

1st EUCASS Aerospace Thematic Workshop: Collisions of fast particles with surfaces



Aussois, France
Sept. 11-16
2016
<https://www.eucass.eu/atw16>



	Monday, 12 September	Tuesday, 13 September	Wednesday, 14 September	Thursday, 15 September	Friday, 16 September
8:40-9:00	Opening				
9:00-10:00	1. Aart W. Kleijn (Center of Interface Dynamics for Sustainability, Chengdu, China) Reactions and uptake of hyperthermal atoms at surfaces	6. Emilie Despiau Pujo (LTM Grenoble) Ion-induced damage and etching, modelling and experimental support	11. Arthur Krasilnikov (TsNIIMash) Experimental research of catalytic coatings on the re-entry heat flux into the high-frequency plasma	14. Deborah A. Levin (U. Illinois) Multi-scale Studies of Gas-surface Interactions for High Mach Number	19. Maria Rutigliano (PlasmiLab@CNR-Nanotec) Molecular Dynamics simulations of molecular surface processes: a global theoretical approach
10-10:30	Coffee break				
10:30-11:30	2. Yevgeny Raitses (PPPL) Plasma-Wall Interactions In the Presence of Strong Fluxes from the Wall	7. Pablo Gamallo (U. Barcelona) Gas surface processes on re-entry heat shields	12. Timothy Minton (Montana St. U.) Gas-Surface Reaction Dynamics on Hot Carbon Surfaces	15. Pere Roca I Cabarrocas (PICM, CNRS) Low temperature plasma epitaxy. How does it work?	20 Davar Feili (ESTEC) Erosion Aspects of an Electric Space Propulsion System for Atmospheric Propellant (RAM-EP)
11:30-12:30	3. Diederik Depla (U. Gent) Modeling reactive magnetron sputtering	8. Boris Tolochko (Budker Institute) Nanosecond X-ray diffraction experiment for the study of behavior of crystal structure of materials under a powerful (100 J) pulse (100 μs) action	13. Tom Schwartzentruber (UMN) Gas-Surface Reaction Models from Computational Chemistry and Molecular Beam Experiments.	16. Alexander Dolgoborodov (IHED) Explosive compositions on the base of mechano activated oxidizer-fuel mixtures and nanosized components	21. Khaled Hassouni (LSPM, CNRS) & Christian Grisolia (CEA) Plasma surface interaction and dust formation in hydrogen/carbon, hydrogen/tungsten and hydrogen/aluminum systems
12:30-17:00					22. Conclusions
					Lunch
17:00-18:00	4. Maija Kukla (NSF) Mechanisms of surface reactions triggered by defects and electronic excitations in energetic materials.	9. Yevgeniy Bondar (ITAM) Surface Recombination in the Direct Simulation Monte Carlo Method	Free time	17. Eduard Vasilievski (TsAGI) Nonequilibrium flow of dusty gas near cylinder. New effects of light radiation	
18:00-19:00	5. Jacques Couzi (CEA) Mesoscale ablation for carbon/carbon composite in re-entry environment	10. Pascale Roubin & Gilles Cartry (U. Aix-Marseille) Hydrogen plasma interactions with surfaces (with Tokamak applications)		18. Philippe Reynier (ISA) & Elena Kustova (St Petersburg State U.) Advanced Models for Vibrational and Chemical Kinetics Applied to Mars Entry Aerothermodynamics	
19.30	Dinner	Dinner	Dinner	Banquet dinner	
20.30-22.30	Poster Session 1	Poster Session 2	Poster Session 3		

Visit to ONERA facilities in Modane on Wednesday afternoon 2-5 PM (for those participants who signed up for it, first come first served, and contingent upon issuance of clearance)