74th 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

ON-LINE-ANNUAL ASSEMBLY, July 15th – July 16th, 2021

Thursday July 15th, 2021: 13:00 – 16:00

13:00 – 13:20 Opening of the Meeting, Marc Kreutzbruck
Adoption of the Agenda, Marc Kreutzbruck

V-1930-21 Annual Report of Commission V, Marc Kreutzbruck
Remarks
(10 min)

Commission V Election of the chair C-V
(10 min)

Sub-commission VA Radiographic Based Weld Inspection Techniques, Uwe Zscherpel
13:20 – 14:00

V-1931-21 Annual Report of Sub-commission VA, Uwe Zscherpel
(15 min)

V-1932-21 “Non-destructive measurement technique and quality metrics for analysis of laser welded hairpin joints in electric drives with computed tomography”,
Markus Omlor, Jajnabalkya Guhathakurta, Rolf Graef,
Sven Simon, Klaus Dilger (Porsche AG, TU Braunschweig, DE)
(25 min)

Sub-commission VC Ultrasonic Based Weld Inspection Techniques, Channa Nageswaran
14:00 – 15:00

V-1933-21 Annual Report of Sub-commission VC, Channa Nageswaran
(5 min)

V-1934-21 “Real-time grain orientation mapping of anisotropic media for improved ultrasonic non-destructive evaluation”,
Jonathan Singh (University of Strathclyde, UK)
(20 min)

Iikka Virkkunen (True Flaw, Finland)
(20 min)
V-1936-21 “Simulation-based training of a CNN for detection of cracking”, Xuening Zou (Loughborough University, TWI, UK) (15 min)

**Sub-commission VD  Structural health monitoring, Bastien Chapuis**
15:00 – 16:00

V-1937-21 Annual Report of Sub-commission VD, Bastien Chapuis, (10 min)
V-1938-21 **Resolution:** new working group for the revision of ISO 18211 guided wave Standard (10 min)
V-1939-21 Qualification of Guided Wave Ultrasonic Technology for testing pipes, *Graham Edwards (TWI, UK)* (20 min)
V-1940-21 On the benefit of using machine learning methods in SHM: Application to defect detection in high attenuating medium, *Mahjoub El Mountassir (Institut de Soudure, FR)* (20 min)

**Friday July 16th, 2021: 13:00 – 16:00**

**Sub-commission VE  Weld Inspection techniques based on Electrical, Magnetic, and Optical Methods, Matthias Pelkner**
13:00 – 14:10

V-1941-21 Annual Report of Sub-commission VE, Matthias Pelkner (10 min)
V-1942-21 “Inspection of dissimilar metal welded joints using the metal magnetic memory technique”, *Anatoly Dubov, Alexandr Dubov, Peter Ladany, Artem Marchenkov, Sergey Kolokolnikov,* (Energodiagnostika, RU) (20 min)
V-1944-21 Process monitoring in metal AM@BAM: The project, *C. Maierhofer, S.J. Altenburg, H. Ehlers* and Team ProMoAM (BAM, DE) (20 min)

**Sub-commission VF  NDT reliability including Simulation of NDT Techniques, Pierre Calmon**
14:10 – 15:10

V-1945-21 Annual Report of Sub-commission VF, Pierre Calmon (20 min)
V-1946-21 “Simulation-assisted Machine learning applied to ultrasonic TFM multimodal analysis”, *Roberto Miorelli et al.* (CEA, FR) (20 min)
V-1947-21 “A Finite Element tool for the simulation of the ultrasonic propagation in austenitic welds” *Nicolas Leymarie et al.* (CEA, FR) (20 min)

**Conclusion of the Meeting**