

Striving for Sustainability in Surface Engineering (SSSE24)
25th April 2024, Registration 8.30-9.00 at ESLC Building, Room A09



Session 1 Chair: Prof Tanvir Hussain					
Session 1 9.00-10.40	09.00-09.10	Welcome and housekeeping			
	09.10-09.35	Prof Ping Xiao	Manchester	TBC/EBC	Characterization techniques for understanding failure of TBCs and EBCs
	09.35-10.00	Prof John Nicholls	Cranfield		Towards Smart, Sustainable Coatings: Self-diagnostic TBCs and EBCs
	10.00-10.20	Dr Stefan Zimmermann	Lincotek		Suspension Sprayed Thermal Barrier Coatings Deposited by Advanced Cascaded Plasma Spray Technology
	10.20-10.40	Dr Mingwen Bai	Leeds		Investigating Cracking Dynamics in Thermal Barrier Coatings: An In-Situ SEM and Image-Based FEA Study
10.40-11.00	Coffee and Tea				
Session 2 & 3 Chair: Prof Nadimul Faisal					
Session 2 & 3 11.00-12.20	11.00-11.20	Dr Andrew Ang	Swinburne	AI	Computational Approach for Efficient Designing of Thermal Sprayed High Entropy Alloy Coatings
	11.20-11.40	Dr Spyros Kamnis	Castolin		Accelerating Material Design using Pretrained Large Language Models
	11.40-12.00	Dr Thorsten Stoltenhoff	Praxair	Wear	Linde Advanced Material Technologies: ExoGard® - High Performance Coatings for Hard Chrome Substitution
	12.00-12.20	James Hopper	Oerlikon		A Complementary Sustainable Surface Engineering Approach Aligned with UK & EU REACH Legislation
12.20-14.00	Lunch followed by a lab tour of nmRC and Centre of Excellence in Coatings & Surface Eng				
Session Chair: Dr Mingwen Bai					
Session 4 14.00-15.00	14.00-14.20	Dr Mario Cordero	Welding Alloy	Surface Eng	Metal Cored Wires as a Fundamental Component in State-of-the-art Tailored Coating Solutions to Combat Materials Degradation
	14.20-14.40	Dr Mark Cole	Laser Fusion Tech		Laser Fusion Technologies: Influence of laser heating on adhesion and coating properties in Laser Assisted Cold Spray
	14.40-15.00	Dr Adam Bennett	Cranfield Plasma Solutions		Digitally Supported Plasma Processing
15.00-15.30	Coffee and Tea				
Session Chair: Dr Andrew Ang					
Session 5 15.30-16.30	15.30-15.50	Prof Nadimul Faisal	RGU	Sustainability	Thermally sprayed multi-material electrode manufacturing for electrolysis
	16.10-16.30	Dr Jamie Pulsford	Metallisation		Enhancing the Sustainability of HVOF Thermal Spraying using Hydrotreated Vegetable Oil (HVO)
	16.10-16.30	Dr Melissa Riley	TWI		Developments in Thermal and Cold spraying at TWI Ltd
16.30-17.00	Wrap up TSSEA				