ESMolNa 2021
European School on Molecular Nanoscience

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Program

14th European School on Molecular Nanoscience

23rd to 28th May 2021

8th Workshop on 2D Materials
Benidorm (Alicante, Spain)

w2dm 2021 Workshop on 2D Materials

ICMOL | Vniversitat de València | Universitat d'Alacant Universidad de Alicante | Universidad Politécnica de Cartagena

ESMolNa 2021
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W2dm 2021 Workshop on 2D Materials

Organized by:

ICMOL | Vniversitat de València | Universitat d'Alacant Universidad de Alicante | Universidad Politécnica de Cartagena

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w2dm Workshop on 2D Materials

2021

ESMolNa 2021

European School on Molecular Nanoscience

	Sunday 23rd	Monday 24 th	Tuesday 25 th	Wednesday 26th	Thursday 27th	Friday 28th	
9:00-9:30		Inauguration	J Wu	F Luis	A Castellanos		9:00-9:30
9:30-10:00		D Mecerreyes				Brainstorming: Trends and perspectives in 2D Materials	9:30-10:00
10:00-10:30			E Ruiz	J Puigmartí	N Pascual		10:00-10:30
10:30-11:00		*Coffee break*					10:30-11:00
11:00-11:30		B Ros	*Coffee break*	*Coffee break*	*Coffee break*	*Coffee break*	11:00-11:30
11:30-12:00		JL Serrano	J Veciana	M Valera	M M Ugeda		11:30-12:00
12:00-12:30		C Rovira					12:00-12:30
12:30-13:00		T Torres	A L Cortajarena	G Serrano	E Vázquez		12:30-13:00
13:30-13:30					F Zamora		13:30-13:30
13:30-14:00							13:30-14:00
14:00-15:30	*LUNCH*	*LUNCH*	*LUNCH*	*LUNCH*	*LUNCH*	*LUNCH*	14:00-15:30
15:30-16:00	*Registration*						15:00-15:30
16:0016:30							16:00-16:30
16:30-17:00	Welcome						16:30-17:00
17:00-17:30	T F Otero	Oral communications	Oral communications	M Souto	G Abellán		17:00-17:30
17:30-18:00				Oral communications	R Calvo		17:30-18:00
18:00-18:30	E Ortí				S Mañas		18:00-18:30
18:30-19:00					*Coffee break*		18:30-19:00
19:00-19:30	*Reception cocktail*				Oral communications		19:00-19:30
19:30-20:00							19:30-20:00
20:00-20:30							20:00-20:30
20:30	*DINNER*	*DINNER*	*DINNER*	*DINNER*	*DINNER*		20:30

	SUNDAY 23rd	ESMolNa2021
14:00	*Lunch*	
15:30	Registration	
16:30	**Eugenio CORONADO- ICMol- Univ. de València (ES)**	*Welcome: Introduction to Molecular Nanoscience*
17:00	**Toribio FERNÁNDEZ OTERO- Univ. Politécnica de Cartagena (ES)**	***Can we describe biological functions by physical-chemical equations? Materials and devices constituted by macromolecular electrochemical machines***
18:00	Enrique ORTÍ- ICMol- Univ. de València (ES)	*A Theoretical Glance to p-Conjugated Conducting Polymers*
19:00	*Reception cocktail*	
20:30	*Dinner*	

	MONDAY 24th	ESMolNa2021
9:00	Inauguration	
9:30	**David MECERREYES- POLYMAT / UPV/EHU (ES)**	***Innovative Polymers for Energy and Bioelectronics***
10:30	*Coffee break*	
11:00	Blanca ROS- INMA- Univ. de Zaragoza (ES)	*Functional materials based on bent-core molecules self-assemblies*
11:30	José Luis SERRANO- INMA- Univ. de Zaragoza (ES)	*Metallomesogens: An excellent tool to functional materials*
12:00	Concepció ROVIRA- ICMAB-CSIC (ES)	*Switchable surfaces by functionalization with electroactive molecules*
12:30	Tomás TORRES CEBADA- Univ. Autónoma de Madrid (ES)	*Subphthalocyanine Properties*
14:00	*Lunch*	
17:00	Marta ALCARAZ MEGIAS- ICMol - Univ. de València (ES)	*Continuous-Flow Synthesis of High-Quality Few-Layer Antimonene Hexagons*
	Alireza AMIRI- Univ. Autónoma de Madrid (ES)	*Few-Layer Antimonene From synthesizing to the application*
	Víctor GARCIA LOPEZ- ICMol - Univ. de València (ES)	*Spin-crossover complexes for deposition on surfaces*
Oral comm 8'+2'	Alejandro GARCÍA REGUEIRO- ICMol - Univ. de València (ES)	*Chemical design of spin-crossover nanoparticles with a hysteretical spin transition at room temperature*
	Silvia GIMENEZ-SANTAMARINA- ICMol - Univ. de València (ES)	*Computational design of spintronic devices based on Spin Crossover compounds*
	Camilo Andrés JARAMILLO HERNÁNDEZ- ICMol - Univ. de València (ES)	*NiFe LDHs as a scalable alternative for energy conversion systems.*
	Alejandro MARTÍNEZ BUENO- INMA-CSIC (ES)	*Functional supramolecular materials based on self-assembling star-shaped triphenylamine-containing molecules*
	Alejandro NUÑEZ LOPEZ- ICMol - Univ. de València (ES)	*Spin Crossover in coordination polymers selectively grown onto MoS2 flakes*

	Rafael Eduardo PAIVA FEENER- Univ. de La Laguna (ES)	*Degradable & post-functionalizable microspheres from dynamic tetrazine polymers*
	Harsha Vardhan RAJA RAJAN- Univ. Autónoma de Madrid (ES)	*Automated Control of Dielectrophoresis with suspended Silicon Nanowire Self-Assembly*
	Cecile HUEZ- IEMN (FR)	*Evolutive nanodevices based on molecular oxides for non-conventional computing*
20:30	*Dinner*	

	TUESDAY 25th	ESMolNa2021
9:00	**Jishan WU- National Univ. of Singapore (SG)**	***Open-shell Singlet Diradicaloids, Polyradicaloids and Covalent Organic Radical Frameworks***
10:00	**Eliseo RUIZ- Universitat de Barcelona (ES)**	***Room-Temperature Magnetoresistance Devices: From Molecules to 2D Materials***
11:00	*Coffee break*	
11:30	**Jaume VECIANA- ICMAB-CSIC (ES)**	***Quatsomes: Novel Multifunctional Supramolecular Nanovesicles for Drug Delivery and Bioimaging Applications***
12:30	**Aitziber L. CORTAJARENA- CIC biomaGUNE (BRTA) (ES)**	***Biomolecular Nanotechnology: engineering protein-based functional nanostructures and biomaterials***
14:00	*Lunch*	
17:00	Miriam ABAD ANDRÉS- Univ. de Zaragoza-INMA (ES)	Hybrid Palladium-Polymeric Nanoparticles of Stimuli-Responsive Block Copolymers Prepared by Microfluidics for Biomedical Applications
	María BOHOYO PAJUELO- ICMol - Univ. de València (ES)	*Synthesis of Cu-based Metal-Organic Polyhedra containing amino acids*
Oral comm	Katia CAAMAÑO- ICMol - Univ. de València (ES)	*Metal-Organic Framework-based biocomposites with enhanced inhibitory activity*
8'+2'	Alfredo CASASNOVAS MELIÁN- Univ. de La Laguna (ES)	*Design of 3D laser nanofabricated sub-wavelength diffraction gratings.*
	Sang-hyun CHIN- ICMol - Univ. de València (ES)	*Halide Perovskite Heterojunction-based Light Emitters*
	Pau CONGOST ESCOIN- ICMol - Univ. de València (ES)	*Antimonene: a novel two-dimensional material for cancer therapy*
	Tamara DE ARA GARCÍA- Univ. de Alicante (ES)	*Molecular Electronic Transport at Ambient Conditions of Adsorbed Organic Solvents*
	Moussa FAYE- ICMol - Univ. de València (ES)	*Controllable incorporation of amino acids to porous hosts for chiral recognition*
	Patricia FERRER ALCARAZ- Univ. de Alicante (ES)	*3D printeable STM*
	Diana MÉNDEZ ARVELO- Univ. de La Laguna (ES)	*Electrografting of 3-aminopropyltriethoxysilane on HOPG*
	Santiago A. SARASA SAN JOSÉ- UV & CI Príncipe Felipe (Valencia) (ES)	*Synthesis of Star-Shaped Polypeptide as Theranostic Nanomedicine*
	Hugo THERSSEN- IEMN (FR)	*Imaging BDPA molecule chain with STM and no-contact AFM*
20:30	*Dinner*	

	WEDNESDAY 26th	ESMolNa2021
9:00	**Fernado LUIS- INMA- Univ. de Zaragoza (ES)**	***Molecular spins in quantum technologies***
10:00	**Josep PUIGMARTÍ- Univ. de Barcelona (ES)**	***Simulated microgravity conditions for materials synthesis***
11:00	*Coffee break*	
11:30	**Maria VARELA- Univ. Complutense de Madrid (ES)**	***Nanomaterials in the light of electrons***
12:30	Giulia SERRANO- Univ. degli studi Firenze (IT)	*Surface and synchrotron radiation techniques for the investigation of magnetic molecules on superconducting materials*
14:00	*Lunch*	
17:00	Manuel SOUTO SALOM- Univ. of Aveiro - CICECO (PT)	*Electroactive porous frameworks based on redox-active organic building blocks*
17:30		
17:30	Yaiza MARTIN GARCIA- Univ. de La Laguna (ES)	*Materials based on MOFs compounds for the removal of emerging polluntants in water*
	María Eugenia MIGUEL CASAÑ- ICMol - Univ. de València (ES)	*Heterometallic Palladium(II)-Iron(III) Metal-Organic Framework as heterogeneous catalyst for cross coupling reaction*
	Alberto MONTOYA RUIZ- ICMol - Univ. de València (ES)	*Magnetizing surface states of a topological insulator.*
Oral comm 8'+2'	Javier NAVARRO ALAPONT- ICMol - Univ. de València (ES)	*Highly Efficient Removal of Neonicotinoid Insecticides by a Family of Thioether-Based Metal-Organic Frameworks*
	Marta ORTS- ICMol - Univ. de València (ES)	*FIELD-INDUCED SLOW RELAXATION OF THE MAGNETISATION IN A FAMILY OF 0D AND 1D HOMOMETALLIC LANTHANIDE(III) COMPLEXES BASED ON ALPHA- AND BETA-AMINO ACIDS*
	Sergio RUIZ GAMARRA- ICMol - Univ. de València (ES)	*Cation Dependent Magnetic Behaviour in Isostructural Tetrathiafulvalene-Based Microporous Metal-Organic Frameworks*
	Estefanía TIBURCIO- ICMol - Univ. de València (ES)	*Direct Visualization of Gas Adsorption Mechanisms and Continuous Breathing Behavior in a Rare Hemilabile Metal-Organic Framework*
	Aman ULLAH- ICMol - Univ. de València (ES)	*Theoretical Insights into the vibronic relaxation pathways in molecular spin qubit [Ho(W5O18)2]9-*
	Simone CHICCO- Univ. of Parma (IT)	*Coherent Manipulation of Vanadium-based Molecular Qubits coupled to nuclear Qudits*
20:30	*Dinner*	

	THURSDAY 27th	ESMolNa2021 +W2DM
9:00	**Andrés CASTELLANOS-GÓMEZ- Inst Ciencia Materiales Madrid-CSIC (ES)**	***A tutorial about 2D-based electronic devices***
10:00	**Nacho PASCUAL- nanoGUNE (ES)**	***Magnetism and Topology in atomically precise graphene nanoflakes***
11:00	*Coffee break*	
11:30	**Miguel M. UGEDA- Donostia International Physics Center (ES)**	***Unconventional superconductivity in 2D transition metal dichalcogenides***
12:30	Ester VÁZQUEZ- Univ. de Castilla- La Mancha (ES)	*2D Materials for Soft 3D Smart Structures*

13:30	Felix ZAMORA- Univ. Autónoma de Madrid (ES)	*Beyond Phosphorene: Antimonene and Bismuthene*
14:00		
17:00	Gonzalo ABELLAN- ICMol-Univ. de València (ES)	*Interface Control of Novel 2D-Pnictogen Nanomaterials*
17:30	Reyes CALVO- Univ. de Alicante (ES)	*Optoelectronics with MPX3s*
18:00	Samuel MAÑAS- ICMol-Univ. de València (ES)	*Spin sensing with van der Waals heterostructures*
18:30	*Coffee break*	
19:00	Isaac BROTONS - ICMol - Univ. de València (ES)	*Stability study of chemically exfoliated MnPS3*
Oral comm	Shanmugasibi MATHIALAGAN- Univ. Autónoma de Madrid (ES)	*Topography and Electronic characterization of Negatively-curved nanographene Self-Assembled on Metal Surfaces*
8'+2'	Safiya OUAZZA- ICMol - Univ. de València (ES)	*Optical sensing of Spin-Crossover thin layers with 2D-materials*
	María RAMOS VÁZQUEZ- Univ. de Alicante (ES)	*Ultra-broad spectral photo-response in FePS3 air-stable devices*
	Alvaro SEIJAS-DA SILVA- ICMol - Univ. de València (ES)	*Surface modification of layered double hydroxides by functionalization and post-functionalization using tripodal ligands*
	Natalya VASSILYEVA- ICMol - Univ. de València (ES)	*Liquid-phase preparation of asymmetrically decorated 2D layers*
20:30	*Dinner*	

	FRIDAY 28th	W2DM
9:30	**Brainstorming: Trends and perspectives in 2D Materials** 1. **Chemistry**: Gonzalo Abellán (ICMol-U Valencia), Félix Zamora (U Autónoma Madrid)	
11:00	*Coffee break*	
11:30	2. **Physics**: Reyes Calvo (U Alicante), Andrés Castellanos (ICMM-CSIC) 3. **Theory**: José J Baldoví (ICMol-U Valencia)	
14:00	*Lunch*	

MAY 2021
23rd to 28th

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