

Lectio Matera

Newsletter of the

ACADEMIA NDT INTERNATIONAL

Science, Technology and Diagnostics in Non-Destructive Testing

Academia NDT International: Working to advance the science in NDT

'Academia' was the term that described the sacred place in ancient Greece where Plato is said to have had his Centre of Learning, an olive grove dedicated to the goddess of wisdom, Athena.

These days, we understand an Academia to represent an accumulation of knowledge in a certain field of science. A forum for the exchange of ideas, this brings together the most eminent scientists and experts to promote excellence in science and practice, facilitating solutions to the problems facing mankind.

Established in 2008 with its headquarters in Brescia, Italy, Academia NDT International is an independent, non-governmental, non-profit association of scientists working in the field of non-destructive testing, non-destructive evaluation and associated disciplines. Currently, there are 83 members (at the end of 2022) from 20 different countries.

The mission of the Academia NDT International is to promote the science and research and development (R&D) in the field of NDT/NDE and to encourage the development of practical applications of findings in this discipline at universities, R&D institutions and other relevant bodies throughout the world. It aims to achieve this by:

- ◆ providing a forum for the exchange of ideas that brings together the most eminent scientists and experts;
- ◆ establishing and maintaining networks among scientists and technologists;
- ◆ developing and contributing with a bank of knowledge and understanding and implementing NDE philosophy, theory and practice.

Important objectives of the Academia NDT International are to allow the development and use of high-performance materials and

processes and quality services and to attract the attention of authorities, governments, agencies and public organisations to the importance and benefits that NDE can provide.

In a broader sense, Academia NDT International brings together scientists who can bridge the gap between the technical and scientific disciplines and NDT/NDE by means of either having basic expertise in related fields or being able to incorporate know-how into NDT/NDE by transferring the fundamental expertise.

Taking all of these into account, we can say that NDT/NDE is serving the society by contributing to an improvement of the quality of life and by making the world safer.



Professor Peter Trampus
President, Academia NDT International
Brescia and Budapest, June 2023

Academia NDT International's short-term objectives

In its plan to further strengthen its role and structure, the Academia NDT International is focusing on certain pillars on which to build, including:

- ◆ Further development of the assembly of senior scientists and young researchers;
- ◆ The establishment of a special entrepreneur section, following the motto 'from theory to application'; and
- ◆ The creation of a research laboratory network.

A Scientific Council is integrated into the structure of Academia NDT International. The objectives of the Scientific Council are primarily, but not limited to, the following:

- ◆ Identifying key scientific questions and research tendencies in the field of NDT;
- ◆ Organising international research days in the large international NDT conferences and, as in the past, striving to ensure the participation of Nobel Prize Laureates;

- ◆ Organising workshops and webinars in selected subjects, such as the frontiers of NDT; and
- ◆ Publishing a review book on the scientific aspects of NDT development, possibly for each world conference.

A fundamental part of the Academia NDT International's scientific programme is the promotion of NDT in university curricula with special regard to NDT integrity engineering.

NDT integrity engineering is a discipline/profession in the development of non-destructive testing and evaluation, involving materials science, fracture mechanics and other sciences that would guarantee and enhance the reliability and safety by ensuring the integrity of structures and components.

Among the Academia NDT International's marketing goals, the maintenance of the traditionally healthy cooperation with the international NDT groups, such as the International Committee for NDT (ICNDT) and the regional NDT groups, is essential.

Academia NDT International Research Day 2023

Wednesday 5 July 2023

The Academia Day will be organised within ECNDT 2023 and other parallel sessions – see back page for full programme.

Gallery



Members of the Academia Council at the Academia European Research Day held as part of the European Conference in Gothenburg in 2018. Left to right: Serge Dos Santos, Shant Kenderian, Vjera Krstelj and Giuseppe Nardoni

Academia NDT International President Professor Peter Trampus at the European Conference in Gothenburg in 2018



Dignitaries at Gothenburg in 2018. Left to right: Norikazu Ooka, Serge Dos Santos, Takamasa Ogata and Zdenek Preverovsky

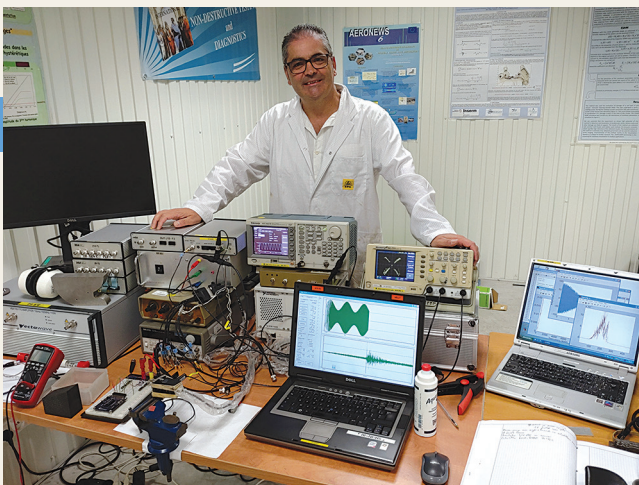
Some Academia NDT International members at the General Assembly held in Brescia in 2017. Left to right: M Kazakevich, Giuseppe Nardoni, Zdenek Preverovsky, Serge Dos Santos, Uwe Ewert, Shant Kenderian, Rainer Link, Vjera Krstelj, David Gilbert, Peter Trampus, Adriana Savin and Marija Bertovic





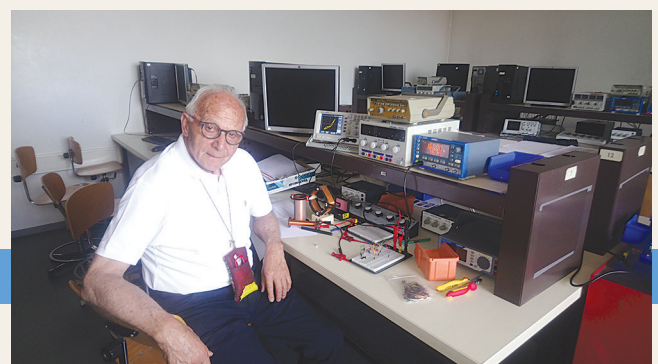
The President of Academia NDT International (centre) with the Vice Presidents. Left to right: Serge Dos Santos, Peter Trampus and Shant Kenderian

Members of Academia NDT International at their visit to the PAKs nuclear power plant in Hungary in 2022. Left to right: R S F Orozco, Peter Trampus, Zdenek Preverovsky, Shant Kenderian, Serge Dos Santos and Uwe Zscherpel



Serge Dos Santos at work in his laboratory

Past President Giuseppe Nardoni in his laboratory



Academia NDT International Research Day 2023

Wednesday 5 July 2023

The Academia Day will be organised within ECNDT 2023 and other parallel sessions

1. Frontiers in NDT

Chair: Peter Trampus

- 09:00-09:10 **Opening and welcome**
Peter Trampus, President of Academia NDT International, Hungary
- 09:10-09:50 **NDE and deep learning: fashion trend or the future?**
Keynote presentation: Roman Gr Maev, University of Windsor, Canada
- 09:50-10:20 **The perspective of Academia NDT International**
Peter Trampus, President of Academia NDT International, Hungary
- 10:20-10:40 **Experimental evidence of the spin magnetic moment of electron activated by the magnetic field and monitored by acoustic emission**
Giuseppe Nardoni, N Fallahi and P Nardoni, I&T Nardoni Institute, Italy
- 10:40-11:10 Coffee break

2. International Forum on NDT Education at Universities

Joint meeting of Academia NDT International with ICNDT WG3 (Chairs: Younho Cho and Peter Trampus)

- 11:10-11:20 **Opening and welcome**
Younho Cho, President of WCNDT 2020 and ICNDT WG3, South Korea
- 11:20-11:50 **NDT integrity engineering – the feasible curriculum**
*Keynote presentation:
Peter Trampus, President of Academia NDT International, Hungary
Vjera Krstelj, President of Croatian Engineering Association, Croatia*
- 11:50-12:10 **Current status and challenges of NDE education at academic institutions in the USA**
Reza Zoughi, Center for Nondestructive Evaluation (CNDE), Iowa State University, USA
- 12:10-12:30 **The UK Research Centre for NDE (RCNDE): Twenty years of delivering value to industry**
Colin Brett, RCNDE, UK
- 12:30-12:50 **General education and training of NDT personnel, including NDT education at universities in South Africa**
Manfred Johannes, Immediate Past President of SAINT, South Africa
- 12:50-14:10 Lunch

3. International Forum on NDT Education at Universities

- 14:10-14:30 **Experience with an international NDT master course in view of research and development**
*Uwe Ewert, Dresden International University, Germany
Viktor Lyamkin, NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany
Christian Boller, NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany and Dresden International University, Germany*
- 14:30-14:50 **Strategy for NDT&E education at universities in France**
*Phillippe Duvauchelle, NDT Specialised Master, INSA, France
Rachid El-Guerjouma, Mechanical Engineering and Acoustic, Le Mans University, France
Serge Dos Santos, INSA Centre Val de Loire, France*
- 14:50-15:10 **The role of ASNT in supporting NDT education and research in the USA**
Shant Kenderian, The Aerospace Corporation, ASNT Engineering Council, USA
- 15:10-15:30 **Development and practical exploration of NDT education at universities in China**
Yongshun Xiao, Tsinghua University, China
- 15:30-15:50 **Strategy for NDE education at universities in the UK: an integrated education programme for NDT professionals**
David Gilbert, BINDT, UK
- 15:50-16:10 **Strategy for NDT education at universities in India**
Krishnan Balasubramaniam, IIT, India
- 16:10-16:40 Coffee break

4. Panel Discussion (16:40-17:10)

Chairs: Shant Kenderian, Younho Cho and Peter Trampus, Academia NDT International and ICNDT WG3

- 17:10 End of Academia NDT International Research Day 2023

ACADEMIA NDT INTERNATIONAL

President: Professor Peter Trampus. Email: trampus@uniduna.hu

Vice Presidents: Dr Serge Dos Santos and Dr Shant Kenderian

Academia NDT International Council Members: Above plus Dr Zdenek Preverovsky (Treasurer), Dr Sajeesh Kumar Babu, Dr Uwe Ewert,

David Gilbert, Dr Adriana Savin. Co-opted: Professor Roman Maev, Dr Yoshikazu Ohara

General Secretary: Dr Anish Poudel. Email: anishpoudel85@gmail.com

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ACADEMIA website (under construction): www.academia-ndt.org