



UDA IKASTAROAK
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CICbiomaGUNE
MEMBER OF BASQUE RESEARCH
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2022

ChemOnTubes

Palacio Miramar, Donostia-San Sebastian, Spain
April 24th – April 28th 2022

Gold sponsors

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Sunday, 24 th April 2022	
15:00 h	Registration
17:00 h	Opening: Alejandro Criado and Maurizio Prato
17:15 h	<u>Session 1: sponsored by Gobierno Vasco</u>
	- I1: Nicholas Kotov (University of Michigan) <i>Unifying Structural Descriptors for High Complexity Biomimetic Assemblies between Chiral Nanoparticles, Nanocarbons and Proteins</i>
18:00 h	- O1. Shani Ligati Schleifer <i>3D printing of carbon-based composites with enhanced thermal conductivity</i>
18:20 h	- O2. Salomè Forel <i>Diameter-dependent single- and double-file stacking of squarylium dyes inside single-wall carbon nanotubes</i>
18:40 h	- O3. Alejandro Galán-González <i>Graphene quantum dots sensitization of ZnO nanowires</i>
19:00 h	Welcome Buffet

Monday, 25 th April 2022	
9:30 h	<u>Session 2: sponsored by CIC biomaGUNE</u>
	- I2: Aurelio Mateo-Alonso (Polymat) <i>Extending, Distorting and Stacking Nanographenes into 1D, 2D and 3D Structures</i>
10:15 h	- O4. José Gonzalez-Dominguez <i>Extraordinary Protective Efficacy of Graphene Oxide over the Stone-Based Cultural Heritage</i>
10:35 h	O5. Maria Antonia Herrero <i>The role of graphene derivatives in hydrogel structures: applications and self-healing</i>
10:55 h	- O6. Aldo Zarbin <i>Thin films of carbon nanostructures and 2D-based materials at liquid/liquid interfaces: from preparation to devices</i>
11:15 h	Coffee break
11:45 h	<u>Session 3: sponsored by CICA</u>
	- I3: Sabine Szunerits (University of Lille) <i>Graphene-based field effect transistor: differentiation between mild-moderate-severe myocardial injury</i>
12:30 h	- O7. Giovanni Valenti <i>Advanced carbon nanomaterials for electrochemiluminescent biosensor applications</i>
12:50 h	- O8. David Stringer <i>Reductively Crosslinked Single-walled Carbon Nanotube Networks for Gas Sensors</i>
13:10 h	- O9. Mohsen Beladi-Mousavi <i>Fine-Tuning the Physico-Chemical Features of Reduced Graphene Oxide</i>
13:30 h	Lunch
15:00 h	<u>Session 4: sponsored by ACS NANO</u>
	- I4: Diego Peña (Universidad de Santiago) <i>Bottom-up approach to carbon nanomaterials: from solution chemistry to on-surface synthesis</i>
15:45 h	- O10. Gonzalo Abellan <i>Carbon nano-onions: potassium intercalated and reductive covalent functionalization.</i>
16:05 h	- O11. Martin Kalbac <i>Localized and ordered functionalization of CVD graphene</i>
16:25 h	- O12. Miles Martinati <i>Wavelength-dependent Resonant Raman Spectroscopy of Graphene Nanoribbons Synthesized inside Carbon Nanotubes.</i>

16:45 h	Coffee break
17:15 h	<u>Session 5</u>
	- O13. Vincent Bernardin <i>Cooperative catalysis between metal single atoms and nanoparticles supported on carbon nanotubes</i>
17:35 h	- O14. Reshma Jose <i>Decisive role of spin-state and spin-coupling in dictating selective O₂ adsorption in chromium(III) metal-organic framework</i>
	Flash contributions
18:00 h	- F1. Miguel Angel Alvarez-Sanchez <i>Highly fluorescent green emissive Carbon Dots: synthesis, characterization and their use in green H₂ production</i>
18:05 h	- F2. Matteo Lucherelli <i>Carbon nano onions – pristine vs oxidized comparison on cytotoxicity and ROS development</i>
18:10 h	- F3. Aina Fito Parera <i>Diameter-dependent optical absorption and energy transfer from encapsulated dye molecules to single wall carbon nanotubes</i>
18:15 h	- F4. Vicente Orts <i>Characterising Functionalised Graphene Nanoplatelets using Raman Spectroscopy & Machine Learning</i>
18:20 h	- F5. Iluminada Rodriguez-Pastor <i>Effective and scalable method for a graphene oxide with impressive selectivity in carboxyl groups</i>
18:30 h	Poster session & Cocktail
	P1 Beneventi; P4 Carrera; P7 Chen; P10 Coulter; P13 Gomez Blanco; P16 Li; P19 Mancino; P22 Merino; P25 Pascual; P28 Vera; P31 Wetzl; F1-F5

Tuesday, 26 th April 2022	
9:30 h	<u>Session 6: sponsored by AXA</u>
	- I5: Alberto Bianco (CNRS Strasburg) <i>Radicals on chemically modified graphene oxide: mechanism of generation and biological activity</i>
10:15 h	- O15. Apolline Simon <i>Impact of the coating of single-walled carbon nanotubes on their diffusion properties within biological models</i>
10:35 h	- O16. Somen Nandi <i>Sp³ Defects Implanted Ultrashort Carbon Nanotubes as NIR-II Biomarkers</i>
10:55 h	- O17. Eric Anglaret <i>Volume phase transition in PNIPAM/SWNTs hybrid microgels triggered by near infrared photo-thermal excitation</i>
11:15 h	Coffee break
11:45 h	<u>Session 7: sponsored by Fisher Scientific</u>
	- I6: Dirk Guldi (Friedrich-Alexander-Universität) <i>From Carbon Dots and Graphene Quantum Dots to HBCs and Beyond</i>
12:30 h	- O18. Antonio Setaro <i>Single-walled carbon nanotubes charge management by controlled functionalization</i>
12:50 h	- O19. Dmitry Levshov <i>Detailed optical spectroscopy reveals efficient inner-to-outer wall energy transfer in highly pure double-wall carbon nanotubes</i>
13:10 h	- O20. Cristina Madrona <i>Intercalation of carbon nanotube yarns with acceptors</i>
13:30 h	Lunch

15:00 h	<p>Session 8: sponsored by Carlo Erba</p> <ul style="list-style-type: none"> - I7: Ester Vazquez (Universidad de Castilla-La Mancha) <i>2D materials for 3D smart soft structures</i>
15:45 h	<ul style="list-style-type: none"> - O21. Daniel Iglesias <i>Multiple functionalization of exfoliated MoS2 via supramolecular interactions towards multi-responsive devices.</i>
16:05 h	<ul style="list-style-type: none"> - O22. Marina Garrido <i>Exfoliation and Functionalization of MoS2 through Non-Covalent Interactions</i>
16:25 h	<ul style="list-style-type: none"> - O23. Jana Vejpravová <i>Towards single molecule magnet – pseudospin hybrids</i>
16:45 h	Coffee break
17:15 h	<p>Session 9</p> <ul style="list-style-type: none"> - O24. Oren Regev <i>Reinforcement and workability aspects of graphene-oxide-reinforced cement nanocomposites</i>
17:35 h	<ul style="list-style-type: none"> - O25. Milo Shaffer <i>Incorporating nanotubes into next generation fibre reinforcements</i>
17:55 h	<ul style="list-style-type: none"> - O26. Anastasiia Mikhalchan <i>Development of CNT fibres and fabrics for structural composites through control of alignment</i>
18:15 h	<ul style="list-style-type: none"> - O27. Afshin Pendashteh <i>Nanocomposites Based on Built-in CNT Fabric Current Collector for Energy Storage</i>
18:45 h	Poster session & Cocktail
	P2 Benito; P5 Cesco; P8 Collavini; P11 Ford; P14 Hamouma; P17 Lopez; P20 Martinez; P23 Misia; P26 Settele; P29 Wederhake

Wednesday, 27 th April 2022	
9:30 h	<p>Session 10: sponsored by SFEC</p> <ul style="list-style-type: none"> - I8: Alain Penicaud (University of Bordeaux) <i>Nanocarbon solutions and more</i>
10:15 h	<ul style="list-style-type: none"> - O28. Yuanzhi Xia <i>Grafting Ink for Direct Writing: Solvation Activated Covalent Functionalization of Graphene</i>
10:35 h	<ul style="list-style-type: none"> - O29. Jaime Sanchez <i>All-Electrochemical Nanofabrication of Stacked Ternary Metal Sulfide/Graphene Electrodes for Aqueous Batteries</i>
10:55 h	<ul style="list-style-type: none"> - O30. Carlos Martínez-Barón <i>Single-walled carbon nanotubes/nanocellulose hybrid films: towards the development of PEC water splitting photoanodes</i>
11:15 h	Coffee break
11:45 h	<p>Session 11: sponsored by RSEQ-GENAM</p> <ul style="list-style-type: none"> - I9: Cinzia Casiraghi (University of Manchester) <i>Water-based, defect-free and biocompatible 2D material inks enabled by supramolecular chemistry</i>
12:30 h	<ul style="list-style-type: none"> - O31. Luna Boulbet <i>Graphene dispersion in water: formulation and stability</i>
12:50 h	<ul style="list-style-type: none"> - O32. Lucas Cullari <i>Kinetically arrested dispersion: breaking dispersion barriers of carbon allotropes in aqueous solutions</i>
13:10 h	<ul style="list-style-type: none"> - O33. Tiago Serodre <i>Molecular insights into the production of few-layer graphene in N-Cyclohexylpyrrolidone + water mixtures</i>
13:30 h	Lunch

15:00 h	<p><u>Session 12: sponsored by Fomento Donostia- San Sebastián</u></p> <ul style="list-style-type: none"> - I10: Silvia Marchesan (Università di Trieste) <i>Where supramolecular chemistry meets carbon nanotubes</i>
15:45 h	<p>O34. Tommaso Costantini <i>Stoichiometric Control of Reductive SWCNTs Cross-Linking and applications of nanotube aerogels in CO2 capture</i></p>
16:05 h	<ul style="list-style-type: none"> - O35. Lorenza Maddalena <i>Polyelectrolyte stabilized graphite nanoplatelets as building block for multi-layered gas barrier thin films</i> <p>Flash contributions</p>
16:30 h	<ul style="list-style-type: none"> - F6. Kalpana Balaskandan <i>Wet-Spun Carbon Nanotube Fibres as Structural Fibre Electrodes</i>
16:35 h	<ul style="list-style-type: none"> - F7. Victor Calvo <i>Nanostructured biopolymers as green dispersants of carbon nanomaterials</i>
16:40 h	<ul style="list-style-type: none"> - F8. Teresa Cardona <i>Graphene based devices containing PAHs/CNTs curcuminoids</i>
16:45 h	<ul style="list-style-type: none"> - F9. Paul Debes <i>Molecular Rectifiers: Diamantane-Fullerene Adducts</i>
16:50 h	<ul style="list-style-type: none"> - F10. Shegufta Upama <i>Processing of CNT/inorganic hybrid electrodes via rapid Joule heating</i>
16:55 h	Poster session & Coffee break
	P3 Bolivar; P6 Chavignon; P9 Colom; P12 Gatti; P15 Heimfarth; P18 Luzzato; P21 Maser; P24 Neri; P27 Silvestri; P30 Weller; F6-F10
21:00 h	Gala Dinner

Thursday, 28 th April 2022	
10:30 h	<p><u>Session 13</u></p> <ul style="list-style-type: none"> - I11: Mauricio Terrones (Pennsylvania State University) <i>Carbon nanotube technology: An efficient platform for virus enrichment and detection</i>
11:15 h	Coffee break
11:30 h	<p><u>Session 14</u></p> <ul style="list-style-type: none"> - O36. Sara Amar <i>Zeolite-Templated Carbon: a 3D Interconnected Graphenic Network</i>
11:50 h	<ul style="list-style-type: none"> - O37. Marina Avramenko <i>Shedding light on the mechanisms of aqueous two-phase separation of single-wall carbon nanotubes</i>
12:10 h	<ul style="list-style-type: none"> - O38. David Tilve Martinez <i>3D printing of conductive nanocarbon based composites</i>
12:30 h	<ul style="list-style-type: none"> - O39. Gal Shachar-Michaely <i>The hybrid filler synergistic effect in nanocarbon-loaded polymer composites</i>
13:00 h	Closure
13:30 h	Lunch