



# M4Dconf 2022

IMEKO TC 6 – First International Conference on  
Metrology and Digital Transformation

19. – 21. September 2022



Berlin, Germany

## SPECIAL SESSION

### Pathways to digital transformation

There are 256 institutes currently participating in the CIPM MRA, and many more laboratories and regulatory bodies that will be affected by digital transformation of the international quality infrastructure. The needs, expertise, and resources of these various participants will vary greatly; a few are advanced along their digitalisation pathway, while many more feel daunted by the task ahead. However, unlike other sweeping technological changes in metrology, digital systems are ubiquitous. Institutes in all economies are facing the challenge of designing and implementing innovative solutions that are fit for the needs of particular communities and compatible with the emerging global standards. This session is intended for participants still in the early stages of transformation, or with needs that differ substantially from more advanced technological economies. It is a forum to share experience about novel and innovative approaches to digital transformation.

#### SESSION ORGANIZERS

- › Blair Hall (MSL)
- › Jon Barthomolew (EMI)

#### IMPORTANT DATES

- › Extended Abstract Submission Deadline:  
15 March 2022

#### WEBSITE & CONTACTS

[www.m4dconf2022.ptb.de](http://www.m4dconf2022.ptb.de)  
[m4dconf2022@ptb.de](mailto:m4dconf2022@ptb.de)

### SESSION TOPICS

The session will consist of experience reports or innovative solutions relating to the following topics, or to other aspects of transformation journeys.

- › **Strategic planning:** Everyone needs a plan - a roadmap for successful transformation. How do you develop such a plan; how do you evaluate stakeholder needs; are there obstacles; how do you raise awareness; what are the costs and expected benefits?
- › **Obstacles to transformation:** Transformation will not be not easy. What are some of the obstacles; how can they be overcome; how can influential decision-makers be engaged in the transformation process; how can traditional approaches be reconciled with new digital ones?
- › **Capability development:** Digital transformation will produce a whole new quality infrastructure. To build and maintain these systems, all participants need to acquire the necessary expertise, skills and knowledge. What are these skills; how can they be fostered and developed; is the new skill-set of 'digital metrologist' recognised, encouraged, and rewarded?
- › **Data:** Data is at the heart of digital transformation. How do we handle data correctly; how do we process it, and ensure that it is durable and of high quality? What are the best tools; which formats are best; how can the durability of data be assessed; how can the quality of data be assessed; what are the best ways to maintain and curate data records?



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## Special Session: Pathways to digital transformation

### SESSION ORGANIZERS



## Blair Hall

Blair leads a project in data metrology at the Measurement Standards Laboratory of New Zealand (MSL) and also chairs the APMP focus group on digital transformation in metrology. He studied at Victoria University of Wellington and holds a doctorate in experimental physics from the Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland. Blair has also worked at the Swiss national metrology institute (METAS) and at Massey University, New Zealand, where he lectured in physics and electronics.

## Jon Barthomolew

Jon Barthomolew is Acting Scientific and Industrial Metrology Director at Emirates Metrology Institute (EMI) the national metrology institute of the United Arab Emirates. He is a Chartered Physicist with an MSc in Industrial Measurement Systems from Brunel University, UK. He started work in Electrical Metrology in 1990, working at the National Physical Laboratory, UK and in Saudi Arabia before joining EMI at its founding in 2013. He has also worked as a systems engineer with a focus on process improvement through the modelling of standards, requirements and processes. He is the GULFMET TC chair leader and chair of the GULFMET working group on digital transformation.



### SUBMISSION OF ABSTRACTS

- › Submission of abstracts for this Special Session are handled by the IMEKO Conference platform:  
<https://conferences.imeko.org/event/2>
- › The deadline for submission of abstracts is 15th March 2022
- › Response to authors is scheduled for 31st May 2022