

**Dear Friends and Colleagues,**

So much has happened since our last newsletter in April. This issue is about our Chinese Member Organisation's (CSM) special Metrology Day celebration, IMEKO's first TC Workshop, the latest news on the World Congress Yokohama, TC news, and the elections and more.

Something new: part of this issue is dedicated to our TC8. We would like to continue in the upcoming newsletters by introducing a TC in each.



### **Member Organisation s DOUBLE CELEBRATION OF METROLOGY DAY**

This year's Metrology Day celebration had been an extraordinary event for our Chinese Member Organisation, the China Society for Measurement. CSM had been celebrating its 60<sup>th</sup> anniversary and 60 years of IMEKO membership. An occasion commemorated by our President and President-Elect on IMEKO's behalf with a specially prepared short video and greeting letter.

The 60th anniversary of the founding of the China Society for Measurement (CSM) and the series of activities to commemorate the '5.20 World Metrology Day' were held in Beijing through May 17<sup>th</sup>-20<sup>th</sup>, 2021, with the theme of "Innovation and Development, Renewal of Brilliance", with a central venue and branch venues. More than 1,000 people from measurement technology institutions, universities and enterprises attended the event.

### Main Theme: World Metrology Day 2021 "Measurement for Health."

The main session was chaired by Mr Pu Changcheng, President of the CSM, who delivered a welcome speech. Since its establishment 60 years ago, under the leadership of the State Administration of Market Regulation and the Chinese Association for Science and Technology, the society has been given full play to its advantages as a national scientific and technological academic society and made positive contributions in serving measurement and testing scientists, innovation-driven development, improving the quality of science for all people and scientific consultation with the government.

### IMEKO message

On behalf of IMEKO, Professor Masatoshi Ishikawa, the President of IMEKO, has sent a letter to commemorate the 60th anniversary of CSM.

Professor Frank Härtig, President-elect of IMEKO, sent a video message to the conference in which he spoke of the similar role of the Institute and IMEKO, focusing on all aspects of scientific, technical and industrial measurement. He expressed his hope that they would work together collaboratively and warmly congratulated the event.

### Reports on WMD

Combined with the theme of World Metrology Day 2021, the society invited academicians Prof. Yang Huanming from the Shenzhen Huada Institute of Life Sciences and academicians Prof. Pang Guofang from the China Institute of Inspection and Quarantine to give excellent presentations on measurement as a guardian of health, respectively.

### Session on Academic Exchange on Measurement and Testing Technology

In this event, the CSM held various metrology and testing-related technical societies exchange, promoting the development of metrology and testing services for scientific and technological innovation.

These are the "Enterprise Metrology Work Experience Exchange Meeting", "Excellent Paper Reading", "Flowmeter Performance Evaluation, Promote Industrial Quality Development", "Laboratory Technology Support and Guarantee Professional Committee Annual Meeting and the Third Laboratory Construction and Operation and Maintenance Management Development Forum", "Time-frequency Measurement,



Frontier Development", "Ionising Radiation Measurement Technology Progress and Development". "Laboratory Technology Support and Guarantee", "Frontier Development of Time and Frequency Metrology", "Seminar on Optical Metrology Technology", "Development of Vacuum Metrology to Promote Scientific and Technological Innovation", "Photovoltaic Metrology and Testing and the Inaugural Meeting", "Pressure measurement and testing technology", "Standard substances and chemical metrology development report", "Innovation and development of China's quality measurement", "Geological and Mineral Analysis and Testing Metrology Standardization", "5G and Optical Communication Metrology and Testing Technology Progress and Challenges", "Metrology for the Overall Development of Glass Industry", "Acoustic Metrology Testing Application Technology Forum", "Metrology for High-Quality Medical Development", "Full Life Cycle IC Testing Technology from Design, Metrology to Defect Detection", "Technology Transformation and Industry-University-Research Cooperation", "Geometric Metrology Technology", "Workshop on Outlook of Electric Energy Metering under Carbon Neutrality", "Smart Energy Measurement in the Information Age", "Health Safety and Biometrics", "Metrology Instrument Professional Committee Meeting", "Display Industry Metrology and Testing Symposium".

#### **Important information release by CSM**

The CSM also held an important information conference on "major scientific issues and technical engineering problems" in the field of measurement, as well as the "China Science and Technology Pioneer Technology List" and related group standards.

#### **The Eighth General Assembly of the CSM Held in Beijing**

On the 19<sup>th</sup> of May 2021, the 8<sup>th</sup> General Assembly of the CSM was held in Beijing. Members of the Society, branches, local societies, relevant measurement technology institutions, institutions and enterprise representatives, nearly 300 people attended. The meeting took a secret ballot for the election of the eighth council of CSM.

#### **Inauguration of Youth Working Committee and Dialogue with Academicians**

The Youth Working Committee of the CSM was established, and the Dialogue of Academicians was held in Beijing on the 19<sup>th</sup> of May 2021. More than 200 young scientists and technicians from metrology technical institutions, universities and enterprises attended the meeting. As the first activity of the Youth Working Committee of the Chinese Society for Metrology and Testing (CSTM), the Dialogue of Academicians was themed around "Inheritance and Innovation" and invited Academician Prof. Jin Guofan from Tsinghua University, Academician Prof. Wang Liding from Dalian University of Technology, Academician Prof. Tan Jiubin from Harbin Institute of Technology, Academician Prof. Li Xianhua from Institute of Geology and Geophysics, Chinese Academy of Sciences to share their experiences with young scholars with their growth, innovation and research experiences, and had face-to-face interactive exchanges.

Written by Mr Guo Su, CSM

## THE IMEKO TC WORKSHOP

On the 28<sup>th</sup> of May, it has been a well-attended event with 37 participants.

IMEKO thanks you if you have attended for devoting your time and for your active presence.

If you couldn't make it, hopefully, we shall see each other next time.

First, the survey results have been elaborated in two presentations. Frank Härtig, Chair of the TB, summarised the TB relevant issues, and Zoltan Zelenka, Secretary-General, the TC's.

The diversity of opinions and experiences launched the discussions following the presentations and identified the need to continue dialoguing and develop further these vital subjects.

Four working groups have been established with volunteers on each topic. Each shall work out their scope and organise their further activities.



The groups with the preliminary agenda are:

- WG on TC events, including the update of "How to organise ...",
- WG on TC functioning
- WG on TB functioning
- WG on IMEKO publishing activity, quality of the papers

### WG on TC events, including the update of "How to organise ..."

Giorgio Spazzini, Dirk Röske, Sascha Eichstädt, Zafar Taqvi, Pasquale Daponte

How to attract young people to the TCs and their events.

- IMEKO central support for conference organisation.
- The organisation of cooperations between single TCs. How to support (centrally) each other in the advertisement of our conferences?
- Joint or separate conferences?
- Science-industry balance.
- Award categories in TC conferences.
- Etc.

### WG on TC functioning

Elisabeth Montero, Gustavo Ripper, Michela Sega, Nicolas Spethmann, George Milushev, Zsolt Viharos

- Expected activities of a member.
- Central System for the evaluation of members activity.
- How to find successors for the inactive members?
- Collaboration between TC and county representatives (Mos) and involving new members from new countries.
- How is the typical task distribution among TC leaders?
- Central storage of documents - shared file system?
- Science-industry balance.
- Etc.

### WG on TB functioning

Frank Härtig, Malcolm McEwen, Dirk Röske,

- Tasks and responsibilities of the TB
- Members of the TB
  - Who shall be the members?
  - Who shall have voting rights?
- How shall the TB coordinate the TC activities?
- Publishing and quality of papers.
- Etc.

### WG on IMEKO publishing activity, quality of the papers

Francesco Lamonaca, Ron Summers, Eric Benoit, Jaromir Volf

- Registering the proceedings.
- ACTA
- Scientific impact measurement.
- Establishment of TC Technical Subcommittees and TC Distinguished Speaker Setup (for interested TCs)
- Etc.

The WG's work with Francesco Lamonaca leading this group on IMEKO publishing activity, quality of the papers had already started.

**A special thanks to you all volunteers!**



### The list of attendees to the workshop:

Prof. Masatoshi Ishikawa, President, Japan  
 Prof. Frank Härtig, President-Elect, Germany  
 Prof. Ken Grattan, Chair of the Advisory Board, UK  
 Prof. Paolo Carbone, Vice President for Publications, Italy  
 Dr Dirk Röske, Information Officer, Germany  
 Prof. Francesco Lamonaca, Editor in Chief for Acta-IMEKO, Italy  
 Mr Zoltan Zelenka, Secretary-General  
 Prof. Alexander Shestakov, Russia  
 Prof. Vukan Ogrizovic, Serbia  
 Prof. George Milushev, Bulgaria  
 Dr Efthymios Karabetos, Greece  
 Dr Janos Zsolt Viharos, Hungary  
 Prof. Jaromír Volf, Czech Republic  
 Prof. Jouko Halttunen, Finland  
 Dr Malcolm McEwen, Canada  
 Dr Andy Knott, TC3 Chair, UK

Dr Ogushi Koji, TC3 Scientific Secretary, Japan  
 Dr Renato Reis Machado, TC5 Chair, Brazil  
 Sascha Eichstadt, TC6 Chair, Germany  
 Dr Eric Benoit, TC7 Chair, France  
 Prof. Elisabeth Costa Monteiro, TC7 Scientific Secretary, Brazil  
 Dr Michela Segal, TC8 Chair, Italy  
 Prof Davor Zvizdic, TC12 Chair, Croatia  
 Prof Ron Summers, TC13 Chair, UK  
 Dr Pier Giorgio Spazzini, TC9 Chair, Italy  
 Dr Jay H. Hendriks, TC16 Chair, USA  
 Prof. Ravi Fernandez, TC20 Chair, Germany  
 Dr Zafar Taqvi, TC17 Chair, USA  
 Dr Gustavo Ripper, TC22 Chair, Brazil  
 Mrs Barbara Goldstein, TC25 Chair, USA  
 Mr Nicolas Spethmann, TC25 Vice-Chair, Germany  
 Mr Tim Prior, TC25 Scientific Secretary, UK

### OUR TC8

TC8 - Traceability in Metrology - **was established in 1972**. The current officers, Michela Segal (Chair), Nieves Medina (Vice-Chair) and Thomas Wiedenhofer (Scientific Secretary), are working in close cooperation with the TC members to **renew its tasks** taking into account new challenges of metrological traceability.

The SI revolution of 2019, linking each definition to a fundamental constant, represents a revolutionary paradigm shift also in terms of promoting and assuring metrological traceability. The redefinition of SI has been a starting point towards **new challenges and new goals** to be faced. It is necessary to disseminate the new concepts and reassure that such a revolutionary change must nevertheless guarantee continuity in everyday life and in the metrological traceability approach.

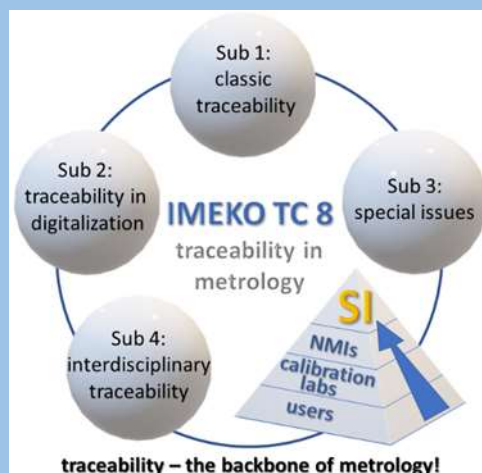
**Traceability is the backbone of metrology:** being a property of a measurement result that links it to a reference. It guarantees that measurements carried out in different places and at different times are comparable and needs to be fully established and implemented in all measurement fields, including emerging sectors like diagnostics, genomics, digitalisation, or quantum technologies. There are many cases where traceability is not straightforward and specific paths must be conceived and put in place.

To face the new challenges without leaving apart the traditional fields and to give new life to the TC, **four subcommittees were established:**

To face the new challenges without leaving apart the traditional fields and to give new life to the TC, **four subcommittees were established:**

- 1) **classic traceability and its application today**
- 2) **traceability in digitalisation** (digital calibration certificates, virtual worlds/digital twins)
- 3) **special issues** - e. g. vanishing standards during calibration/testing in chemistry
- 4) **interdisciplinary traceability** - what do we have in common; what can we learn from one another; redefinition of the system of units (SI) and effects on traceability.

Each subcommittee aims to identify specific issues to be addressed and act as discussion forums and interface with external stakeholders. For more information or if you want to support our work as a member of TC8, please contact the IMEKO Secretariat ([imeko@hunmeko.org](mailto:imeko@hunmeko.org)).



**The IMEKO XXIII World Congress (IMEKO2021)** on "Measurement: sparking tomorrow's smart revolution" will be held at the international conference between August 30<sup>th</sup> - September 3<sup>rd</sup>, 2021. **Join and meet us at the TC8 scientific session and the TC8 meeting!** More information is available on the Congress Webpage <https://imeko2021.org/>.

2022 will be the 50<sup>th</sup> anniversary of IMEKO TC8. An online conference, "Traceability: the backbone of metrology", will be organised to celebrate the special date. More information will be available soon on the TC8 web page <https://www.imeko.org/index.php/tc8-homepage>. **Stay tuned!**

Written by Dr Michela Segal, INRIM; Dr Maria Nieves Medina Martin, CEM; Mr Thomas Wiedenhofer, PTB.

## TC 24 NEWS

Metrology in Chemistry is becoming increasingly important subject. IMEKO's TC24 dedicated to Chemical Measures had a meeting a short while ago, where the decision was made to expand this TC into new directions. TC24 is opening up to receive new, motivated members ready to take on a fresh challenge and be part of this TC on a new journey. If you wish to join or would like to recommend someone for his or her expertise, please contact the IMEKO Secretariat.

## IMEKO WORLD CONGRESS YOKOHAMA

This is the first online IMEKO Congress. As such, it cannot be compared to the previously organised events. Nevertheless, the organisers are working very hard to make it a successful event.

- The final number of submitted papers is 318, and the reviewing process is finished.
- By June 15<sup>th</sup>, all authors had been notified of their paper's acceptance or rejection.
- After June 15<sup>th</sup>, the TC Chairs will be contacted regarding the arrangement of their sessions.
- The submission date for the final paper is July 15<sup>th</sup>, which is also the end of the early registration.
- Registration fees will be low and especially favourable for students, making this an excellent opportunity to present their scientific paper at an international conference.
- As an online event, the organisers expect over 500 participants to register.
- The video presentations will have to be uploaded by the authors and will be available for viewing until the end of September.
- The WC is destined for the follow-up discussions of the presentations.
- Mid-September, the best proceedings are going to be published.
- The leading publishing countries are Japan, Germany, China, the USA, Italy, Brazil, the UK, and Poland. (not necessarily in this mentioned order).
- The TC's "arrival" meetings are scheduled for the first day of the WC meetings with a maximum duration of 2:30 hours.
- The WC is going to start each day (possibly at 13:00 hours CET).

## INFORMATION ON THE GENERAL COUNCIL

The Advisory Board session will take place on the 20<sup>th</sup>, the Technical Board and General Council sessions on the 28<sup>th</sup> and 29<sup>th</sup> of August, all at 13:00 hours CET.

Finally, the traditional elections of every 3 years are going to take place at our next General Council Session. The new President-Elect will be chosen, and IMEKO and TC Officers, will be elected or perhaps reelected. If you wish to become a candidate or nominate someone you think an excellent candidate, please contact the Secretariat.







After the final editing of this newsletter arrived the sad news about Dr Tamás Kemény's passing. Most of us remember him, knew him well.

He has been with IMEKO for over fifty years, starting in 1958 actively participating until 2009. He still maintained his interest in his later years and kept in contact with our organisation, following IMEKO's progress through the years.

Let me share his own words with you when he retired and wrote us, speaking volumes about what he thought about his work, his life.

"I am sad to announce that after 58 active years, I have to retire and let this chapter go.

Between my 22<sup>nd</sup> and 80<sup>th</sup> years of age, I have loved working passionately, dedicated my time only to projects that had been beneficial to society and my country and brought joy and contentment to me.

I shall become now like a child again, playing mainly for as long as I can. I shall enjoy playing with my grandchildren, with my garden, with the technical novelties of our time (internet, iPad, and all that is to come), music, and my friends, regardless of distance and time. So let's continue together, playing."

Yours with love,  
Tamás Kemény"