



INTERNATIONAL INSTITUTE OF WELDING

A world of joining experience

Doc. No: V-1980-23

**76<sup>nd</sup> IIW Annual Assembly - COMMISSION V  
NDT and Quality Assurance of Welded Products**

**Agenda of the Technical Meetings of Commission V,  
NDT and Quality Assurance of Welded Products**

**SINGAPORE-ANNUAL ASSEMBLY, July 17<sup>th</sup> – July 19<sup>th</sup> , 2023**

**Monday July 17<sup>th</sup> , 2023: 8:30 – 12:30 (local time Singapore)**

**8:30 – 8:50**    **Opening of the Meeting,**  
**Marc Kreuzbruck**  
Adaption of the Agenda, Marc Kreuzbruck

V-1981-23    Annual Report of Commission V,  
*Marc Kreuzbruck*    (20 min)

**Optical and active Thermography Techniques  
8:50 – 9:30**

V-1982-23    Non-destructive Evaluation of Residual Stress using Shearography  
and high Density Current Impulses,  
*Leonid Lobanov, Viktor Savitsky, Oleksii Shutkevych,*  
*Iryna Kyianets, Kostiantyn Shyian, PWI, Ukraine*    (20 min)

V-1982-23    Improved spatial resolution using IR-Beamer excitation  
in active Thermography,  
*Marc Kreuzbruck, IKT, Stuttgart*    (20 min)

**Sub-commission VC Ultrasonic Based Weld Inspection Techniques,  
9:30 – 10:30    *Channa Nageswaran***

V-1983-23    Annual Report of Sub-commission VC,  
*Channa Nageswaran,*    (20 min)

V-1984-23    Evaluation of PCI technique for CRA inspection applications,  
*Daly Souissi, Evident Scientific*    (20 min)

V-1985-23      Phased array ultrasonic volume testing of partially penetrated welds,  
François Berthelot, Michel Marzin, Benoit Dupont, Fabien Lefebvre,  
CETIM, France      (20 min)

**Coffee Break**

**10:30 – 10:50**

**Special Session Artificial Intelligence**

**10:50 – 12:05**

V-1986-23      AI for tube testing with ECT,  
*Casper Wassink, Eddyfi*      (25 min)

V-1987-23      Improvement of 3D-Active Thermography by using  
Artificial Intelligence,  
*Marc Kreutzbruck, IKT Stuttgart*      (25 min)

V-1988-23      Simulation-driven deep learning for defect characterization from ultrasonic TFM  
images in the presence of part uncertainties.

AI activities at CEA,

*Pierre Calmon, CEA Paris — Saclay*  
(25 min)

**Tuesday July 18<sup>th</sup> , 2023: 8:30 – 12:30 (local time Singapore)**

**8:30 – 8:50**

Election of the Chair C-V

**Sub-commission VF / VD      **NDT reliability including Simulation of NDT Techniques /  
Structural health monitoring, *Pierre Calmon*****

**8:50 – 9:~~10~~30**

V-1989-23      Annual Report of Sub-commission VF and VD,  
*Pierre Calmon*

V-XXX      Validation of MAPOD methodology for Guided Waves SHM on the example of the  
detection of a growing crack in plate-like structure.      (20 mn)  
*Pierre Calmon, B. Chapuis*

(20 min)

**Sub-commission VE Weld Inspection techniques based on Electrical and Magnetic methods, *Casper Wassink***

**9:310 – 10:200**

- V-1990-23 Annual Report of Sub-commission VE, *Casper Wassink* (30 min)  
Update on Eddy Current Array standards development
- V-1991-23 Comprehensive diagnostics of welded joints on pipelines in polyurethane foam insulation. (20 min)  
*Anatoly Dubov, Alexandr Dubov, Sergey Kolokolnikov, Artem Marchenkov*

**Coffee Break**

**10:200 – 10:420**

**Visit of the Secretariat**

**10:420 - 11:040**

**Special Session Robotic NDT**

**11:040 – 12:155**

- V-1992-23 A robotized adaptive solution for the ultrasonic inspection of a complex nuclear component with a matrix array ~~Robotic in CEA,~~ (25 min)  
*Pierre Calmon, CEA, ParisSaclay*
- V-1993-23 Robotic inspection of underground fuel tanks, (25 min)  
*Casper Wassink, Eddyfi, Canada*
- V-1993-23 A Freely Positionable Dual-RobotSystem for Automated NDT of Large Structures, (25 min)  
*Marc Kreutzbruck, IKT, Stuttgart*
- 12:00-15 – 12:3015**  
Welding in the World Presentation annual report, (15 min)  
*Thomas Kannengießer*

**Wednesday July 19<sup>th</sup>, 2023: 8:30 – 12:30 (local time Singapore)**

**Sub-commission VA Radiographic Based Weld Inspection Techniques, *Uwe Zscherpel***  
**8:30 – 9:30**

- V-1994-23 Annual Report of Sub-commission VA, *Uwe Zscherpel* (20 min)
- Open discussion (20 min)

**Conclusion of the Meeting**