

Measuring By Light 2025

Tuesday 1 April 2025

Registration and coffee	9:00	10:00	Registration and coffee - foyer
Welcome	10:00	10:15	Welcome word - auditorium
Keynote 1 Auditorium	10:15	10:55	Plug & Probe - A vision for accelerating the pace testing through non-destructive measurements <i>Ibrahim Sever</i> Rolls Royce, Derby, UK
Keynote 2 Auditorium	10:55	11:35	Enlightning the Sensors at ASML <i>Umit Arabul</i> ASML, Eindhoven, the Netherlands
Sponsor pitch	11:35	12:30	5 min pitch of each sponsor: <i>Polytec, Konnexions, Ommatidia, Optonar, UCL, Mitutoyo, Fibotec, LaVision, Spektra</i>
Lunch - Exhibition	12:30	13:30	Foyer
Parallel session			
Parallel Session 1	13:30	14:50	Auditorium: "Aerospace I"
			Senaatszaal: "MEMS Characterization"
	13:30	14:50	13:30 - 13:50 Modal analysis of an aerospace jointed structure using a 3D SLDV system (37) <i>Dario Di Maio, Jelte Dotinga</i> University of Twente, Enschede, Netherlands
			13:30 - 13:50 Static and Dynamic Analysis of Flexible Capacitive Micromachined Ultrasound Transducers for Medical Imaging (65) <i>Chloe Halbach</i> Imec, Leuven, Belgium. KU Leuven, Leuven, Belgium
13:30	14:50	13:50 - 14:10 Comparison of Laser ultrasonic using Q-switched laser and LDV against traditional ultrasound. (9) <i>Benjamin van Elburg, William Kramer, Patrick Jansen</i> NLR (Dutch Aerospace Centre), Marknesse, Netherlands	
		13:50 - 14:10 Automated vibration measurement at the wafer level using laser Doppler vibrometry (75) <i>Markus Heilig</i> Polytec, Waldbronn, Germany	
13:30	14:50	14:10 - 14:30 Optical system parameters influence on signal to noise ratio in shearography (51) <i>Luis Garza-Soto, Nan Yue, Andrei Anisimov</i> Delft University of Technology, Delft, Netherlands	
		14:10 - 14:30 High-Frequency Characterization of Surface Acoustic Waves: Insights from Laser Doppler Vibrometry and Atomic Force Microscopy Techniques (24) <i>Hande Acikagbi, 2, Inge van der Knijff1, Allard Koton1, Peter Steeneken1, Gerard Verbiest1, Sabina Caneva1</i> 1 Technical University of Delft, Delft, Netherlands. 2 Kavli Institute of Nanoscience Delft, Delft, Netherlands	
13:30	14:50	14:30 - 14:50 Non-Destructive Inspection of large, thin-walled aircraft parts with infrared thermography (11) <i>Daniella Deutz, Arnoud Bosch, Jacco Platenkamp, Patrick Jansen</i> NLR (Dutch Aerospace Centre), Marknesse, Netherlands	
		14:30 - 14:50 Mechanical Characterization of Fully Flexible Polyimide Membrane-Substrate Integration (14) <i>Éléonore Masarweh, Denis Flandre</i> UCLouvain, Louvain-la-Neuve, Belgium	
Frans Van Hasseltzaal: "Fiber Optics"			
13:30	14:50	13:30 - 13:50 Revolutionary use of optical sensor on rotating equipment; case study breakthrough in power train monitoring (1) <i>Georgo Angelis, Eric van Genuchten</i> Sensing360, Utrecht, Netherlands	
		13:50 - 14:10 Accuracy and repeatability of sapphire fibre Bragg grating based temperature measurement with automated mode mixing(35) <i>René Eisermann1, Bruno Rohloff1, Tobias Habisreuther2, Stephan Krennek1</i> 1 Physikalisch-Technische Bundesanstalt (PTB), Berlin, Germany. 2 Leibniz-Institut für Photonische Technologien, Jena, Germany	
13:30	14:50	14:10 - 14:30 Shape sensing of a catheter using a single optical fiber (44) <i>Chantal van Tuijl, Anneloes van Dijk1, Ludo Clement1, Junior de Vries1, Marin Hagenaar1, Marinus van der Hoek2, Hemanth Ramanna3, Naomi van der Kolk1, Steven van den Berg1</i> 1 The Hague University of Applied Sciences, Delft, Netherlands. 2 VanDerHoekPhotonics, Vlaardingen, Netherlands. 3HagoZiekenhuis, The Hague, Netherlands	
		14:30 - 14:50 The INFOTherm project – towards an integrated European research, calibration and testing infrastructure for fibre-optic thermometry (42) <i>Stephan Krennek1, Guillaume Failleau2, Xin Lu3, René Eisermann1, Peter James Thomas4, Henrik Kjeldsens</i> 1 Physikalisch-Technische Bundesanstalt (PTB), Berlin, Germany. 2 Laboratoire National de métrologie et d'Essais (LNE), Trappes, France. 3 Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany. 4 Norwegian Research Centre AS (NORCE), Bergen, Norway. 5Danish Technological Institute (DTI), Aarhus C, Denmark	
Coffee break	14:50	15:20	Foyer
Parallel session			
Parallel Session 2	15:20	16:40	Auditorium: "Material Testing"
			Senaatszaal: "Optomechanics I"
	15:20	16:40	15:20 - 15:40 Laser Doppler Vibrometry for Characterizing Wave Dynamics in Additively Manufactured Polymer Metamaterials (3) <i>Sidhant Beniwal, Ranjita Bose, Anastasio Krushynska</i> University of Groningen, Groningen, Netherlands
			15:20 - 15:40 High-Q SiN Nanomechanical Resonators Integrated with Free-Space Cavities (69) <i>Richard Jorje, Megha Khokhar, Paola Sberna</i> Delft University of Technology, Delft, Netherlands
15:20	16:40	15:40 - 16:00 Viscoelastic Material Identification Using Laser Doppler Vibrometry and Digital Twin Modeling (20) <i>Linus Tzenger1,2, Bart Van Damme1, Paolo Tiso2</i> 1 Empo, Dübendorf, Switzerland. 2 ETH Zurich, Zurich, Switzerland	
		15:40 - 16:00 Modelling the reflectance of Porous Silicon thin films by transfer matrix approach (32) <i>Clémentine Gevers, Louise Lejeune, Laurent Francis</i> UCLouvain, Louvain-la-Neuve, Belgium	
15:20	16:40	16:00 - 16:20 Laser Doppler Vibrometry for the dynamic characterization of vibroacoustic resonant metamaterial panels(55) <i>Stefan Janssen1,2, Daniele Giannini3, Lucas Van Belle4,2, Claus Claeys4,2, Edwin P.B. Reyniers3, Elke Deckers1,2</i> 1 Department of Mechanical Engineering, KU Leuven Campus Diepenbeek, Diepenbeek, Belgium. 2 Flanders Make@KU Leuven, Leuven, Belgium. 3 Department of Civil Engineering, KU Leuven, Leuven, Belgium. 4 Department of Mechanical Engineering, KU Leuven, Leuven, Belgium	
		16:00 - 16:20 Towards quantum thermometry with optomechanics (31) <i>Emile Ferreux1,2, Ferhat Loubar1,2, Tatiana Steshchenko2, Olga Kozlova1, Théo Théo Martel3, Inès Ghorbel4, Luca Aimone Giggio4, Sylvain Combré4, Alfredo De Rossi4, Fernando Sparasci1, Laurent Pitre1, Rémy Braive3,5,6, Tristan Briand2, Stéphan Brioudeau1</i> 1Laboratoire commun de métrologie LNE-CNAM – Conservatoire National des Arts et Métiers (CNAM) - Laboratoire national de métrologie et d'essais (LNE), St Denis, France. 2Laboratoire Kastler Brassel, Sorbonne Université, ENS - Université PSI, Collège de France, CNRS, Paris, France. 3Centre de Nanosciences et de Nanotechnologies, CNRS, Université Paris Saclay, Palaiseau, France. 4Thales Research & Technology (TRT), Palaiseau, Palaiseau, France. 5Université Paris Cité, Paris, France. 6Institut Universitaire de France (IUF), Paris, France	
15:20	16:40	16:20 - 16:40 Rapid Characterization of PMMA using Scanning Laser Doppler Vibrometry and High-Power Ultrasonic Excitation (18) <i>Navid Hasheminejad, Nasser Ghaderi, Steve Vanlanduit, Cedric Vuyse</i> University of Antwerp, Antwerp, Belgium	
		16:20 - 16:40 Tip-enhanced optical microscopy through scanning probe techniques (19) <i>Roel Burgwal, Nikhil Seeja Sivakumar, Joëlle Schrijer, Daniel Wegner</i> Radboud University, Nijmegen, Netherlands	
Frans van Hasseltzaal: "Infrastructure"			
15:20	16:40	15:20 - 15:40 Analysis of in-situ stress distribution of timber foundation piles equipped with distributed fiber optic sensors (DFOS) (38) <i>Giorgia Pagella1, Maria Felicità2, Michele Mirra1</i> 1TU Delft, Delft, Netherlands. 2ETH Zurich, Zurich, Switzerland	
		15:40 - 16:00 Comparison of digital image correlation and fiber bragg grating techniques for strain measurement in bituminous materials. (9) <i>Vincent Jacobs, Ali Galmohammadi</i> University of Antwerp, Wilrijk, Belgium	
15:20	16:40	16:00 - 16:20 Applications of Massively Parallel Laser RADAR in Vibration and Displacement Analysis (62) <i>Eduardo Margallo, Stephen O'Brien, Jose Luis Rubio Guivermou, Gregory Pandraud</i> Ommatidia LIDAR, Madrid, Spain	
		16:20 - 16:40 Vertical axis wind turbine monitoring using fiber Bragg grating sensors (47) <i>Christophe Caucheteux1,2, Bastien Van Esbeem1, Damien Kinet1,2, Corentin Guyot2</i> 1University of Mons, Mons, Belgium. 2B-SENS, Mons, Belgium	
Network event & Conference dinner			
Busses to Madurodam	16:45	17:30	Madurodam George Maduroplein 1 2584 RZ The Hague Netherlands
reception and park visit	17:30	18:30	
Walking dinner	18:30	21:30	