

# Giornate di dipartimento DS<sup>Q</sup>TM 2022

Posizione	Autore	Istituto	Titolo	
P1	Andrea Barbieri	ISOF	Multichromophoric polymer containing luminescent lanthanide centers	Chimica ed Energia
P2	Filippo Bossola	SCITEC	Sustainable hydrogen production via catalytic reforming reactions	
P3	Alessandro Mordini	ICCOM	Tailored Organic Compounds for Solar Energy Collection and Conversion	
P4	Giuliana D'Ippolito	ICB	Biological production and storage of green hydrogen	
P5	Anna Maria Ferretti	SCITEC	Transmission Electron Microscopy and Nanoscience: a perfect match	
P6	Cinzia Giannini	IC	Watching at the appealing universe of new materials for Energy by the piercing eyes of Crystallography	
P7	Rossella Labarile	IPCF	Biomaterials for energy	
P8	Francesco Mingoia	ISMN	New 1,3,4-Substituted-Pyrrolo[3,2-c]quinoline derivatives: synthesis and biological evaluation	
P9	Leonarda Liotta	ISMN	State of art and new strategies for NOx after-treatment technologies in compliance with Euro 7 and Marpol regulations	
P10	Maria V. Pagliaro	ICCOM	Pd-CeO <sub>2</sub> /OLC as highly active and durable electrocatalyst for hydrogen oxidation in AEMFCs	
P11	Nicola Sangiorgi	ISTEC	Perovskite materials for photo-catalytic and photo-electrocatalytic applications	
P12	Donatella Spadaro	IPCF	Processes and technologies for a renewable and sustainable energy	
P13	Benedetta Squeo	SCITEC	Development of organic advanced materials in POP lab: energy devices and smart coatings	
P14	Maria Pia Casaletto	ISMN	Advanced surface approaches to Heritage Science	Chimica per i beni culturali
P15	Gabriella Di Carlo	ISMN	Towards a safe and sustainable conservation of cultural heritage: new strategies for corrosion inhibition	
P16	Sabrina Gualtieri	ISTEC	Cultural Heritage: archeometry, diagnostics and smart restoration	
P17	Stefano Legnaioli	ICCOM	Portrait of an Artist at Work: Exploring Max Ernst's Surrealist Techniques	
P18	Letizia Monico	SCITEC	Study of properties and chemical stability of cadmium yellow paints by a multi-technique approach at multiple scale lengths	
P19	Paolo Accardo	ICB	Encapsulation of liposoluble vitamins in polymeric-based nanocapsules for nutraceutical application	
P20	Marco Agnes	ISOF	sMultifunctional nanocarriers loading three orthogonal therapeutic agents enabling photo- and chemotherapy in hypoxic conditions	
P21	Giuseppina Andreotti	ICB	Studying bioactive small molecules and protein targets: examples from our 10-years experience with rare diseases	
P22	Francesco Attanasio	IC	Role of copper signaling in tissue repair processes mediated by hydroxyapatite derivatives	
P23	Greta Bergamaschi	SCITEC	Fine Tuning Peptide Supramolecular Assemblies for Bioanalytic Applications	
P24	Fabrizio Clemente	IC	Image processing, reverse engineering and 3D printing for innovative clinical pathways	
P25	Grazia Maria Letizia Consoli	ICB	Green one-pot synthesis and characterization of luminescent carbon-based polymer dots: New drug delivery system for anticancer chemo-photothermal therapy	
P26	Caterina Cristallini	IPCF	Recent advances in molecular imprinting strategies for biomedical application	

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P27	Francesco Damin	SCITEC	CovidArray: a microarray-based assay for the detection of SARS-CoV-2 and its variants
P28	Massimiliano Dapporto	ISTEC	Injectable apatitic bone cements for prolonged release of antimicrobials
P29	Francesca Della Sala	IPCB	ECM-like microspheres as cell delivery carriers for tissue regeneration
P30	Carmen Gallo	ICB	Natural products and new age receptors for treatment of immune-based diseases
P31	Giovanni Gambera	ICB	Synthesis of a Glycerophosphoinositol Configurational Analogue
P32	Arash Ghalayani	IPCB	Development of electrophoretic antibacterial coating for Ti6Al4V 3D printed implants
P33	Fabio Iannotti	ICB	Unravelling New Prospectives In Skeletal Muscle Disorders: Study of The Gut-Microbiota-Endocannabinoidome Crosstalk
P34	Annalisa Masi	IC	Nucleic acids models for study and recognition of biomarkers of oxidative DNA damage
P35	Irina Naletova	IC	Stimulation of trophic factors by copper complexes with a conjugate of hyaluronic acid with carnosine
P36	Fabiana Piscitelli	ICB	Potential role of the microbiome-endocannabinoidome connection in the gut-brain axis after traumatic brain injury and its association with alzheimer's disease.
P37	Giuseppina Rea	IC	Long-term osteogenic differentiation of human bone marrow stromal cells in real and simulated microgravity
P38	Federica Rizzi	IPCF	Liposomes Delivering Luminescent Carbon Dots and MCC950 for Targeted Inhibition of the NLRP3 Inflammasome Activation
P39	Teresa Russo	IPCB	Advances in 3D Bioprinting Towards Improved Bio-Inspired Devices for Diagnosis and Repair Strategies in Tissue Engineering
P40	Paolo Ruzza	ICB	Interaction of a short peptide with G-quadruplex forming sequences
P41	Giuseppina Sabatino	IC	Optimization and scale-up of synthetic strategies for large-scale manufacturing of peptides as Active Pharmaceutical Ingredients: a technology transfer case study
P42	Anna Maria Santoro	IC	Bio-inspired 20S proteasome regulators
P43	Michele Saviano	IC	The word of Peptide Science: Peptide, Peptidomimetic, Peptide Nucleic Acid for the design of news drugs and diagnostics
P44	Marta Tavoni	ISTEC	Chemically- and structurally-driven mechanisms governing the release profile of bioactive molecules from 3-D porous apatitic bodies
P45	Angelo Palmigiano	IPCB	From Mild Cognitive Impairment to Alzheimer's Disease: Cerebrospinal fluid (CSF) Mass Spectrometry (MS) N-Glycan analysis as a tool to predict the conversion
P46	Greta Varchi	ISOF	Prodrugs-based nanoparticles combining anticancer chemo- and photo-therapy
P47	Alberto Vitali	SCITEC	Finding new bioactive peptides: from natural sources to designed bioinspired molecules for therapeutic and functional purposes
P48	Carmen M. Marrodán	ICCOM	The way to Green Chemistry
P49	Irene Bonadies	IPCB	Sustainable polymer materials: formulations, processing and applications
P50	Simona Bronco	IPCF	From biopolymers to bioplastics: new opportunities to industrial biobased wastes

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P51	Maria Concetta Carnevale	ITM	Direct Contact vs Vacuum Membrane Distillation: a comparison between two configurations in the olive mill wastewater treatment	Chimica verde e sostenibilità
P52	Carmela Conidi	ITM	Membrane assisted biorefinery strategies for recovering valuable compounds from agro-food wastes	
P53	Maria Rosaria Plutino	ISMN	Sustainable innovative hybrid nanostructured materials: from design synthesis to functional applications	
P54	Ilaria Finore	ICB	The many faces of Parageobacillus thermantarcticus, an extremophilic bacterium producing molecules of biotechnological interest: from green chemistry to astrobiology	
P55	Giuseppe Granata	ICB	Effective strategies for small molecule encapsulation: preparation of nanosystems for potential biomedical and food applications	
P56	Silvia Rinaldi	ICCOM	Terpene trapped in Crystals against Paper Biodeteriogens	
P57	Manuela Melucci	ISOF	Sustainable chemical engineering of carbon nanomaterials and devices for selective capture and sensing of emerging contaminants in drinking water	
P58	Raffaele Morrone	ICB	Biodiesel from ground spent coffee: a one-pot efficient process	
P59	Werner Oberhauser	ICCOM	Acetic acid from bio-mass derived alcohols by nanoparticle-based catalysis	
P60	Simona Ortelli	ISTEC	Nanomanufacturing Safe and Sustainability by design: the Asina's roadmap to achieve the goal	
P61	Emma Piacentini	ITM	The power of membranes in particles technology	
P62	Claudia Sanfilippo	ICB	Regio- and stereoselective oxidations of organic compounds catalyzed by peroxygenase from oat seeds flour	
P63	Viviana Scognamiglio	IC	Convergent technologies for the development of diagnostic systems to be applied in the field of personalized medicine	
P64	Nicola Scotti	SCITEC	Zr-based catalysts for the transformation of lignocellulosic-derived platform molecules	
P65	Pietro Spanu	ICB	Sustainable chemistry for drug discovery: multicomponent reactions as a powerful tool for the synthesis of new modulators of the immune response	
P66	Maria Luisa Testa	ISMN	Functionalized materials for biomass conversion into valuable chemicals: green approaches	
P67	Maurizio Vignolo	SCITEC	Properties degradation of biobased plastics in the marine environment	
P68	Giuseppe Cassone	IPCF	Vibrational spectroscopy of molecules and condensed matter under electric fields	Modellistica Computazionale
P69	Alessandro Pesaresi	IC	Kinetic modeling of time-dependent enzyme inhibition by pre-steady-state analysis of progress curves: the case study of the anti-Alzheimer's drug galantamine	
P70	Giacomo Prampolini	ICCOM	Developing Computational Protocols for Material Science	
P71	Daniele Veclani	ISOF	Anchoring strategies of a catalyst on surfaces of TiO2 and graphene. A theoretical study	

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P72	Giuliano Angella	ICMATE	Functional properties assessment of innovative austempered ductile irons for lightweight applications
P73	Davide Altamura	IC	X-ray scanning microscopy with scattering/absorption contrast for advanced material characterization using laboratory or synchrotron sources
P74	Simone Battiston	ICMATE	Implementing sustainability in laboratory activities: life cycle assessment of film-based materials and devices for energy applications
P75	Alessandro Benedetti	ICMATE	Laboratorio Marino Politematico nella Stazione Marina Mareco di CNR-ICMATE a Bonassola
P76	Stefano Boldrini	ICMATE	Ultrafast High-temperature Sintering of functional ceramics
P77	David Bronte Ciriza	IPCF	Elongated active particles in speckle fields
P78	Vincenzo Buscaglia	ICMATE	The impact of microstructure on the dielectric properties of PVDF-based composites containing BaTiO <sub>3</sub> core-shell particles: experimental results and FEM simulations
P79	Rachele Castaldo	IPCB	Hyper-crosslinked polymers in hierarchically porous systems with broad and versatile sorption properties
P80	Davide Ciniglia	ICMATE	Study of the applicability of Laser Induced Breakdown Spectroscopy to brake exhaust emission analysis
P81	Sonia Conte	ISTEC	Recycling the product of thermal inertization of man-made vitreous fibres (MMVF) in porcelain batches
P82	Roberto D'Ambrosio	IPCF	Assessment of SiC-based ceramic matrix composites by microwave-assisted chemical vapor infiltration
P83	Silvia Maria Deambrosio	ICMATE	Development of magnetron sputtering CrFeNi-based high entropy alloy coatings for marine environment applications and their mechanical, tribological and tribochemical characterizations.
P84	Massimo Dell'Edera	IPCF	Photoactive TiO <sub>2</sub> nanomaterials: a powerful tool for air/water remediation, antimicrobial inactivation and cultural heritage protection
P85	Maria Grazia Donato	IPCF	Optical characterization of holographic acoustic tweezers
P86	Riccardo Donnini	ICMATE	Assessment of mechanical and microstructural properties of structural alloys in fusion energy design in EUROFUSION framework
P87	Simone Failla	ISTEC	Field assisted Hybrid Spark Plasma Sintering Technology - a new facility at ISTEC to produce 'hard-to-sinter' multifunctional materials
P88	Francesco Galiano	ITM	New routes for a more Sustainable Membrane Preparation
P89	Donatella Giuranno	ICMATE	Advancing in SiC-based Electronics: Influence of Graphene layers on metal-ceramic wetting and adhesion during soldering processes
P90	Giovanna Gomez D'Ayala	IPCB	Advanced polymer materials for environmental and biomedical applications
P91	Andrea Lorenzoni	ISMN	Modeling of interfaces for organic electronic applications
P92	Valentina Medri	ISTEC	Inorganic Polymers for the design of fire resistant, lightweight sustainable composited materials: the FENICE project

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P93	Chiara Molinari	ISTEC	What does it happen to ceramic pigments during ink micronization? A tale of phase composition, grindability, microstructure and optical properties
P94	Marcello Monteleone	ITM	Mixed Matrix Membranes Containing Imide/Imine Organic Cages for Gas Separation
P95	Beatrice Muzzi	ICCOM	Star shaped magnetic-plasmonic Au@Fe <sub>3</sub> O <sub>4</sub> nano-heterostructures for photothermal therapy
P96	Adelaide Nespoli	ICMATE	New challenges in SMA field: Elastocaloric effect and cryogenic application
P97	Simone Pittaccio	ICMATE	Wearing more functionalities: synergies of material shape and properties in a quest for better medical and sports devices
P98	Gennaro Rollo	IPCB	Composites materials in additive manufacturing of high-performance prosteses
P99	Fabiana Tescione	IPCB	Design and synthesis of multifunctional nanoparticles as smart platform for advanced material development
P100	Paola Stagnaro	SCITEC	Sulfur-based polymers from inverse vulcanization as high-refractive-index materials for nanophotonics
P101	Barbara Vercelli	ICMATE	Red-emitting Carbon Quantum Dots for Biomedical Applications: Synthesis and Purification Issues
P102	Filippo Samperi	IPCB	VOCs and Additives Present in Italian PET-bottles used Mineral Waters. Innovative aldehydes scavengers
P103	Andrea Scamporrino	IPCB	EnJoiPol – Environment Joins Polymers
P104	Antonino Mazzaglia	ISMN	Recent insights on hybrid nanomaterials based on cyclodextrins for human health
P105	Marco Rapisarda	IPCB	Synthesis, characterization, and soil burial degradation of biobased polyurethanes