability in Metrology.

*Written by Michela Segal and Thomas Widenhoefer TC8*

## EVENT ELSEWHERE

21st INTERNATIONAL METROLOGY CONGRESS

**CIM 2023**

**07  
10**  
MARCH  
LYON  
FRANCE

[www.cim2023.com](http://www.cim2023.com)

“From the 7th to 10<sup>th</sup> of March, 2023, at Eurexpo Lyon France, the CIM202, the International Metrology Congress renews the experience with the biggest French industrial tradeshow dealing with industrial topics, Global Industrie, where more than 40,000 visitors are expected. The geographic location of the city offers many connections with bordering countries, a strong representation of the business sector, not to mention the gastronomy that Europe and the whole world envy so much.

A bold programme facing the world's challenges

The event becomes a 4-day event with the aim of approaching and dealing with all the topics responding to the most current global challenges. This is a unique occasion to share expertise and collect information on market developments, research and innovation in the field of measurement.”

Visit: <https://www.cim2023.com/fr/>

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