

Tuesday, 10 December

REGISTRATION AND MORNING COFFEE
08.30 - 09.00

Amphithéâtre Chaudron

OPENING CEREMONY
09.00 - 09.20

2D Materials I
Chair: Anna Baldycheva
09.20-10.40
Itai Epstein
Igor Rozhanski
Habib Rostami
Antonio Di Bartolomeo

COFFEE BREAK
10.40 - 11.00

PLENARY TALK
Thomas Webster
11.00-12.00

Academia to Business: Spinning out Innovations from Research Labs
Chair: Alexandra Walker
12.00-13.00
Thomas Webster
Anna Baldycheva
Pavel Ginzburg

LUNCH
13.00 - 14.00

Bibliothèque

PLENARY TALK
Ventsislav Valev
14.00-15.00

COFFEE BREAK
15.00 - 15.15

NanoPhotonics I
Chair: Andrey Gorodetsky
15.15-16.40
Louise Bradley
Ivan Fernandez-Corbaton
Emilija Petronijevic
Pavel Ginzburg

WELCOME WINE RECEPTION
POSTER SESSION
17.00 - 19.00

Wednesday, 11 December

REGISTRATION AND MORNING COFFEE
08.30 - 09.00

Amphithéâtre Chaudron

Innovations in Energy: Advanc.in Nanoscience and Photovoltaics
Chair: Hani Barhum
09.00-10.45
Ibrahim Yehia
Lior Eger
Hani Barhum
Davide Raffaele Ceratti
Gilbert Daniel Nessim

COFFEE BREAK
10.45 - 11.00

PLENARY TALK
Yoel Fink
11.00-12.00

Smart, Functional Fibers & Textiles I
Chair: Alexander Gumennik
12.00-13.00
Yuanuan Guo
Fabien Sorin
Burak Temelkuran

LUNCH
13.00-14.00

Smart, Functional Fibers & Textiles II
Chair: Alexander Gumennik
14.00-16.00
Alexander Gumennik
Amit Sitt
Michael Fokine
Sylvain Danto
Merve Gockle
Hassan Alshahrani
Viktor Filatov

COFFEE BREAK
16.05 - 16.25

THz Optoelectronics and Photonics I
Chair: Andrey Gorodetsky
16.25-18.00
Giacomo Scalari
Masayoshi Tanouchi
Jessica Boland
David Citrin
Etienne Cardin

NanoPhotonics II
Chair: Hani Barhum
12.00-13.20
Sebastian Klemmt
Bruce Ou
Pavel Ginzburg
Maria Kafesaki

LUNCH
13.20-14.15

Microscopy & Microspectroscopy
Chair: Pavel Ginzburg
14.15-16.05
Sylvie Role
Hiromi Okamoto
Kevin MacDonald
Hilton De Aguiar
Jan Pihbyl
Ayodele Olomieja

New Materials Developments
Chair: Benjamin Hogan
16.25-17.40
Simona Achilli
Jonas Johansson
Bat-El Pinchasik
Mohamad Danial Shafiq

GALA DINNER
20.00 -

Thursday, 12 December

REGISTRATION AND MORNING COFFEE
09.10 - 09.40

Salle 6

Quantum Optics and Quantum Metrology I
Chair: Iveta Steblevska
09.40-10.50
Andrey Shukorukov
Michael Venner
Ksenia Mamaeva
Charles Downing

Amphithéâtre Chaudron

LUNCH
12.00-13.00

2D MATERIALS
Chair: Silvia Giordani
13.00 - 14.40
Vladimir Diakonov
Hao Xu
Nicholas Bergeal
Anastasios D. Koulouklidis
Slaven Garaj

COFFEE BREAK
14.40-14.55

Quantum Optics & Quantum Metrology II
Chair: David Andrews
14.55 - 16.55
Ferruccio Renzoni
Vladimir Antonov
Alina Karabchevsky
Ortwin Hess
Takis Kontos
Marianna D'Amato

Amphithéâtre Moissan

Optical Systems and Networks
Chair: Toms Salgals
11.00 - 12.20
Toms Salgals
Eugenio Maggiolini
Inga Brice
Frederic Gardes

LUNCH
12.20-13.20

THz Optoelectronics and Photonics II
Chair: Andrey Gorodetsky
13.20 - 14.35
SaeJune Park
Anna Tasolamprou
Eve Ammerman
Sara Cibella

COFFEE BREAK
14.35-14.50

Sensors & Spectroscopy
Chair: Benjamin Hogan
14.50 - 15.45
Haider Butt
Yossi Rosenwaks

Nanomaterials in Biology & Medicine
Chair: Pavel Ginzburg
15.45 - 16.55
Francis Rey Cortes
Louis A. van der Elst
Nur Hidayatul Nazirah Kamarudin
Gangaraju Gedda

PLENARY TALK
Silvia Giordani
17.00-18.00

WINE RECEPTION
18.00 - 19.00

Friday, 13 December

REGISTRATION AND MORNING COFFEE
08.30 - 08.50

Bibliothèque

BEST PRESENTATION AWARD CEREMONY
08.50 - 09.00

PLENARY TALK
Giuseppina Padeletti
09.00-10.00

Characterisation Methods in Art and Heritage
Chair: Giuseppina Padeletti
10.00-12.20
Daniel Caurant
Gilles Wallez
Maria Pia Casaletto
Koen Janssens
Sorin Hermon
Gabriela di Carlo
Luca Totoro

Closing Remarks

Programme Schedule

10TH DECEMBER 2024

8.30 - 9.00

REGISTRATION & MORNING COFFEE

Amphithéâtre Chaudron

OPENING CEREMONY

9.00 - 9.15

Anna Baldycheva, STEMM Global, University of Exeter, INNANO Ltd.
Giuseppina Padeletti, Institute of Nanostructured Materials, CNR

9.20 - 10.40

2D Materials I

Chair: Anna Baldycheva (University of Exeter)

9.20 - 9.40

Itai Epstein (Tel Aviv University, Israel)
"Light-matter interaction in 2D semiconductors"

9.40 - 10.00

Igor Rozhansky, Vladimir Fal'ko (University of Manchester, UK)
"2D van der Waals Magnets as a promising host for strong-correlated phenomena"

10.00 - 10.20

Habib Rostami, Emmanule Cappelluti and Federico Cilento (University of Bath, UK)
"Dichroism and Kerr rotation in bulk WSe₂"

10.20 - 10.40

Antonio Di Bartolomeo (University of Salerno, Italy)
"2D Molybdenum Disulfide and Black Phosphorus in Field-Effect Transistors"

10.40 - 11.00

COFFEE BREAK & NETWORKING

11.00 - 13.00

Academia to Business: Spinning out Innovations from Research Labs

11.00 - 12.00

PLENARY TALK - Thomas Webster
(Hebei University of Technology, China)
"Commercializing Nanomedicine: 30,000 Spinal Implants in Humans with No Failures"

12.00 - 13.00

Academia to Business Panel Discussion (Q&A)

13.00 - 14.00

LUNCH

10TH DECEMBER 2024

Bibliothèque

14.00 - 15.00	PLENARY TALK - Ventsislav Valev (University of Bath, UK) <i>"From hyper-Rayleigh to hyper-Raman optical activity"</i>
15.00 - 15.15	COFFEE BREAK & NETWORKING
15.15 - 16.40	NanoPhotonics I Chair: Andrey Gorodetsky (University of Birmingham)
15.15 - 15.35	Louise Bradley , H. Hajian, M. Proffit, P. Landais (Trinity College Dublin, Ireland) <i>"Electrically driven reprogrammable metasurface design for NIR beamsteering"</i>
15.35 - 15.55	Ivan Fernandez-Corbaton , Benedikt Zerulla, Marjan Kristic, Dominik Beutel, Christof Holzer, Maria Poleva, Carsten Rockstuhl (Karlsruher Institut für Technologie, Germany) <i>"Computing the optical response of molecular materials: From nano to device scales"</i>
15.55 - 16.15	Emilija Petronijevic (Sapienza University of Rome, Italy) <i>"Photo-acoustic spectroscopy with widely tuneable laser: resonances, spatial absorption mapping and circular dichroism in nanostructures"</i>
16.15 - 16.40	Pavel Ginzburg (Tel Aviv University, Israel)

Galerie

17.00 - 19.00 17.00 - 18.00	WELCOME WINE RECEPTION POSTER SESSION
P1	Ainur Zhambolova , Kydyrali A.N., Ongarbaev Ye.K. (Institute of Combustion Problems, Kazakhstan) <i>"Functionalization of nanosilica particles to obtain a bitumen modifier"</i>
P2	Aleksandrs Dutovs , Raimonds Poplausks, Uldis Malinovskis, Donats Erts, Juris Prikulis (University of Latvia, Latvia) <i>"Self-assembled plasmonic gold nanoparticle arrays on hybrid Al/PAAO nanostructures for formaldehyde sensing in wastewater"</i>
P3	Aliya Kenzhegaliyeva , Ongarbayev Ye.K. (Institute of Combustion Problems, Kazakhstan) <i>"Modification of bitumen with nanostructural char from pyrolysis of lemon peel waste"</i>
P4	Ayagoz Bakkara , Bakhtiyar Sadykov, Ainur Khairullina, Aida Artykbayeva, Alua Maten, Anar Zhapekova, Timur Osserov (Institute of Combustion Problems, Kazakhstan) <i>"High-temperature SHS thermal insulators based on pre-activated diatomite"</i>

10TH DECEMBER 2024

Galerie

17.00 - 19.00

WELCOME WINE RECEPTION

17.00 - 18.00

POSTER SESSION

- P5 **Eftychia Martino**, Christos Chatziliias, Alexandros Katsaounis (University of Patras, Greece)
"Effect of Carbon Support on the Performance of Pt-based Anodes for Bio-Alcohol Fuel Cells"
- P6 **Gaukhar Smagulova**, Aruzhan Keneshbekova, Bayan Kaidar, Aigerim Imash, Aidos Lesbayev (Satbayev University, Kazakhstan)
"Development and Characterization of Nanocomposites Based on Magnetite, MXene and Activated Carbon for the Adsorption of Pb Ions from Aqueous Solutions"
- P7 **Hüma Yılmaz**, H. E. Kucukgocen (University of Gazi, Turkey)
"Development of a fluorescent sensor using surface imprinted polymers for specific recognition of 5-fluorouracil"
- P8 **Juris Prikulis**, Uldis Maļinovskis, Raimonds Poplauskis, Aleksandrs Dutovs, Donats Erts (University of Latvia, Latvia)
"Nanoporous anodic aluminum oxide - gold plasmonic substrates for the optical detection of protein biomarkers"
- P9 **Natalia Fijol**, Sheng-An Yu, Helena Kagebrand, Michael Fokine (Nobula 3D, Sweden)
"Advanced glass fabrication and 3D printing using CO₂-laser"
- P10 **Nilesh Gajanan Bajad**, Sushil Kumar Singha (Indian Institute of Technology, India)
"Development of donor-acceptor architecture type benzothiazole-based theranostic"
- P11 **Sara Stolfi**, Martina Fracchia, Paolo Ghigna, Umberto Anselmi Tamburini, Mauro Coduri, Luca Braglia, Piero Torelli (Università di Pavia/CNR-IOM Istituto Officina dei Materiali, Italy)
"Mechanism of CO Oxidation on High Entropy Spinels"
- P12 **Yeligay Segizbay** (Nazarbayev University, Kazakhstan)
"Optimization of Material Properties for Enhanced Performance of 1D MEMS Oscillators"
- P13 **Yerdos Ongarbayev**, Ainur Zhambolova (Institute of Combustion Problems, Kazakhstan)
"Modification of Bitumen with Nanostructured Carbonized Rice Husk"
- P14 **Yerzhan Imanbayev**, Yerdos Ongarbayev, Ainur Zhambolova (Institute of Combustion Problems, Kazakhstan)
"Production of nanosized silica particles for bitumen modification"
- P15 **Yuto Akimoto**, Gildas Coativy, Jean-Yves Cavaille, Yuanyuan GUO (Tohoku University, Japan)
"Fiber-based soft actuators via thermal drawing"

10TH DECEMBER 2024

Galerie

17.00 - 19.00	WELCOME WINE RECEPTION
17.00 - 18.00	POSTER SESSION
P16	Achanai Buasri , W. Nakhlo, P. Srikaenkaew, P. Yaidee, V. Loryuenyong, A. Eiad-Ua (Silpakorn University, Thailand) <i>"Preparation and characterization of CO₂ adsorbent from spent coffee ground"</i>
P17	Bakhtiyar Sadykov , Ayagoz Bakkara, Aida Artykbayeva, Anar Zhapekova, Timur Osserov, Ainur Khairullina, Alua Maten (Institute of Combustion Problems, Kazakhstan) <i>"Effect of mechanochemical treatment of aluminum powders on the combustion of SHS-compositions"</i>
P18	Manal Safar Alghamdi , Saverio Russo, Monica Craciun (University of Exeter, United Kingdom) <i>"Graphene electronics"</i>
P19	Najib Hamisu Umar , Adebimpe Sosan, Auwal I. Usman (National Agency for Science and Engineering Infrastructure, Nigeria) <i>"Fabrication and Characterization of Electrospun PAni/PVA Nanofiber Composites"</i>
P20	Vorrada Loryuenyong , A. Boonpanya, A. Yangderm, T. Kensopha and A. Buasri (Silpakorn University, Thailand) <i>"Microwave synthesis of Dy³⁺, Sm³⁺ co-doped recycled waste glass"</i>
P21	Xuejuan Cui , Chi Wing Tsang, Xiao-Ying Lu (Technological and Higher Education Institute of Hong Kong, China) <i>"Synthesis and evaluation of transition metal oxides (TMOs) into carbon nanofibers (CNFs) as anode materials for lithium-ion batteries"</i>
OP22	Michał Bartkowski , Valeria Bincoletto, Iris C. Salaroglio, Giacomo Ceccone, Raul Arenal, Sara Nervo, Barbara Rolando, Chiara Riganti, Silvia Arpicco, Silvia Giordani (Dublin City University, Ireland) <i>"Carbon Nano-Onions as a Scaffold for CD44-targeted Gemcitabine Prodrug Delivery in Pancreatic Cancer Therapy"</i>
OP23	Ksenia Maleeva , Arina A. Pavlova, Evgeny A. Smirnov, Kirill V. Bogdanov (ITMO University, Russia) <i>"Easily fabricated SERS tags based on spherical polymer matrices decorated by gold nanoparticles"</i>
OP24	Khairun Nasriah Azmi , Muhammad Ameerullah Sahudin, Tan Kong Wai, Muhammad Faisal Khyasudeen (Universiti Malaya, Malaysia) <i>"Synthesis and Binding Studies of Two Zinc(II) Schiff-Base Complexes Derived from 4,4'-Methanedianiline with Tyramine for Food Spoilage Monitoring"</i>
OP25	Aravind Kannoth Anilkumar , Michał Bartkowski, Silvia Giordani (Dublin City University, Ireland) <i>"Dispersibility and Stability studies of Surface Functionalized Carbon Nano-Onions"</i>
OP26	Anton P. Tkach , Sofia A. Khorkina, Kirill V. Bogdanov (ITMO University, Russia) <i>"Unclonable Optical Tags: WGM Resonators based on Polystyrene Microspheres and AgInS₂/ZnS Quantum Dots"</i>

11TH DECEMBER 2024

8.30 - 9.00

REGISTRATION & MORNING COFFEE

Amphithéâtre Chaudron

9.00 - 10.45

Innovations in Energy: Advancements in Nanoscience and Photovoltaics

Chair: Hani Barhum (Tel Aviv University)

9.00 - 9.30

Ibrahim Yehia (Triangle R&D Centre, Israel)
"Advances in Agrivoltaics"

9.30 - 9.50

Lioz Etgar (Hebrew University of Jerusalem, Israel)
"Chirality and piezoelectricity in low dimensional perovskite and fully printable solar cells"

9.50 - 10.10

Hani Barhum (Tel Aviv University, Israel)
"Organic and Hybrid Materials for Energy Conversion and Harvesting"

10.10 - 10.25

Davide Raffaele Ceratti, David Cahen, Gary Hodes (ChimieParisTech, PSL, France)
"De rerum natura: Damage and Self-Healing in Pb - Halide Perovskites"

10.25 - 10.40

Gilbert Daniel Nessim (Bar Ilan University, Israel)
"One-step synthesis of single atom catalysts (SACs) on nanocarbons using thermal delamination: a new paradigm for high performance, binder-free, electrodes for water splitting"

10.45 - 11.00

COFFEE BREAK & NETWORKING

11.00 - 12.00

PLENARY TALK - Yoel Fink

(Massachusetts Institute of Technology, USA)

"Are four small brains as good as one big one? a computing fabrics perspective"

12:00 - 13:00

Smart, Functional Fibers and Textiles I

Chair: Alexander Gumennik (Indiana University)

12.00 - 12.20

Yuanyuan Guo (Tohoku University, Japan)
"Thermally-drawn fiber technologies with sensing and actuation capabilities for neuroscience and healthcare applications"

12.20 - 12.40

Fabien Sorin (Ecole Polytechnique Fédérale de Lausanne, Switzerland)
"Liquid Metal-Based Soft Electronic Fibers and Textiles"

12.40 - 13.00

Burak Temelkuran, Libaihe Tian, Qindong Zheng, Jiwoo Choi, Mohamed E.M.K. Abdelaziz (Imperial College London, UK)
"Thermally Drawn Catheters for Endovascular Interventions"

13.00 - 14.00

LUNCH

Amphithéâtre Chaudron

14.00 - 16.00

Smart, Functional Fibers and Textiles II

Chair: Alexander Gumennik (Indiana University)

- 14.00 - 14.20 **Alexander Gumennik** (Indiana University, USA)
"Micro-Architected Monofilaments for Smarter Telecommunication and Biomedicine"
- 14.20 - 14.40 **Amit Sitt**, Shiran Ziv-Sharabani, Elad Livnat (Tel Aviv University, Israel)
"Unique Shape-Morphing Behaviors in Hierarchical Responsive Microfiber Architectures"
- 14.40 - 15.00 **Michael Fokine**, Sheng-An Yu, Helena Kagebrand, Natalia Fijoł (KTH Royal Institute of Technology, Sweden)
"Advanced Glass Fabrication and 3D Printing using CO₂-laser"
- 15.00 - 15.20 **Sylvain Danto**, Yazan Badour, Sara Al Homsy, Lionel Teulé-Gay, Bruno Bousquet, Lionel Canioni, Véronique Jubera, Angeline Poulon-Quintin, Manuel Gaudon (University of Bordeaux, France)
"Recent progresses in the fabrication of multimaterial fibers using thermoplastic polymers and glasses with intermediate T_g"
- 15.20 - 15.35 **Merve Gocke**, Eilam Smolinsky, Louis Alexandre van der Elst, Jillian Noblet, Creasy Clauser Hunstman, Alexander Gumennik (Indiana University, USA)
"Selective stress/proximity sensing by time domain reflectometry in a deformable fiber-antenna"
- 15.35 - 15.50 **Hassan Alshahrani** (Najran University, Saudi Arabia)
"Development of Novel 3D Printed Core-Shell Polymeric Composite"
- 15.50 - 16.05 **Viktor Filatov**, Grigoriy Evseev, Taisiya Latypova, Darya Kosovskaya, Mikhail Lovygin, Sergey Bozhko, and Mariya Olkhovskaya (SkyLab AG, Switzerland)
"Towards functional textiles using laundry detergents: the novel sustainable technologies for improvement of appearance, color, elasticity, and regeneration of microdamages"

16.05 - 16.25

COFFEE BREAK & NETWORKING SESSION

16.25 - 18.00

THz Optoelectronics and Photonics I

Chair: Andrey Gorodetsky (University of Birmingham)

- 16.25 - 16.45 **Giacomo Scalari** (ETH Zürich, Switzerland)
"An active planarized platform for coherent THz optics: from combs to on-chip WDMs"
- 16.45 - 17.05 **Masayoshi Tonouchi** (Osaka University, Japan)
"Terahertz Emission Spectroscopy on GaN-based Superlattices"
- 17.05 - 17.25 **Jessica Boland** (The University of Manchester, UK)
"Terahertz and topology: exploring optoelectronic properties of topological insulators via terahertz spectroscopy and microscopy"
- 17.25 - 17.45 **David Citrin** (Georgia Institute of Technology, USA)
"The Gauss chain: A new quasi-periodic lattice and its potential quantum mechanical and electromagnetic realizations"
- 17.45 - 18.00 **Etienne Cardi**, Stefan Skupin, Luc Bergé, Keshav Dani, Julien Madéo, Sukhdeep Dhillon, Juliette Mangeney, Jérôme Tignon (LPENS, France)
"TeraHertz generation from femtosecond laser-induced micro-plasma"

Amphithéâtre Moissan

NanoPhotonics II

12:00 - 13:20

Chair: Hani Barhum (Tel Aviv University)

- 12.00 - 12.20 **Sebastian Klemmt** (University of Würzburg, Germany)
"Topological edge and corner modes in polariton lattices"
- 12.20 - 12.40 **Bruce Ou** (University of Southampton, UK)
"Meta-scope: metalens-based compact multifunctional microscope"
- 12.40 - 13.00 **Pavel Ginzburg** (Tel Aviv University, Israel)
"Optically Responsive Vaterite for Drug Delivery Applications"
- 13.00 - 13.20 **Maria Kafesaki, I. Katsantonis, A. Tasolamprou, Th. Koschny**, (University of Crete, Greece)
"Controllable circular polarization lasing based on chiral metamaterials"

13.20 - 14.15

LUNCH

Microscopy and Microspectroscopy

14.15 - 16.05

Chair: Pavel Ginzburg (Tel Aviv University)

- 14.15 - 14.35 **Sylvie Roke** (Ecole Polytechnique Fédérale de Lausanne, Switzerland)
"A magic wand for material characterization"
- 14.35 - 14.55 **Hiromi Okamoto, Shun Hashiyada, Tetsuya Narushima, Junsuke Yamanishi** (Institute for Molecular Science, Japan)
"Imaging Chiral Optical Fields in Nano-/Micro-Structured Materials"
- 14.55 - 15.15 **Kevin MacDonald, Cheng-Hung Chi, Thomas A. Grant, Anton Vetlugin, Eric Plum, Nikolay I. Zheludev** (University of Southampton, UK)
"Picometrology with topologically structured light"
- 15.15 - 15.35 **Hilton De Aguiar** (ENS, France)
"A few for more: high-speed compressive Raman imaging"
- 15.35 - 15.50 **Jan Přibyl, Šimon Klimovič, Monika Pávková-Goldbergová, Radka Obořilová** (Masaryk University, Czechia)
"Advanced characterization of nano and biomaterials using AFM and Raman microscopy"
- 15.50 - 16.05 **Ayodele Olomieja, Hakeem Bello, Olatunbosun Sojину, Olufunso Bankole-Ojo** (Ogun State Institute of Technology, Nigeria)
"Synthesis and Photocatalytical Degradation of Pharmaceutical Pollutants using Green Synthesized Nanocomposite"

16.05 - 16.25

COFFEE BREAK & NETWORKING SESSION

Amphithéâtre Moissan

New Materials Developments

16.25 - 17.40

Chair: Benjamin Hogan (University of Exeter)

16.25 - 16.45

Simona Achilli, Guido Fratesi, Giovanni Onida, Daya Sagar Dhungana, Federico Orlando, Carlo Grazianetti, Christian Martella, Alessandro Molle, Carlo Spartaco Casari, Paolo D'Agosta, Andrea Li Bassi, Francesco Tumino, Alessio Orbelli Biroli, Jorge Lobo-Checa, Giovanni di Santo, Luca Petaccia (University of Milan, Italy)

"Theoretical and experimental analysis of the pivotal role of the substrate in the growth of ordered 2D structures"

16.45 - 17.05

Jonas Johansson (Lund University, Sweden)

"Heteroepitaxial Growth Modes Revisited"

17.05 - 17.25

Bat-El Pinchasik (Tel Aviv University, Israel)

"Responsive Fluidics: The liquid Analogue of Electric Circuits"

17.25 - 17.40

Mohamad Danial Shafiq, Amir M. N. A. Abdul Rahman, Lim J. Kang (Universiti Sains Malaysia, Malaysia)

"Interparticle Interactions Between Carbon in Oil: Effect of Poly-isobutylene-Ionic-Liquid Dispersants"

20.00 -

GALA DINNER

12TH DECEMBER 2024

9.10 - 9.40

REGISTRATION & MORNING COFFEE

Salle 6

09.40 - 10.50

Quantum Optics and Quantum Metrology I

Chair: Iveta Steblevska (Queen's University Canada)

09.40 - 10.00

Andrey Sukhorukov, Jinyong Ma, Tongmiao Fan, Tuomas Haggren, Laura Valencia Molina, Matthew Parry, Saniya Shinde, Jihua Zhang, Rocio Camacho Morales, Frank Setzpfandt, Hark Hoe Tan, Chennupati Jagadish, Dragomir N. Neshev (Australian National University, Australia)
"Generating Optically Tunable Entangled Photon Pairs From Metasurfaces"

10.00 - 10.20

Michael Vanner (Imperial College London, UK)
"Brillouin optomechanics in whispering-gallery-mode microresonators: Strong coupling, the lasing transition, and single-phonon addition and subtraction operations"

10.20 - 10.35

Kseniia Mamaeva, H. Hajian, C. Elliott, T. Faraone, C. Delaney, L. Florea, A. L. Bradley (Trinity College Dublin, Ireland)
"Single gold Bipyramid coupled with quantum dot"

10.35 - 10.50

Charles Downing (University of Exeter, United Kingdom)
"Double photon charging of a quantum battery"

Amphithéâtre Moissan

11.00 - 12.20

Optical Systems and Networks

Chair: Toms Salgals (Riga Technical University)

11.00 - 11.20

Toms Salgals (Riga Technical University, Latvia)
"Kerr optical frequency comb (OFC) light sources for telecommunication applications"

11.20 - 11.40

Eugenio Maggolini (Johannes Kepler University Linz, Austria)
"Quantum nonlinear optics in exciton-polariton circuits"

11.40 - 12.00

Inga Brice, Janis Alnis (University of Latvia, Latvia)
"Tailoring whispering gallery mode resonator for wide range of potential applications"

12.00 - 12.20

Frederic Gardes (University of Southampton, UK)
"Advancing Silicon Nitride Photonics for Next-Generation Systems"

12.20 - 13.20

LUNCH

Amphithéâtre Moissan

13.20 - 14.35	THz Optoelectronics and Photonics II Chair: Andrey Gorodetsky (Birmingham University)
13.20 - 13.40	SaeJune Park (Queen Mary University of London, UK) <i>"Free-space and on-chip terahertz biosensing and other applications"</i>
13.40 - 14.00	Anna Tasolamprou (National and Kapodistrian University of Athens, Greece) <i>"THz graphene-based metasurfaces for wave manipulation"</i>
14.00 - 14.20	Eve Ammerman, V. Jelic, L. Bobzien, B. Schuler, T. L. Cocker (Empa, Switzerland) <i>"Ultrafast Terahertz Scanning Tunneling Microscopy of Single Atomic Defects"</i>
14.20 - 14.35	Sara Cibella, G. Torrioli, P. Carelli, P. Micheletti, U. Senica, M. Beck, J. Faist, G. Scalari (IFN CNR, Italy) <i>"Optical beatnote detection of a portable THz QCL comb by direct microwave mixing onto an Hot-electron bolometer"</i>
14.35 - 14.50	COFFEE BREAK & NETWORKING SESSION
14.50 - 15.45	Sensors and Spectroscopy: Materials and Methodologies Chair: Benjamin Hogan (University of Exeter, INNANO)
14.50 - 15.10	Haider Butt (Khalifa University, United Arab Emirates) <i>"3D Printed Multi-material Nanocomposite Contact Lenses"</i>
15.10 - 15.30	Yossi Rosenwaks (Tel Aviv University, Israel) <i>"Electronic Nose Based on a Single Silicon Gas Sensor"</i>
15.30 - 15.45	Muhammad Ameerullah Sahudin (Universiti Malaya, Malaysia) <i>"Schiff Base Complex: Fluorescence Chemosensor for Food Safety Monitoring"</i>
15.45 - 16.55	Nanomaterials in Biology and Medicine Chair: Pavel Ginzburg (Tel Aviv University)
15.45 - 16.05	Francis Rey Cortes, Eva Falomir, Jesus Lancis, Gladys Mínguez-Vega (Universitat Jaume I, Spain) <i>"Pulsed laser fragmentation synthesis of carbon quantum dots (CQDs) for the non-enzymatic glucose detection"</i>
16.05 - 16.25	Louis A. van der Elst, Merve Gokce, and Alexander Gumennik (Indiana University, USA) <i>"Designing Biomonitoring and Biostimulating Fibers for Wound Prevention and Regeneration"</i>
16.25 - 16.40	Nur Hidayatul Nazirah Kamarudin, C. D'Haeyer, K. Thevisse, A. Braem (Universiti Kebangsaan Malaysia, Malaysia) <i>"Development of Smart Anti-Microbial Drug Releasing Dental Implant"</i>
16.40 - 16.55	Gangaraju Gedda, Yoo-Jin Park, Jae Yung Hur, Soo-Min Hwang, Myung-Geol Pang (Chung-Ang University, South Korea) <i>"Assessment of function of fluorescent carbon dot's role in the male Reproductive system"</i>
17.00 - 18.00	PLENARY TALK - Silvia Giordani (Dublic City University, Ireland) <i>"Tailoring Carbon Nanoparticles for drug delivery"</i>
18.00 - 19.00	WINE RECEPTION & NETWORKING

Amphithéâtre Chaudron

12.00 - 13.00	LUNCH
13.00 - 14.40	2D MATERIALS Chair: Silvia Giordani (Dublin City University)
13.00 - 13.20	Vladimir Dyakonov (University of Würzburg, Germany) <i>"Coherent Control and Sensing Applications of the Color Centers in hexagonal Boron Nitride"</i>
13.20 - 13.40	Hao Xu (University of Electronic Science and Technology of China, China) <i>"2D TMDs: Large-Scale Growth, Integrated Optoelectronics and Beyond"</i>
13.40 - 14.00	Nicholas Bergeal (ESPCI Paris, France) <i>"Superconducting oxide interfaces"</i>
14.00 - 14.20	Anastasios D. Koulouklidis , M. Liebich, M. Florian, N. Nilforoushan, F. Mooshammer, L. Wittmann, K. Mosina, Z. Sofer, F. Dirnberger, M. Kira, R. Huber (Regensburg Center for Ultrafast Nanoscopy, Germany) <i>"Magnetic Control of Quasi-1D Excitons and Coulomb Correlations in CrSBr"</i>
14.20 - 14.40	Slaven Garaj (National University of Singapore, Singapore)
14.40 - 14.55	COFFEE BREAK & NETWORKING SESSION
14.55 - 16.55	Quantum Optics and Quantum Metrology II Chair: David Andrews (University of East Anglia)
14.55 - 15.15	Ferruccio Renzoni (University College London, UK) <i>"Electromagnetic Induction Imaging with Atomic Magnetometers: Coming of Age"</i>
15.15 - 15.35	Vladimir Antonov , I Antonov, R Shaikhaidarov, K Ho Kim, D Golubev, O Astafiev (Royal Holloway University of London, UK) <i>"Development of a new quantum device: the Bloch transistor"</i>
15.35 - 15.55	Alina Karabchevsky (Ben Gurion University of Negev, Israel) <i>"Optical Chips for Quantum Photonics Applications"</i>
15.55 - 16.15	Ortwin Hess (Trinity College Dublin, Ireland) <i>"Nanoplasmonic Architectures for Room-Temperature Quantum Nanophotonics"</i>
16.15 - 16.35	Takis Kontos (ENS, France) <i>"Quantum sensing of axion dark matter"</i>
16.35 - 16.55	Marianna D'Amato , Antonio Balena, Lucien Belzane, Chengjie Ding, Quentin Glorieux, Emmanuel Lhuillier, Hanna Le Jeannic, Alberto Bramati (Sorbonne University, France) <i>"Room-temperature integrated single-photon sources based on solid-state quantum emitters"</i>
18.00 - 19.00	WINE RECEPTION & NETWORKING
P22	Ghazal Shineh (The University of Sydney, Australia) <i>"Hydrogel Nanocoating on Bone Implants via Nanoscale Plasma-Activated Technology"</i>

13TH DECEMBER 2024

8.30 - 8.50

REGISTRATION & MORNING COFFEE

Bibliothèque

08.50 - 09.00

Best Presentations Awards

9.00 - 10.00

PLENARY TALK - Giuseppina Padeletti
(Institute of Nanostructured Materials, CNR Italy)
"Preserving the Past, Protecting the Future: A Cross-disciplinary Review of Recent Innovations in Materials for Safeguarding Heritage in a Changing Climate"

10.00 - 12.20

Characterisation Methods in Art and Heritage
Chair: Giuseppina Padeletti (Institute of Nanostructured Materials)

10.00 - 10.20 Daniel Caurant (CNRS, France)
"Several investigations on glazes on ceramics from Antiquity to the present day"

10.20 - 10.40 Gilles Wallez (Sorbonne University, France)
"Written in (lead) white: the chemical skills of the masters of the Renaissance painting"

10.40 - 11.00 Maria Pia Casaletto (CNR · Institute of Nanostructured Materials ISMN, Italy)
"A methodological approach to the conservation of marine outdoor bronze surfaces"

11.00 - 11.20 Koen Janssens (University of Antwerp, Belgium)
"Characterization of painted works of art from the macro to the nanoscale for the benefit of art historians and art conservators"

11.20 - 11.40 Sorin Hermon, Livio de Luca, Xavier Rodier (Cyprus Institute, Cyprus)
"Towards an open, cross-disciplinary Cultural Heritage – first steps"

11.40 - 12.00 Gabriella Di Carlo (National Research Council, Italy)
"Sustainable conservation of metal objects: innovative materials from waste and renewable sources"

12.00 - 12.20 Luca Totorà (Roma Tre University, INFN, Italy)
"Multiscale Chemical Imaging to Decipher Degradation Processes and Reconstruct Artistic Narratives in Cultural Heritage"

12:20 - 12.30

Closing Remarks

13.00 - 14.00

WOMEN in STEMM LUNCH*
*STEMM Global Women in STEMM Members Annual Meeting