

# 13<sup>th</sup> European Conference on Surface Crystallography and Dynamics (ECSCD-13)

Donostia-San Sebastián, June 19-21, 2017

## Scientific Programme

**Keynote talk:** 30 min. talk + 10 min. discussion

**Invited talk:** 20 min. + 5 min. discussion

**Oral contribution:** 15 min. + 5 min discussion

<b>Monday 19</b>			
9:00-10:00	Registration		
10:00-10:10	Opening remarks		
10:10-10:50	Keynote 1	Repp	Individual Molecules on Surfaces: From Chemical Reactions to Ultra-Short Timescales
10:50-11:15	Invited 1	Sykes	Correlated Rotational Switching in 2D Self-assembled Molecular Rotor Arrays
11:15-11:45	Coffee break		
11:45-12:10	Invited 2	Shimizu	Molecular Adsorption on Anatase TiO <sub>2</sub> (101) Studied by Submolecular Imaging Technique with Si Cantilever AFM
12:10-12:30	Oral 1	Gaberle	Entropy Induced Changes in Molecular Adsorption Behaviour of Organic Molecules at Insulating Surfaces
12:30-12:50	Oral 2	Piquero	Precise Engineering of Quantum Dot Array Coupling through Their Barrier Widths
12:50-13:10	Oral 3	Jelinek	Multiple Electron Charge States within a Single Molecule
13:10-16:30	POSTER SESSION During lunch		
16:30-16:55	Invited 3	Lauritsen	Structure and Electronic Properties of Single-Layer MoS <sub>2</sub> on Au(111)
16:55-17:15	Oral 4	Chen	Synthesis and Characterisation of Epitaxial MoS <sub>2</sub> Nanocrystals
17:15-17:35	Oral 5	Zandvliet	Germanene: the Germanium Analogue of Graphene
17:35-17:55	Oral 6	Bignardi	Key Role of Rotated Domains in Oxygen Intercalation at Graphene on Ni(111)

<b>Tuesday 20</b>			
9:00-9:40	Keynote 2	Locatelli	Unveiling Complex Graphene Structures Using SPELEEM
9:40-10:05	Invited 4	Aballe	Imaging Strain Waves in a PhotoEmission Electron Microscope: Magnetism Goes Surfing
10:05-10:25	Oral 7	de la Figuera	Magnetic Domains on Magnetite Islands: from XMCD-PEEM to Micromagnetism
10:25-10:45	Oral 8	Horstmann	Ultrafast LEED: Exploring Surface Dynamics with Short Electron Pulses
10:45-11:05	Oral 9	Kumpf	Steering the Growth of Multiple Ordered Heteromolecular Phases by Utilizing Intermolecular Repulsion
11:05-11:35	Coffee break		
11:35-12:00	Invited 5	Lobo-Checa	Curved Crystal Surfaces: A Playground for General Surface Concepts and Dimensionality Transitions
12:00-12:25	Invited 6	Gellman	Mapping Enantioselectivity across Surface Structure Space
12:25-12:45	Oral 10	Duncan	Benchmarking DFT Calculations for Metal Oxides: Geometric Adsorption Site of Copper and Silver Adatoms on Magnetite
12:45-13:05	Oral 11	Schneider	Adsorbate Phases and Structural Evolution Upon Reduction of Quasi One-Dimensional CoO <sub>2</sub> Chains on Ir(100)
13:05-15:00	Lunch break		
15:00-15:25	Invited 7	Förster	Quasicrystals and Approximants in Two-Dimensional Perovskite Oxides
15:25-15:50	Invited 8	Gallego	Biphase Ordering at Fe Oxides
15:50-16:10	Oral 12	Harlow	Nanostructured Aluminum Oxides and Metal Electrodeposition
16:10-16:40	Coffee break		
16:40-17:05	Invited 9	Moriarty	Can Dynamic Force Microscopy Really “see” Intermolecular Bonds?
17:05-17:25	Oral 13	Albrecht	Structure Determination of Individual Non-Planar Molecules by Means of nc-AFM with Functionalized Tips
17:25-17:45	Oral 14	Moro	Demonstration of Large Converse Piezoelectric Effect on a Single Molecule
17:45-18:05	Oral 15	Pavlicek	On-surface Synthesis and Characterization of Reactive Molecules
20:45	Conference dinner		

<b>Wednesday 21</b>			
10:00-10:40	Keynote 3	Sánchez-Portal	Towards Electronic Devices Using Graphene Nanoribbons
10:40-11:05	Invited 10	Africh	In-Situ Atomic-Scale Investigation of CVD-Grown Graphene on Polycrystalline Nickel Substrates
11:05-11:35	Coffee break		
11:35-12:00	Invited 11	Chuvilin	Accessing Kinetics of Structural Rearrangements in Graphene via Direct Atomic Imaging
12:00-12:20	Oral 16	Gastaldo	Topological Line Defects in Graphene Nanoislands
12:20-12:40	Oral 17	Balog	Switching the Reactivity of Graphene on Ir(111) by Hydrogen Intercalation
12:40-13:00	Oral 18	Menzel	Core Hole Clock Characterization of Intercalated and Compressed Argon under Graphene Monolayers and in Blisters
13:00-15:00	Lunch break		
15:00-15:20	Oral 19	Zamborlini	Unexpected Multi-Orbital Charge Transfer at Highly Oriented Organic/Metal Interfaces
15:20-15:40	Oral 20	Sarasola	On the Origin of Unexpected Core Level Shifts of Tetrapyrrole Molecules on Surfaces
15:40-16:00	Oral 21	Soubach	1D and 2D Extended Materials on Metal Surfaces: Interface Structure with NIXSW
16:00-16:20	Oral 22	Woodruff	Understanding Molecular Adsorption Structures: Scanning Tunnelling Microscopy and Density Functional Theory are Not Enough
16:20-16:50	Coffee break		
16:50-17:15	Invited 12	Magnussen	Surface Dynamics at Electrochemical Interfaces
17:15-17:40	Invited 13	Sulpizi	Water Interfaces: Structure and Vibrational Spectroscopy from Ab Initio Simulations
17:40-17:50	Concluding remarks		

## Poster session

Africh	NFFA-Europe: enhancing European competitiveness in nanoscience research and innovation
Bana	Transition from Sulfided Molybdenum Clusters to monolayer MoS <sub>2</sub> on Au(111)
Blanco-Rey	A Non-Adiabatic Model for Intermode Coupling in Organic Adsorbates: Application to STM-induced Porphycene Tautomerization
Brede	Mechanisms of the surface-confined Ullmann-reaction on semiconducting TiO <sub>2</sub> (110) surfaces
Corso	Graphene nanoribbons growth on kinked Au(16 14 15)
Gallardo	Magnetic properties of transition metal atoms on a h-BN monolayer
Gao	Characterization of Pd Nanocrystals on Anatase TiO <sub>2</sub> (001) Thin Films Grown on SrTiO <sub>3</sub> (001) Substrates
Hammer	Structure and Growth of Monatomic TM-Oxide Chains - Copper Against All Others
Hammer	Structural sensitivity of medium energy intensity data in a LEED analysis
Ishioka	Coherent optical and acoustic phonons at buried GaP/Si interfaces
Kißlinger	Structure Determination Considering Surface Dynamics: The O/Rh(100) System
Kretz	Robustness of topological surface states against magnetic perturbations
Küchle	Understanding the Geometric Structure of a Superconductor with a Strain Induced High T <sub>c</sub>
Lundgren	The structure of the SnO <sub>2</sub> (110)-(4x1) reconstruction
Mandziak	Initial stages of mixed nickel-iron oxides growth on Ru(0001)
Merino	Electronic Structure Characterization of atomically-precise Chiral Graphene Nanoribbons on gold surfaces
Niño	Surface spectroscopy and spin filtering of DPEDA chiral molecular film
Ocal	Decoding crystallographic domains of molecular systems by cantilever torsion imaging
Ortega	Structure and electronic states of vicinal noble metal surfaces with densely kinked steps
Oteyza	Non-Covalent Dimerization after Eneiyne Cyclization on Au(111)
Palacios-Rivera	Hierarchical chirality transfer during (S,S) and (R,R) DPEDA growth on Cu(100)
Pussi	Structure of the SnO <sub>2</sub> (110)-(4x1) with LEED I(E)
Schiller	Interplay between metal-organic interface state and donor-acceptor interface mediated charge separation on PTCDA/TiOPc/Ag(111)
Stolz	Click reaction on the chiral PdGa{111} surfaces
Wang	Surface Structures of Niobium Oxide 2D Nanostructures and Ultrathin Films
Zollner	C <sub>60</sub> adsorption on a two-dimensional oxide quasicrystal