

From 2D to 3D Crystals: A Multi-Scale, Multi-Technique and Multi-System Approach of the Crystallization of Organic Molecules on Tailored Carbon Surfaces

Workshop

An international workshop, which will put together experts on crystal growth, polymorphism, epitaxy, surface modifications, and characterization methods, will be organized at the Université Libre de Bruxelles (ULB) on March 21-23, 2022. Participants and speakers are welcome to attend in person or remotely. The goal of the meeting is to discuss the latest results of the 2Dto3D project in an international context. The workshop will be part of the activities of the International Solvay Institutes for Physics and Chemistry, perpetuating a long tradition of scientific excellence.

Monday March 21, 2022 – Chairman Steven De Feyter			
09:30 - 10:00	Registration and starting coffee		
10:00 - 10:20	Yves Geerts	In person	<i>Introduction and context</i>
10:20 - 11:20	Klaus Müllen	In person	<i>In and out of graphene flatland</i>
11:20 - 12:00	Shelley Claridge	In person	<i>Phospholipids on carbon: A bridge from 2D to 3D</i>
12:00 - 12:40	Markus Lackinger	In person	<i>Synthesis of 2D polymers by on-surface photopolymerization</i>
12:40 - 14:00	Sandwich lunch and informal discussions		
14:00 - 14:40	Andreas Hirsch	Remotely	<i>Chemical Patterning of 2D-Materials</i>
14:40 - 15:20	Cinzia Casiraghi	Remotely	<i>Crystallization of organic molecules templated by graphene</i>
15:20 - 16:00	Neil Champness	Remotely	<i>Molecular Organisation: A Journey Through Complex Structures</i>
16:00 - 16:30	Coffee break and informal discussions		
16:30 - 17:10	Roman Forker	Remotely	<i>Correlation between 2D and 3D crystallographic lattices using LEED and rotated GIXD</i>
17:10 - 17:50	Sandra Van Aert	In person	<i>Visualisation of light-element atomic structures by advanced transmission electron microscopy</i>
17:50 - 18:00	Break and installation of posters		
18:00 - 20:00	Poster session and buffet of Belgian gastronomic specialties		

Tuesday March 22, 2022 – Chairman Roland Resel			
10:00 - 10:40	Omer Yaffe	In person	<i>The Interplay Between the Molecular Structure and Lattice Thermal Fluctuations in Organics Crystals – A Raman Spectroscopy Study</i>
10:40 - 11:20	Steven De Feyter	In person	<i>2D crystallization on pristine and chemically modified carbon surfaces</i>
11:20 - 12:00	Roland Resel	In person	<i>Substrate-Induced Crystallisation of Molecular Crystals: Examples from the 2Dto3D Network</i>
12:00 - 12:40	Andrea Minoia	In person	<i>On the foundations of supramolecular self-assembly and polymorphism on surfaces: a molecular modeling exploration</i>
12:40 - 14:00	Sandwich lunch and informal discussions		
14:00 - 14:40	Jean Gillet	In person	<i>From Pasteur's molecular dissymmetry to homochirality : an introduction to experimental & theoretical works</i>

14:40 - 15:20	Francesco Tassinari	In person	<i>Spin-polarized surfaces as resolving agents for enantiomeric resolutions</i>
15:20 - 16:00	Yves Geerts	In person	<i>Tentatives of spin-induced deracemizations</i>
16:00 - 16:30	Coffee break and informal discussions		
16:30 - 17:10	Jim Lusko	In person	<i>Mesosopic Nucleation Theory: a nanoscale approach to understanding crystallization</i>
17:10 - 17:50	Stefan Kowarik	In person	<i>Growth of the first monolayer and beyond: X-ray scattering, artificial intelligence analysis and growth models</i>
18:00 – 18:30	Public transportation to downtown Brussels		
18:30 – 19:30	Free time downtown Brussels to drink a beer, to visit or to buy chocolates		
19:30 - 23:00	Banquet downtown Brussels		

Wednesday March 23, 2022 – Chairman Kunal Mali

10:00 - 10:40	Josep Puigmarti-Luis	In person	<i>Simulated microgravity conditions for materials synthesis</i>
10:40 - 11:20	David Amabilino	In person	<i>Hierarchical supramolecular chemistry at the carbon-molecule interface</i>
11:20 - 12:00	Tom Leysens	In person	<i>The importance of nucleation the appropriate crystal form for the development of multi-component resolution processes</i>
12:00 - 12:15	Yves Geerts	In person	<i>Concluding remark</i>
12:15 - 14:00	Sandwich lunch and informal discussions		
14:00 -	Departure		