Editorial to selected papers from IMEKO TC1-TC7-TC13-TC18 joint symposium and MATHMET (European Metrology Network for Mathematics and Statistics) workshop 2022

Eric Benoit

1 Université Savoie Mont Blanc, PolytechSavoie, Lab. d’Informatique, Systèmes, Traitement de l’Information et de la Connaissance (LISTIC) B.P. 80439 Annecy-le-Vieux cedex 74944, France

Dear Readers,

This issue includes a first selection of papers issued from the IMEKO TC1-TC7-TC13-TC18 joint symposium and MATHMET (European Metrology Network for Mathematics and Statistics) workshop “Cutting-edge measurement science for the future” held in Porto in August 2022. Due to the pandemic, theses four IMEKO communities didn’t have the possibility to meet face to face since 2019 and the enthusiasm of all authors to expose their studies definitely contributed to the success of this event. For this reason a second selection will be presented in a future issue.

Three papers related to education and training in measurement and instrumentation are presented in this issue. Jakub Svatos and Jan Holub explored the impact of the pandemic on education of measurement with the paper “How the COVID-19 changed the hands-on laboratory classes of electrical measurement” [1]. Dominik Pražák et al present “A training centre for intraocular pressure metrology” [2]. On another field of measurement education and training, Raik Illmann, Maik Rosenberger and Gunther Notni expose their “Training program for the metric specification of imaging sensors” [3].

The measurement of biophysical properties is a topic shared by several teams during the symposium. It is considered, first by Francesco Crenna et al with their paper on “Biomechanics in crutch assisted walking” [4], and by Jakub Wagner and Roman Z. Morawski with a “Spatiotemporal analysis of human gait, based on feet trajectories estimated by means of depth sensors” [5].

Finally, this first selection ends with 2 papers on knowledge management considerations related to measurement science: In “Contrasting roles of measurement knowledge systems in confounding or creating sustainable change” [6], William P. Fisher compare the scientific modelling and the statistical modeling in the context of promoting sustainable change. In “A MATHMET Quality Management System for data, software, and guidelines” Keith Lines et al present the essential components of the MATHMET QMS that has the potential to become a reference in the measurement community [7].

I hope you will enjoy your reading.

Eric Benoit
Section Editor

REFERENCES