TECHNICAL PROGRAM HAXPES WORKSHOP, MAY 7TH-9TH, 2025

	WEDNESDAY, MAY 7TH, 2025	
08:30-09:00	**REGISTRATION**	
09:00-09:20	**OPENING – WELCOME – INTRODUCTION TO THE WORKSHOP** **L.P.H. Jeurgens, C. Cancellieri, L. Herrmann** *Empa, Swiss Federal Laboratories for Materials Science and Technology, CH*	
09:20-10:40	**THE DEVELOPMENT OF LABORATORY-BASED HIGH ENERGY SOURCES FOR XPS** **J. Watts** *The Surface Analysis Laboratory, School of Engineering University of Surrey, UK*	***KEYNOTE*** ***K1+K2***
	CHARGE REDISTRIBUTION AND VALENCE BAND OCCUPANCY ON METALLIC ALLOY FORMATION: THE ROLE OF HAXPES USING AUGER PARAMETERS AND PLASMON FEATURES **J. Watts and M.-L. Abel** *The Surface Analysis Laboratory, School of Engineering University of Surrey, UK*	
10:40-11:10	COFFEE BREAK	
11:10-11:30	**CLASSICAL VERSUS QUANTUM ASSESSMENT OF FINAL-STATE EFFECTS IN XPS/HAXPES OF BULK MATERIALS** **Vladyslav Turlo** *Advanced material processing, Empa, Thun, CH*	***INVITED*** ***I1***
11:30-11:50	**CHEMICAL STATE ANALYSIS FOR THE ACCELERATED DEVELOPMENT OF SEMICONDUCTING AND INSULATING THIN FILM MATERIALS** **Sebastian Siol** *Surface science and coating technologies, Empa, Dübendorf, CH*	***INVITED*** ***I2***
11:50-12:10	**FROM MOLECULAR STRUCTURES TO XPS SPECTRA AND BACK: CHALLENGES AND INTRINSIC LIMITATIONS** **Mounir Mensi** *X-ray Diffraction and Surface Analytics Platform (XRDSAP), VS – ISIC – EPFL, Sion, CH*	***INVITED*** ***I3***
12:10-13:15	LUNCH BREAK	
13:15-14:15	**CHEMICAL BONDING AND ELECTRONIC STRUCTURE OF METAL DIHYDRIDES** **Anna Regoutz** *Department of Chemistry, UCL, 20 Gordon Street, London, UK* *Department of Chemistry, University of Oxford, Inorganic Chemistry Laboratory, Oxford, UK*	***KEYNOTE*** ***K3***
14:15-14:35	**IN SITU HAXPES AT SLS: ACHIEVEMENTS AND PERSPECTIVES** **Luca Artiglia** *Center for Energy and Environmental Sciences, PSI, Villigen, CH*	***I4***
14:35-14:55	**HAXPES-XPS COMBINATION REVEALS EXTENDED SURFACE STRUCTURE OF CATALYSTS** **Andreas Borgschulte** *Chemical Energy Carriers and Vehicle, Empa, Dübendorf, CH*	***I5***
15:00-15:30	COFFEE BREAK	
15:30-16:30	**LAB-SCALE HAXPES: ISSUES TO WORRY ABOUT TOWARDS IMPROVED ANALYSIS** **Olivier Renault** *Univ. Grenoble Alpes, CEA, Leti, Grenoble, FR*	***KEYNOTE*** ***K4***
16:30-16:45	**SUMMARY AND CLOSING OF THE DAY/DISCUSSION** **L.P.H. Jeurgens, C. Cancellieri** *Joining technologies and corrosion, Empa, Dübendorf, CH*	
16:50-19:00	APERO	

	THURSDAY, MAY 8TH, 2025	
Session	ORAL SESSION PLENARY	
Room	EMPA ACADEMY	
09:00-10:00	**ADVANCING XPS METHODOLOGIES: 1) TRANSITION METALS, 2) RARE EARTH ELEMENTS, AND 3) THE ROLE OF ADVENTITIOUS CARBON** **Marc Biesinger** *Surface Science Western, 2Dept. of Chemistry Western University, London ON, CA*	***KEYNOTE*** ***K5***
10:00-10:20	**CHARACTERISATION OF CUPRIC OXIDE SURFACES GENERATED BY PLASMA OXIDATION AND RADIOCHEMICAL PROCESSES IN THE LARGE HADRON COLLIDER** **Marcel Himmerlich** *European organisation for nuclear research, CERN, Geneva, CH*	***INVITED*** ***I6***
10:20-10:50	COFFEE BREAK	
10:50-11:50	**ONE-STEP PHOTOEMISSION MODEL: CORE LEVELS TO VALENCE BANDS IN QUANTUM MATERIALS** **Jan Minár** *New Technologies-Research Centre, University of West Bohemia, Pilsen, CZ*	***KEYNOTE*** ***K6***
11:50-13:15	LUNCH BREAK	
13:15-14:15	**HAXPES INELASTIC BACKGROUND FOR CHARACTERIZATION OF NANO-STRUCTURED MATERIALS** **Sven Tougaard** *Department of Physics, Chem. and Pharm., University of Southern Denmark, Odense M, DK*	***KEYNOTE*** ***K7***
14:15-14:35	**REAL-TIME INSIGHTS INTO ALL-SOLID-STATE BATTERIES INTERFACES WITH OPERANDO XPS** **Mario El Kazzi** *Center for Energy and Environmental Science, PSI, Villigen, CH*	***INVITED*** ***I7***
14:35-14:55	**SURFACE CHEMISTRY OF $Li_7La_3Zr_2O_{12}$ SOLID-STATE ELECTROLYTES** **Kostiantyn Kravchyk** *Thin films and photovoltaics, Empa, Dübendorf, CH*	***INVITED*** ***I8***
14:55-15:25	COFFEE BREAK	
15:25-16:25	**HAXPES AT PETRA III AND IV: ELECTRONIC STRUCTURE, OPERANDO DEVICES AND IN-SITU CATALYSIS** **Christoph Schlueter** *Photon Science, Deutsches Elektronen-Synchrotron DESY, Hamburg, DE*	***KEYNOTE*** ***K8***
16:25-16:40	**SUMMARY AND CLOSING OF THE DAY/DISCUSSION** **L.P.H. Jeurgens, C. Cancellieri** *Joining technologies and corrosion, Empa, CH*	
16:40-17:10	**LAB TOUR SHOWING HAXPES @ EMPA (OPTIONAL)**	

	FRIDAY, MAY 9TH, 2025	PART NO.
Session	**ORAL SESSION PLENARY**	
Room	**EMPA ACADEMY**	
09:00-10:00	**PROBING EMERGENT PHENOMENA AT OXIDE INTERFACES WITH HAXPES AND STANDING WAVES** **Alexander Gray** *Department of Physics, Temple University, Philadelphia, USA*	***KEYNOTE*** ***K9***
10:00-10:20	**SOFT-X-RAY ARPES INSIGHTS INTO K-RESOLVED ELECTRONIC STRUCTURE OF FUNCTIONAL MATERIALS** **Vladimir Strokov** *Soft-X-ray ARPES beamline, SLS, PSI, Villigen, CH*	***INVITED*** ***I9***
10:20-10:40	COFFEE BREAK	
10:40-11:40	**OPERANDO HAXPES OF FUNCTIONAL QUANTUM MATERIALS** **Martina Müller** *Department of Physics, University of Konstanz, Konstanz, DE*	***KEYNOTE*** ***K10***
11:40-12:00	**HAXPES ANALYSIS OF NATIVE OXIDES ON STEEL** **Chiara Menegus** *Joining technologies and corrosion, Empa, Dübendorf, CH*	***INVITED*** ***I10***
12:00-12:20	**SUMMARY AND CLOSING OF THE WORKSHOP/DISCUSSION** **L.P.H. Jeurgens, C. Cancellieri** *Joining technologies and corrosion, Empa, Dübendorf, CH*	
12:20-13:30	**LUNCH/DISCUSSION**	
	INDIVIDUAL DEPARTURE – We wish you a safe journey.	