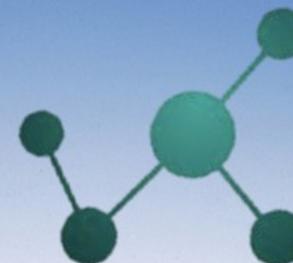


SCIENTIFIC PROGRAM

4-6th October 2017
Bilbao, Spain



RIVA-X

X Iberian Vacuum Conference, RIVA

A joint meeting of the Spanish Vacuum Society (ASEVA)
and the Portuguese Vacuum Society (SOPORVAC)

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Wednesday 4th

8:30	Registration	
9:00	Opening remarks	
9:15	Plenary - Lars Montelius	"Social perspective of science"
10:00	Plenary - Ibon Bustinduy Uriarte	"The European Spallation Neutron Source project"
10:50	Coffee break	
11:20	A. Quesada "A LEEM for the dynamical study of surfaces in Spain"	I. Jiménez "Influence of Mo-doping on the optical, electrical and tribological properties of BCN coatings"
11:40	M. A. Niño "Chiral induced spin filtering effects in organic films"	S. Ruíz-Gómez "Magnetic nanowires with chemical notches for spintronics applications"
12:00	N. Bundaleski "Monitoring dynamics of different processes on rutile TiO ₂ (110) by following work function change"	L. Martínez "Nanoparticle formation using an adjustable multi-magnetron gas aggregation source"
12:20	J. Lobo-Checa "Precise engineering of quantum dot array coupling through their barrier widths"	E. G-Berasategui "Enhancement of optoelectronic properties on indium tin oxide layers by co-sputtering of silver nanoparticles"
12:40	Asamblea ASEVA	
14:00	Lunch break	
15:00	Invited - Jose Ignacio Pascual	"Elementary phenomena in hybrid graphene nanoribbons on metal surface"
15:30	Invited - Otmar Zimmer	"PVD hard coatings > 20 microns, new perspectives for thin film application"
16:00	Coffee break	
16:20	A. Vázquez de Parga "Organic covalent patterning of nanostructured graphene with selectivity at the atomic level"	J. C. Sánchez "On the reactive element effect of yttrium in the oxidation behavior of multilayered CrAlYN coatings"
16:40	N. Ruíz del Árbol "On-surface synthesis: a new route towards azines"	F. Ferreira "DLC coatings for piston rings deposited by Deep oscillation magnetron sputtering"
17:00	N. Merino-Díez "Energy level alignment and selective synthesis of armchair-oriented graphene nanoribbons on gold surfaces"	I. Fernández-Martínez "Enhanced adhesion of hard DLC coatings on steel substrates with HIPIMS metal etch"
17:20	J. Li "Contacting magnetic porphyrines with graphene nanoribbons"	J. J. Roa "Micromechanics of TiN/CrN coatings"
17:40	F. C. Correia "Transparent ZnO:Ga,Bi and TiO ₂ :Nb thin film electrodes with thermoelectric properties"	Fernandes, F. "Influence of Ag additions on the structure, thermal and tribological properties of Cr-O films deposited by HIPIMS"
18:00	J. Delgado Soria "Strontium hexaferrite: from single crystal to thin films"	L. Mendizabal "CrAIN based hard coatings for high demanding cutting operations"
18:20	Poster session	
20:30	Come Together Cocktail	

Thursday

8:30	Registration	
9:00	Plenary - Peter J. Kelly	"The production of photocatalytic materials by magnetron sputtering techniques"
9:50	Invited - Clemens Laubschat	"Functionalization of graphene layers on transition-metal substrates"
10:20	Invited - Osvaldo de Melo	"Vapor phase growth and phase stability of bidimensional tellurides MoTe ₂ and Bi ₂ Te ₃ "
10:50		Coffee break
	M. Knez	K. Lauwaet
11:20	"Utilization of atomic layer deposition (ALD) for vapor phase infiltration and doping of conducting polymers"	"Simulating the life of cosmic dust in the laboratory"
	A. R. González-Elipe	D. Orient
11:40	"Optically active porous 1D Bragg Microcavities prepared by evaporation at oblique angles as optofluidic sensor of glucose"	"Hyperloop UPV: a concept for the future of transportation"
	R. Nevshupa	J. Navarro
12:00	"New advancements in material characterization using Mechanically Stimulated Gas Emission Mass-Spectrometry"	"Experimental characterization of a 1 kW HPT"
	C. Prieto	J. M. García
12:20	"Mo-Si-N Hybrid System for Absorbers in Solar Selective Coatings"	"Development of a Sputtering System for in-situ fabrication of Cu(in,Ga)Se ₂ thin-film solar cells: STAR"
	C. Morales	J. P. Dias
12:40	"Early stages of growth of ZnO on graphene/Cu: graphene decoupled from Cu"	"Innovative Solutions for the Machining of Composite-Ti alloys stacks for the aeronautic sector"
	J. Mendez	I. Azkona
13:00	"New Strategy for Graphene Growth: a MBE Carbon-source"	"Development, Calibration and Application of a Thermal Protection PVD coating Designed for the Solar Orbiter Project"
13:20		Lunch break
15:00	Invited - Pedro Salomé	"Thin film solar cells: vacuum processes and application of nanotechnology"
15:30	Invited - Michael Foerster	"Magnetism catches the wave"
16:00		Coffee break
	E. Kusano	
16:20	"Band gap and film structure control by H ₂ addition to Ar discharge gas in Cu ₂ ZnSnS ₄ thin film deposition by reflector-wall sputtering"	
	A. de Castro	
16:40	"N-H recombination enhancement in nitrogen-hydrogen Glow-Discharge plasmas induced by energetic helium bombardment on the tungsten surrounding surfaces"	
	E. Oyarzabal	
17:00	"Liquid metal (Li, SnLi) thin film protection of metal surfaces: fusion applications"	Special session (J. de Segovia)
	M. U. Gonzalez	
17:20	"Black gold obtained by sputtering glancing angle deposition"	
	S. A. Salehizadeh	
17:40	"Effect of pulling rate on reox state and crystallization of Fe-Si-O glass ceramic prepared by laser floating zone"	
	S. Mato	
18:00	"Benefits of the multilayer design in the oxidation resistance of cathodic arc evaporated nitride coatings in the energy industry"	
18:20	Poster session	
21:00		Conference dinner

Friday 6th

9:00	Plenary - Marek Rubel	"The role of surface analysis in studies of plasma wall-interaction in controlled fusion devices"
9:50	Invited - Tomas Polcar	"Recent advances of solid lubricants prepared by vacuum-related processes"
10:20	Invited - Carlo Morasso	"Surface Enhance Raman Scattering as tool for the improved detection of biomakers"
10:50	Coffee break	
11:20	A. M. Bittner "Water on viral surfaces"	M. Vila "Atomic and Molecular Layer Deposition of Hybrid Nanostructured Materials"
11:40	J. L. Pau "Irreversible humidity indicators based on Zinc Nitride and water vapor effects"	J. Cascales "ALI-1000: A new deposition method for macromolecules in UHV"
12:00	A. Cavaleiro "Ex-vivo studies on friction behaviour of urethral stent coated with Ag clusters incorporated DLC matrix"	L. Walczak "The novel hemispherical energy analyser in the advance surface science research"
12:20	P. Pellacani "Study of colloidal crystalline monolayers for a versatile nanofabrication process"	D. Salinas "Cromatipic: Industrialize solution for metallization on plastics with high quality productivity"
12:40	G. Tabares "Reduced Graphene Oxide sensor formed by dielectrophoresis across AZO electrodes"	A. Wright "A Short Review of Outgassing"
13:00	C. Rodriguez "Impedance biosensor interface based on nanostructured porous silicon"	
13:20	Closing and awards ceremony	
13:30	Oral talk best thesis	
14:00	End of conference	

