



23rd International Conference on Metrology and Properties of Surfaces – Programme

Tuesday 28th June 2022

Venue: University of Strathclyde, The Technology and Innovation Centre, 99 George Street, Glasgow. G1 1RD		
08:10	Registration/Tea & Coffee	
08:50	Opening Conference Address	Prof Liam Blunt
	Session 1: Instrumentation	
09:10	KEYNOTE: Title: Latest Developments in Feature Based Surface Characterisation Speaker: Prof Dame Xiangqian (Jane) Jiang , Director, the EPSRC Future Metrology Hub, RAEng/Renishaw Chair in Precision Metrology, University of Huddersfield	
09:40	Considerations on the geometrical configurations of deflectometric measurement systems	Xiangchao Zhang
10:00	Phase measuring deflectometry with a concave mirror	Ziyu Li
10:20	Dichroic spectrally-resolved interferometry and reflectometry system to characterize film structure	Jian Wang
10:40	Chinese Industrial Survey of ISO surface textures parameters	Tukin Li
11:00	Coffee & Posters	
11:30	Characterizing topographic spatial resolution with the instrument transfer function	Peter de Groot
11:50	Surface measurement using electrolyte jets	Ivan Bisterov
12:10	Towards metasurfaces for metrological applications	Haydn Martin
12:30	Dynamic deflectometric measurement with speckle pattern	Ruiyang Wang
12:50	Binary Pseudo-Random Arrays for the Instrument Transfer Function Evaluation of Surface Texture Microscopes	Ulf Griesmann
13:10	Lunch & Posters	
	Session 2: Additive	
13:50	Scaling stable Al-Fe-Cr quasicrystal grown of additive manufactured aluminium for low-friction and wearlessens functional surfaces	Nan KANG
14:10	Particle Characterization on Laser Powder Bed Fusion Nickel Super Alloy 625 Surfaces	Jesse Radford

14:30	Multiscale geometric characterizations of additively manufactured parts – a re-entrant story	Tomasz Bartkowiak
14:50	Characterizing topographic spatial resolution with the instrument transfer function	Peter de Groot
15:10	A fringe projection system calibration method based on single image	Jin Yu
15:40	Characterizing topographic spatial resolution with the instrument transfer function	Peter de Groot
16:00	Poster and Exhibition Refreshments	
16:20	End of Day	
19:00	Reception Drinks at Glasgow City Chambers	George Square, Glasgow G2 1DU
20:30	Speaker's Dinner at Corinthian Club	191 Ingram Street, Merchant City, Glasgow G1 1DA

Wednesday 29th June 2022

	Session 3: Applications/Characterisation	
09:00	KEYNOTE: Title: Textured surfaces: how do we measure, simulate, and test them for tribological applications? Speaker: <i>Henara Costa</i> , Associate Professor, Federal University of Uberlandia, Brazil	
09:30	The High Tactile Resolution of the Human Finger at Texture Scales: TouchyFinger Technology	Hassan Zahouani
09:50	Fused Metrology Methods for the Analysis of Hip Implant Tribology	Joe Pashley
10:10	Topographical analysis of impressions in the Brinells hardness test	Karol Grochalski
10:30	A multiscale approach to investigating haptic perception of surfaces	Johan Berglund
10:50	Frictional performance of textured surfaces in various lubricated reciprocating conditions	Pawel Pawlus
11:10	Coffee & Posters	
11:40	Towards a future standardization for optical profilometry measurement of ball-on-flat linear reciprocating test wear scars	Alaitz Zabala
12:00	Contribution of multiscale analysis to the understanding of friction evolution of aggregates surface	Wiyao Edjeou
12:20	Analysis of tire/road wear process: the texture effect	Manuela Genesseeux
12:40	Lunch & Posters	

	Session 4: Applications/Maths/Data	
13:40	Performance comparison of machine learning models for the characterisation of additive surfaces using light scattering	Mingu Liu
14:00	Smoothing Spline Filter with Tension: numerically stable implementation, filter-transfer-characteristics, and fast IIR-Filter approach	Jörg Seewig
14:20	A General Framework for the Characterisation of Triangle Mesh based Freeform Surface and its Applications in Additive Manufacturing Metrology	Wenhan Zeng
14:40	Characterization of aperiodic surfaces with mesh-based parameters	Sophie Groger
15:00	Surface representation and filtering by combining the discrete legendre and cosine transform	Han Haitjema
15:20	Coffee & Posters	
15:40	Uncertainty propagation for surface height parameters using the metrological characteristics approach	Athanasios Pappas
16:00	On communicating extruded aluminium surface quality along the supply chain - a customer approach to sustainable surfaces	Sabina Rebyggiani
16:20	Robust surface profile envelope estimation using a beam surface contact model	Tycho Groche
16:40	A data driven evaluation of surface texture parameters for quantitative defect recognition and classification	Jesse Redford
17:00	End of Day 2	
	Main Conference Dinner: Royal College of Physicians and Surgeons	232-242 St Vincent Street, Glasgow G2 5RJ

Thursday 30th June 2022

	Session 5: Characterisation/Manufacture	
09:30	KEYNOTE: Title: Measurements of the Past: The Applications of Surface Metrology in Archaeology Speaker: Danielle A. Macdonald , Associate Professor, Department of Anthropology, The University of Tulsa, Oklahoma, USA	
10:00	Transparent anisotropic films measurement with a polarized angle-resolved spectroscopy	Lihua Peng,
10:20	A Robust 2D Residual-restrained VMD for Surface Texture Analysis	Zhuowei Lia
10:40	Coffee, Posters & Exhibition	
11:20	When archaeology meets tribology. States of surfaces and light in Bronze Age Crete	Bastien Rueff

11:40	First account on the identification of the carving techniques employed to sculpt the red porphyry sarcophagus of the Norman and Hohenstaufen kings of Sicily (12th - 13th centuries)	Elise Morero
12:00	Characterization of lattices for orthopaedic implants produced via selective laser melting with X-ray Computed Tomography and Focus Variation Microscopy	Beatrice Crocco
12:20	Quality assurance of Stereolithography based biocompatible materials for dental applications	Amogh V Krishna
12:40	Lunch & Posters	
13:40	Effect of the measurement contact scale on the thermomechanical characterisation of biocomposite surfaces	Faissal CHEGDANI
14:00	Surface characterization and analysis of textured injection moulded automotive interior components	Vijeth V Reddy
14:20	Smart Defect Identification for Manufacturing Applications	Tapan Ganatma Nakkina
14:40	Development of multiscale curvature characterization of irregular topographies	Tomasz Bartkowiak/Chris Brown
15:00	Closing Conference Address	Prof B. G. Rosen
15:20	Close	