

CALL FOR PAPERS

Test & 2022 Measurement

INTERNATIONAL
CONFERENCE
& WORKSHOP



LABORATORIES NEVER AT REST...

What can we learn from Sir Isaac Newton?

When asked how he formulated his ideas on universal gravitation, Isaac Newton simply replied: 'By thinking on it continually'

Sir Isaac Newton can be justifiably considered as the man who revolutionised 18th century scientific thinking and his name is synonymous with any studies which include physics. There isn't a scholar who has studied physics as part of their curriculum, who has not been introduced to at least, his laws of motion.

What is perhaps less known is the fact that Newton had many interests outside of pure science which included alchemy, theology and the management of his estate! It is estimated that only ten of his 83 years were actually spent on the studies from which his fame emanates (mathematics, celestial mechanics, and optics). In fact, he worked obsessively on any topic which happened to grip his imagination, leading to him being described as a "solitary scholar in search of the truth". These interests were often so intense that he would forgo friendships and more general social interaction.

A recent biography entitled, "Never at rest" aptly describes Newton's life. Metrology, the science of measurement is also *never at rest* since the requirement for ever increasing measurement accuracy in support of modern industry is ongoing. As a result, measurement and testing laboratories are also *never resting*.

The world has dramatically changed over the past two years and these changes will have a significant impact on measurement and testing in the future. Self-calibrating sensors, the advent of digital calibration certificates, the applications of machine-learning and artificial intelligence as well as the use of reference data/big data instead of reference materials are becoming more common place. In the biological sciences the demand for the faster response of measurement science to problems such as pandemics has become a stark reality and has highlighted the requirement for the comparability of measurement results on a global scale. New ways to transfer knowledge such as distance learning and augmented learning are becoming a way of life. Metrology needs to be *never at rest* to remain relevant and adapt to the challenges of the future.

NATIONAL
LABORATORY
ASSOCIATION
SOUTH AFRICA

Tel: +27(0)12 349 1500 • www.nla.org.za

24 - 26 OCTOBER 2022

ONLINE VIRTUAL
CONFERENCE



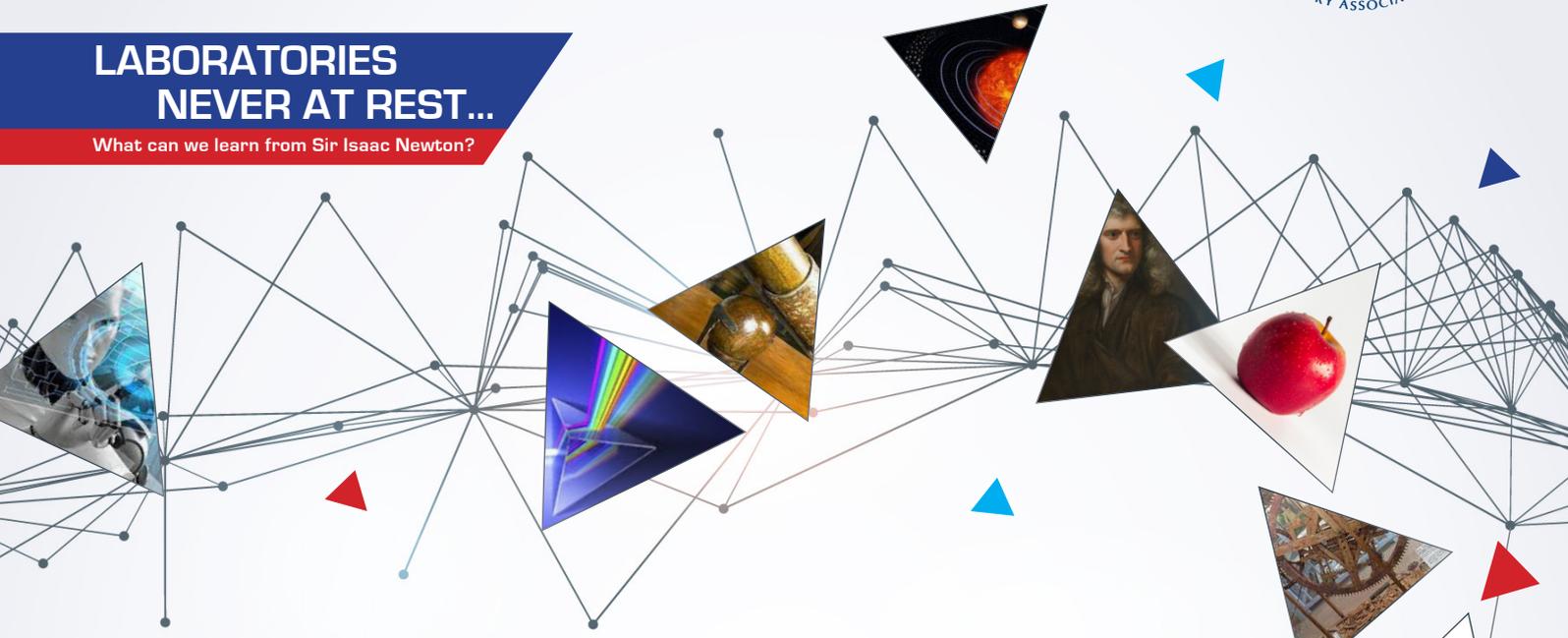
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SCOPE OF SUBMISSIONS

For this year's event contributions are invited in the form of formal papers, posters and tutorials with a practical training focus under the following headings:

- **Measurement and testing in industry:** to highlight how the measurements you perform adapt to changing demands in your industry and communities
- **Measurement traceability:** method validation, measurement uncertainty, reference materials
- **Laboratory quality systems:** ISO/IEC 17025, accreditation, calibration, proficiency testing
- **Laboratory staff:** recruitment, training, evaluating competence

The conference proceedings will be peer-reviewed by an editorial board and published on the NLA-website after the conference.

Manuscripts that are considered by the editorial board of the conference as worthy of publication will be recommended to the following peer-reviewed journals: Accreditation and Quality Assurance (ACQUAL), MEASURE (peer-reviewed journal of the NCSLI) and ARJ (African Research Journal).

REQUIREMENTS & GENERAL INFORMATION

Paper, tutorial and discussion panel content should relate to the suggested topics and, wherever possible, to the conference theme. In all cases they must be non-commercial and objective.

Abstracts of 350 words or less should be submitted electronically to the NLA website at www.nla.org.za, with author contact

information and a biography by **30 April 2022**. (See the NLA website for both the abstract and manuscript format). When you submit your abstract you must be sure that you receive a confirmation of receipt of the abstract from the NLA database.

The Chair of the Technical Programme of the T&M 2022 conference with the editorial board will select the top-rated abstracts for presentation at the conference. After notification of the abstract selection, authors will have until **31 July 2022** to submit the full manuscript. **ALL DEADLINES MUST BE MET.**

SUBMISSIONS

Authors' attention is drawn to the fact that the following registration categories apply for all paper, poster or tutorial submissions.

A SILVER REGISTRATION will be awarded to authors whose abstracts are received on or before **30 April 2022**, and whose abstracts are accepted for presentation.

The **SILVER REGISTRATION** of presenters of papers will be converted to a **GOLD REGISTRATION** provided that the full manuscript of the paper is submitted by **31 July 2022**.

SILVER REGISTRATION: Discount of 25% on the conference fee.

GOLD REGISTRATION: Discount of 50% on the conference fee.

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