

List of Oral Presentations

Tuesday, November 23rd

08:00 Registration

09:00 **OPENING SESSION**

Corinne CHANEAC, Director of C'Nano

Constantin VAHLAS, Chief scientific officer of CNRS Institute of chemistry

09:30 **PLENARY SESSION**

Julie GROLLIER (CNRS- UMPy Laboratory, France) - *Spintronic neural networks*

10:30 Coffee break

10:50

THEMATIC SESSIONS

NANOPHOTONICS & NANO-OPTICS

| | | |
|--------------|--|--|
| 10:50 | Deep learning meets nano-optics | Peter WIECHA • CNRS - LAAS, France |
| 11:20 | Coherent Perfect Absorption in coupled Nano-Opto-ElectroMechanical Systems | Gladys JARA-SCHULZ • Paris-Saclay Univ. - C2N, France |
| 11:35 | Design of photonic nanostructures via chirality induction | Emilie POUGET • CNRS - CBMN, France |
| 11:50 | Near-Field Photochemical Imaging of Chiral Nanostructures | Thinhinane AOUDJIT • UTT - P2MN, France |
| 12:05 | Sharp spectral variations of the ultrafast transient near-ultraviolet light extinction by bimetallic gold-silver nanoparticles | Bruno PALPANT • CentraleSupélec - LUMIN, France |
| 12:20 | Polarization dependent inelastic light scattering by acoustic vibrational modes of Au nanoparticles | Mariana TIMM • INSA Lyon - ILM, France |
| 12:35 | Single gold bipyramid orientation measured by scattering polarization spectroscopy | Julien LAVERDANT • UCB Lyon 1 - ILM, France |

13:00 Lunch, Poster session & Exhibition

NANO: HEALTH, ENVIRONMENT & RISKS

| | | |
|--------------|---|--|
| 10:50 | Advances in environmental risk assessment of engineered nanomaterials | Bernd NOWACK • EMPA - St. Gallen, Switzerland |
| 11:20 | Modeling nanoplastic fate in the Arctic: Mechanisms of transfer from saltwater to ice | Julien GIGAULT • CNRS - TAKUVIK, France |
| 11:35 | Origin, properties, environmental/health concern of plasma-formed polymer nanocomposites traced in natural resources and living organisms | Marie-Agnès COURTY • CNRS - PROMES, France |
| 11:50 | Investigating protein-nanoparticle interactions in 3D cell culture models for the long-term toxicity study of inhaled silver nanoparticles | Daniel SANCHEZ-GUZMAN • Univ. Paris - BFA, France |
| 12:05 | Beyond the paradigm of nanomechanical measurements on cells using AFM: an automated methodology to rapidly analyse thousands of cells | Etienne DAGUE • CNRS - LAAS, France |
| 12:20 | Nano-gold decorated TiO ₂ , ZnO and WO ₃ for NO degradation: new photocatalytic materials for the improvement of the Indoor Air quality | Kevin CASTELLO-LUX • INSA Toulouse - LMDC & LCC, France |

13:00 Lunch, Poster session & Exhibition

Saint-Exupéry
Amphitheater

Spot
room

Cassiopée
room

Saint-Exupéry
foyer

10:50

THEMATIC SESSIONS

1D & 2D NANOMATERIALS

| | | |
|-------|--|--|
| 10:50 | Revealing the topological nature of transport at mesoscopic scales with quantum interferences | Hélène BOUCHIAT • CNRS - LPS, France |
| 11:20 | High magnetic field spin-valley-split Shubnikov-de Haas oscillations in a WSe ₂ monolayer | Walter ESCOFFIER • INSA Toulouse - LNCMI, France |
| 11:35 | What is the electron behavior in two-dimensional CdSe nanoplatelets? | Nemanja PERIC • CNRS - IEMN, France |
| 11:50 | First-principle approach to multi-wavelength Raman spectroscopy of 2D-nanomaterials | Anthony IMPELLIZZERI • Univ. of Nantes - IMN, France |
| 12:05 | Identifying Protein Sequence Motifs from Peptide Translocation in Silico Experiments through Solid-state Nanopores | Andreina URQUIOLA HERNANDEZ • UBFC - ICB, France |
| 12:20 | Collective Magnetism in 2D Polymer Made of C-doped Triangular Boron Nitride Nanoflakes | Alain ROCHEFORT • Polytechnique Montreal - Engineering Physics Dpt, Canada |
| 12:35 | Intense Raman D band without disorder in flattened carbon nanotubes | Emmanuel PICHEAU • CNRS - CRPP, France |

13:00 Lunch, Poster session & Exhibition

NANO GOLD BY YOUNG RESEARCHERS

| | | |
|-------|--|--|
| 10:50 | Scientific outreach: why and how ? | Nathalie LIDGI-GUIGUI • Sorbonne Paris Nord Univ. - LSPM, France |
| 11:20 | Emergence of Mesoionic Carbenes for the Stabilization of Gold Nanoparticles | Alexandre PORCHERON • Sorbonne Univ. - LCMCP, France |
| 11:35 | Photopolymerization at nanoscale on gold nanoparticles followed by plasmon resonance shift | Amine KHITOUS • Univ. of Haute-Alsace - IS2M, France |
| 11:50 | Colloidal assembly of anisotropic gold nanostructures and optical-plasmonic properties | Antonio CARONE • ENS Lyon - LCH Lyon, France |
| 12:05 | Gold nanoclusters synthesis and functionalization aiming at properties enhancement | Victoire ASILA • Sorbonne Univ. - LCMCP, France |

13:00 Lunch, Poster session & Exhibition

List of Oral Presentations

Tuesday, November 23rd

15:00

THEMATIC SESSIONS

NANO FOR IMAGING, DIAGNOSIS & THERAPY

| | | |
|-------|--|---|
| 15:00 | Influence of PEG Spacers on the Cytotoxicity of Titanate Nanotubes-Docetaxel Nanohybrids on a Prostate Cancer Cell Line | Julien BOUDON • <i>Bourgogne Univ. - ICB, France</i> |
| 15:15 | Remote magneto-mechanical destruction of cancer-associated fibroblasts using targeted ultra-small superparamagnetic iron oxide nanoparticles and low frequency magnetic fields | Véronique GIGOUX • <i>INSERM - LPCNO, France</i> |
| 15:30 | Mastering size for the design of innovative theranostic iron oxide based nanoparticles ensuring multimodal therapy | Barbara FREIS • <i>CNRS - IPCMS, France</i> |
| 15:45 | Ag ₂ S nanoparticle-based thermal sensing for hyperthermia therapy | Lise ABIVEN • <i>CNRS - LCMCP, France</i> |
| 16:00 | Hybrid nano-objects of Metal Organic Frameworks and maghemite for theranostic applications | Heng ZHAO • <i>ENS Paris - IMAP, France</i> |
| 16:15 | Thermo-stimulated drug release under alternating magnetic field | Megi BEJKO • <i>Bordeaux Univ. - LCPO, France</i> |
| 16:30 | Optimized Synthesis and Characterization of Magnetic Nanorods | Sirine EL MOUSLI SAADA • <i>Sorbonne Univ. - PHENIX, France</i> |

17:10 Coffee break

MULTIFUNCTIONAL NANOCOMPOSITES

| | | |
|-------|--|---|
| 15:00 | Understanding the kinetics of formation of nanostructures through energy surfaces | Normand MOUSSEAU • <i>Univ. Montréal - Dpt of Physics, Canada</i> |
| 15:30 | Spin crossover in Fe(triazole)-Pt nanoparticle self-assembly structured at the sub-5 nm scale | Simon TRICARD • <i>CNRS - LPCNO, France</i> |
| 15:45 | Plasma based solutions to produce nanocomposite thin film coatings | Françoise MASSINES • <i>CNRS - PROMES, France</i> |
| 16:15 | Hybrid PECVD / direct liquid injection of a Colloidal Solution for SiO ₂ :TiO ₂ nanocomposite thin film deposition | Mireille RICHARD • <i>CNRS - IMN, France</i> |
| 16:30 | How to avoid nanoparticle aggregation in single step formation of nanocomposites | Anne-Françoise MINGOTAUD • <i>CNRS - IMRCP, France</i> |

17:10 Coffee break

15:00

THEMATIC SESSIONS

NANO GOLD BY YOUNG RESEARCHERS

| | | |
|-------|--|---|
| 15:00 | New basic organometallic reactivity of gold: towards new applications ? | Didier BOURISSOU • CNRS - LHFA, France |
| 15:30 | Excitation of multipolar surface plasmon modes offers new horizons in nano-localized surface chemistry | Théo GERONIMI-JOURDAIN • Paris Univ. - ITODYS, France |
| 15:45 | Optical monitoring of the switching of diarylethene molecules grafted on gold nanoparticles | Angeline DILESEIGRES • CNRS - INSP, France |
| 16:00 | Reaching a strong coupling regime between fluorescent emitters and a gold plasmonic resonator with DNA | Jeanne HEINTZ • CNRS - Langevin Institute, France |
| 16:15 | Quench Assembly of Gold Nanoparticles With Quaternized Chitosan | Florent VOISIN • Paris Univ. - MSC, France |
| 16:30 | Ultra-small nanospheres and ultrathin nanowires: growth mechanism study | Ezgi YILDIRIM • INSA Toulouse - LPCNO, France |

17:10 Coffee break

1D & 2D NANOMATERIALS

| | | |
|-------|---|---|
| 15:00 | Efficient light emission from hexagonal SiGe | Erik BAKKERS • Eindhoven Univ. of Technology- Dpt of Applied Physics, The Netherlands |
| 15:30 | Transport properties of a highly transparent Al-Ge/Si-Al core/shell nanowire heterostructures | Jovian DELAFORCE • CNRS - Neel Institute, France |
| 15:45 | Opto-magnetic study of Gold@Spin Crossover Nanocomposites | Nathalie DARO • CNRS - ICMCB, France |
| 16:00 | Growth mechanisms and highlights of 15R structure in ZnS nanowires: from VLS to VSS | Sumit KUMAR • UVSQ - GEMaC, France |
| 16:15 | Quantification of the intra-wall electric field in aluminosilicate nanotubes | Marie-Claire PIGNIE • CEA - NIMBE, France |

17:10 Coffee break

17:30 PLENARY SESSION

Francesca MORESCO (TU Dresden- CFAED, Germany) - *Functional molecules synthesized on surface: gears, nanocars and wires*

18:00 PRESENTATION BY THE 8 TEAMS OFFICIALLY REGISTERED TO NANOCAR RACE II

Chairperson: Christian JOACHIM (CNRS - CEMES, France)



19:00 PLENARY SESSION

Jean-Marc CHOMAZ (CNRS- LadHyX, France) - *The role of the sensitive world in scientific construction*

19:30 WELCOME COCKTAIL, POSTER SESSION & EXHIBITION

List of Oral Presentations

Wednesday, November 24th

08:30 PLENARY SESSION

Jacqueline BLOCH (CNRS- C2N, France) - *Emulating condensed matter with Quantum fluids of light*

09:30 PLENARY SESSION

Fernand DORIDOT (ICAM Lille- CETS, France) - *The NanoFabNet Hub for sustainable Nanofabrication*

10:00 SPONSORS PRESENTATIONS HIMT ; Bruker

10:30 Coffee break

10:50

THEMATIC SESSIONS

NANOPHOTONICS & NANO-OPTICS

10:50 Applications of metasurfaces

Patrice GENEVET • CNRS - CRHEA, France

11:20 Challenges in Nanofabrication for Efficient Optical Metasurfaces

Adelin PATOUX • AIRBUS - LAAS, France

11:35 Hyper doped silicon based tunable mid-IR plasmonic metasurfaces

Jean-Marie POUMIROL • CNRS - CEMES, France

11:50 2-octaves on-chip mid-infrared supercontinuum generation

Miguel BALLESTER MONTESINOS •
Univ. Paris-Saclay - C2N, France

12:05 UpConverting NanoParticles: from small to Ultrasmall "Nanolamps"

Christophe COUDRET • CNRS - IMRCP, France

12:20 Three-Dimensional Orientation Analysis of Nanocrystals via Polarized Luminescence of Rare-Earth Dopants

Thierry GACOIN • CNRS - LPMC, France

12:35 Slow acoustical waves in the GHz for integration of nano-optomechanical oscillators

Rémy BRAIVE • Univ. Paris - C2N, France

13:00 Lunch, Poster session & Exhibition

1D & 2D NANOMATERIALS

10:50 Intrinsic and Extrinsic Light Matter Interaction Processes in Hexagonal Boron Nitride

Bernard GIL • CNRS - L2C, France

11:20 Morphology and band offset in InGaAs/InP nanowires grown by selective area molecular beam epitaxy

Bruno GRANDIDIER • CNRS - IEMN, France

11:35 Investigating the parameters influencing the light emission of TMD monolayers transferred on dielectric nanoantennas

Vincent PAILLARD • CNRS - CEMES, France

11:50 Sequential processing of 2D covalent networks on metal substrates

Frédéric DUMUR • AMU - ICR, France

12:05 Single crystalline Te and Ag₂Te nanostructures for thermoelectric conversion

Karen AL HOKAYEM • Univ. of Lorraine - IJL, France

13:00 Lunch, Poster session & Exhibition

10:50

THEMATIC SESSIONS

NANOCHEMISTRY & NANOPARTICLES

| | | |
|-------|--|--|
| 10:50 | Tailoring Anisotropies in Nanocrystals | Jong-Wook KIM • Ecole Polytechnique – LPMC, France |
| 11:20 | Impact of precursor, solvent and ligand on the size and composition of iron oxide nanoparticles | Sylvie BEGIN • Strasbourg Univ. - IPCMS, France |
| 11:35 | «Non-classical» nucleation of oxide nanoparticles in solution: implications on structure control | David CARRIERE • CEA - NIMBE & LIONS, France |
| 11:50 | Controllable synthesis of ultra-small RE_2O_2S and $RE_2O_2S@NaREF_4$ heterogeneous core-shell nanoparticles | Qilin ZOU • Paul Sabatier Univ. - CEMES, France |
| 12:05 | Silver oxide nanoparticles electrosynthesis and characterization at the individual scale | Mathias MIRANDA VIEIRA • Paris Univ. - ITODYS, France |
| 12:20 | Shape-controlled synthesis of ultra-thin indium sulfide nanoribbons | Lilian GUILLEMENEY • ENS Lyon - LCH Lyon, France |
| 12:35 | Controlling the Synthesis of InP Nanocrystals using the Secondary Coordination Sphere | Fabien DELPECH • INSA Toulouse - LPCNO, France |
| 12:50 | One-step microwave synthesis of functionalized magnetic nanoparticles | Thomas GIRARDET • Univ. of Lorraine - IJL, France |

13:00 **Lunch, Poster session & Exhibition**

NANOMATERIALS FOR ENERGY

| | | |
|-------|---|---|
| 10:50 | Spatial atomic layer deposition: a high-throughput, open-air technique allowing the deposition of patterned functional materials | David MUNOZ-ROJAS • CNRS - LMGP, France |
| 11:20 | Nanopowders Based Transition Metal Oxides for Enhanced Electrochromic Properties | Brandon FACEIRA • CNRS - ICMCB, France |
| 11:35 | Molybdenum-Containing Oxysulfide Nanoplates: Characterization of their Structure and Active Sites for Electrocatalysis | Sophie CARENCO • CNRS - LCMCP, France |
| 11:50 | Out of stoichiometry $CuCrO_2$ thin films as Sustainable Hole Transparent Layer in recyclable organic solar cells | Jean-Luc DESCHANVRES • CNRS - LMGP, France |
| 12:05 | Experimental Evidence of the Role of Structural Short-Range Order on the Electrochemical Activity of Iridium Oxide | Marine ELMAALOUF • Univ. de Paris - ITODYS, France |
| 12:20 | 3D MnO_2/Ni Network as Electrode Material for High Areal Energy Microsupercapacitors | Botayna BOUNOR • CNRS - LAAS, France |
| 12:35 | Ni-Fe oxide electro-catalysts for the Oxygen Evolution Reaction | Caterine AMIENS • CNRS - LCC, France |

13:00 **Lunch, Poster session & Exhibition**

15:00 **PLENARY SESSION**

Suzanne GIASSON (Univ. of Montréal- CRMMA & GRUM, Canada) - *Multi-Responsive Two-Dimensional Microgel Arrays as Coatings for Independent and Specific Control of Surface Properties*

List of Oral Presentations

Wednesday, November 24th

16:00

THEMATIC SESSIONS

NANO-OPTICS & NANOPHOTONICS

16:00 Plasmonics Purcell factor: reconciling classical and cQED approach and downscaling quantum optics to the nanoscale **Gérard COLAS DES FRANCS** • *Univ. Bourgogne - ICB, France*

16:30 Polarization can drive light emission from hybrid plasmonic nanosources **Renaud BACHELOT** • *UTT - LN2, France*

16:45 Controlled positioning of single-photon emitters and coupling to dielectric nanoantennas by AFM-nanoxerography **Mélodie HUMBERT** • *CNRS - LPCNO, France*

17:00 **Coffee break**

17:20 Wavelength selective grating fabricated by thin dye local photo-bleaching using laser writer **Alban GASSENQ** • *UCB - ILM, France*

17:35 Unexpected enhancement of Förster Resonant Energy Transfer thanks to quantum dots aggregation **Thomas NOBLET** • *Univ. of Liège - CESAM, France*

17:50 Colloidal Aluminum Nanoparticles Synthesis for UV Plasmonic **Marion CASTILLA** • *UTT - L2N, France*

MULTIFUNCTIONAL NANOCOMPOSITES

16:00 Versatile and scalable approaches to chemical processing of nanocarbons **Milo SHAFFER** • *Imperial College London – Dpt of Chemistry, UK*

16:30 Magnetic Stimulation of Phase-Changing Nanocomposites **Pablo GRIFFITHS** • *INSA Lyon - MATEIS, France*

16:45 Versatile Design of Multifunctional Microgels from Molecular, Nano- and Microscale Building Blocks for Biomedical Applications **Xiao YU** • *Université de Paris - LCBPT, France*

17:00 **Coffee break**

17:20 Control of graphene localization in co-continuous PMMA/PS polymer blends via chemical modification for electrical applications **Thibaut LALIRE** • *IMT Mines Ales - PCH, France*

17:35 Controllable, resilient and efficient artificial muscles based on spin-crossover/polymer nanocomposites **Mario PIEDRAHITA-BELLO** • *CNRS - LCC, France*

17:50 Easy colorimetric detection of Gadolinium ions based on gold nanoparticles: Key role of phosphine-sulfonate ligands **Diana CIUCULESCU** • *Univ. Toulouse III - Paul Sabatier - IMRCP, France*

18:05 Nanoscale Mechanical and Electrical Characterization of the Interphase in Polyimide/Si3N4 Nanodielectric Materials **Nadine LAHOUD-DIGNAT** • *Univ. Toulouse III - Paul Sabatier - LAPLACE, France*

Saint-Exupéry
Amphitheater

Spot
room

Cassiopee
room

Saint-Exupéry
foyer

16:00

THEMATIC SESSIONS

NANOCHEMISTRY & NANOPARTICLES

| | | |
|-------|---|---|
| 16:00 | Ligand Chemistry and Aggregation kinetics of Cs:WO ₃ Nanocrystals | Capucine CLERET DE LANGAVANT • EP - LCMCP, France |
| 16:15 | MgO nanocatalyst for the valorisation of CO ₂ in the cycloaddition to epoxides | Cyprien POUJIN • CNRS - LCMCP, France |
| 16:30 | Preparation of nanoparticles in supercritical conditions; interesting insights in the use of supercritical solvents | Cynthia CIBAKA NDAYA • CNRS - ICMCB, France |
| 16:45 | Influence of thiol ligands on the ZnSe magic-sized cluster formation | David K. WEGNER • - BAM - Division Biophotonics, Germany |

17:00 Coffee break

| | | |
|-------|--|--|
| 17:20 | Synthesis of copper nanoparticles with tunable sizes and shapes | Armelle OUALI • CNRS- ICGM, France |
| 17:35 | Synthesis of cobalt nanorods and self-assembly assisted by magnetophoresis | Antoine GONON • INSA Toulouse - LPCNO, France |
| 17:50 | Eco-friendly Routes to Metallic Bismuth Nanoparticles | Catherine GOMEZ • Cnam - GBCM, France |
| 18:05 | Original functional nanoparticles in molten salts | David PORTEHAULT • CNRS - LCMCP, France |

NANO FOR IMAGING, DIAGNOSIS & THERAPY

| | | |
|---------------------------|---|--|
| 16:00 | Polymeric micelles for topical treatment of ocular diseases | Carmen Isabel ALVAREZ LORENZO • USC – Pharma. Tech., Santiago de Compostela – Spain |
| 16:30 | Carbon nanotubes based composite for non-invasive transdermal drug delivery | Juliette SIMON • Toulouse III Univ. - Paul Sabatier - CIRIMAT, France |
| 16:45 | Effect of the microstructure of n-butyl acrylate/N-isopropylacrylamide copolymers on their thermo-responsiveness, self-organization and gel properties in water | Fang Yin • Toulouse Univ. - IMRCP, France |
| 17:00 Coffee break | | |
| 17:20 | Synthesis and self-assembly of amphiphilic multi-responsive block copolymers for drug delivery applications | Clémence NADAL • Toulouse III Univ. - Paul Sabatier - CIRIMAT, France |
| 17:35 | Bio-inspired apatite-based nanoparticles: a smart platform for nanomedicine | Christophe DROUET • CNRS - CIRIMAT, France |
| 17:50 | Encapsulation of bio-inspired Mn complexes in mesoporous silica nanoparticles with improved biocompatibility for the regulation of oxidative stress | Tristan PELLUAU • Montpellier Univ. - ICGM, France |

18:30 C'NANO & RENATECH PhD AWARDS 2021

20:30 GALA DINNER

List of Oral Presentations

Thursday, November 25th

9:00

PLENARY SESSION

Teresa PELLEGRINO (ITT- Central Research Labs Genova, Italy) - *Combining magnetic hyperthermia with other therapeutic strategies to tackle cancer*

10:00 Coffee break

10:20

THEMATIC SESSIONS

NANO FOR IMAGING, DIAGNOSIS AND THERAPY

| | | |
|-------|---|--|
| 10:20 | Nanoscale exploration of live brain tissue based on super-resolution microscopy and near-infrared emitting carbon nanotubes | Laurent COGNET • CNRS - LP2N, France |
| 10:50 | Influence of polymer micelles in the delivery of a photosensitizer to model membranes and cells | Clément ROUX • Toulouse Paul Sabatier Univ. - IMRCP, France |
| 11:05 | Hafnium Oxide nanoparticles synthesis for the detection of atherothrombosis through X-ray imaging | Yasmine SEBTI • Sorbonne Paris Nord Univ. - LVTS, France |
| 11:20 | Luminescent Polymer Nanoparticles for Intracellular Imaging | Andreas REISCH • Strasbourg Univ. - LBP, France |
| 11:35 | Molecular Nanocrystals for Bioimaging | Alain IBANEZ • CNRS - NEEL Institute, France |
| 11:50 | Surface engineering of silica nanoparticles with a Gd-PCTA complex for efficient T1-weighted MRI contrast agents | Catherine AMIENS • Toulouse Paul Sabatier Univ. - LCC, France |
| 12:05 | Raman reporters derived from aryl diazonium salts for SERS encoded-nanoparticles | Yun LUO • CNRS - LCBPT, France |

12:30 Lunch, Poster session & Exhibition

NANOSCALE HEAT TRANSFER - MEASUREMENT

| | | |
|-------|---|---|
| 10:20 | Ultrafast energy transfer imaged by time domain thermoreflectance | Stefan DILHAIRE • Bordeaux Univ. - LOMA, France |
| 10:50 | Investigating heat transparency of metal transducers in ThermoReflectance | Jean-Michel RAMPNOUX • Bordeaux Univ. - LOMA, France |
| 11:05 | Synthesis and thermal properties of GO-TiO ₂ /PEDOT:PSS polymer nanocomposites | Shivani SHISODIA • ULCO - UDSMM, France |
| 11:20 | Evaluation of heat transport in «liquid-nanoporous Si» composite by μ -Raman spectroscopy | Oksana MAKUKHA • CNRS - INL, France |
| 11:35 | Surface temperature mapping and thermal damping properties of spin-crossover molecules | Karl RIDIER • CNRS - LCC, France |
| 11:50 | Hybrid modes in a thermally excited isolated pair of antennas | Loubnan ABOU-HAMDAN • ESPCI Paris - Langevin Institute, France |

12:30 Lunch, Poster session & Exhibition

10:20**THEMATIC SESSIONS****NANOCHEMISTRY & NANOPARTICLES**

| | | |
|--------------|--|--|
| 10:20 | Probing ligand coordination in Zinc oxide nanocrystals enabled by Dynamic Nuclear Polarization enhanced solid-state NMR | Gaël DE PAEPE • CEA - IRIG, France |
| 10:50 | Fabrication of complex metasurfaces to control visual appearance | Adrian HEREU • CNRS - ICMCB, France |
| 11:05 | Plasmonic hybrid nanoparticles in catalysis | Clémence QUEFFELEC • Nantes Univ. - CEISAM, France |
| 11:20 | Upgrading biomass by bimetallic catalysts | Miquel CARDONA • Paul Sabatier Univ. - LCC, France |
| 11:35 | Flow synthesis of silver nanodisks: mechanisms & rational processing | Kevin ROGER • CNRS - LGC, France |
| 11:50 | The role of pre-nucleation clusters in the crystallization of gold nanoparticles | Raj Kumar RAMAMOORTHY • INP Toulouse - LGC, France |
| 12:05 | Metal nanostructures formed by electrodeposition in microchannels: study of the growth mechanism and application to SERS | Fabien CHAUVET • Toulouse Paul Sabatier Univ. - LGC, France |

12:30 Lunch, Poster session & Exhibition**NANOMATERIAL FOR ENERGY**

| | | |
|--------------|--|---|
| 10:20 | Atomistic modeling of heat propagation in nanomaterials | Evelyne MARTIN • CNRS - ICube, France |
| 10:50 | Ultrafast dynamics of hot carriers in bulk semiconductors and in accumulation layer: energy relaxation and screening effects | Jelena SJAKSTE • CNRS - LSI, France |
| 11:05 | Low-energy bandgap thermophotovoltaic cells for harnessing near-field thermal photons | Rodolphe VAILLON • CNRS - IES, France |
| 11:20 | Influence of silicon nano-inclusions shape and interconnection on thermal conductivity in an amorphous Si matrix | Paul DESMARCHELIER • CNRS - CETHIL, France |
| 11:35 | Radiative sky cooling of solar cells: fundamental modelling and cooling potential of single-junction devices | Jérémy DUMOULIN • INSA Lyon - INL, France |
| 11:50 | MBE-grown GaAs/GaNIP nanowire arrays on Silicon for tandem solar cells | Capucine TONG • IPVF - IPVF, France |

12:30 Lunch, Poster session & Exhibition

List of Oral Presentations

Thursday, November 25th

14:00

THEMATIC SESSIONS

NANO FOR IMAGING, DIAGNOSIS AND THERAPY

| | | |
|-------|---|--|
| 14:00 | Development of innovative nanocomposite hydrogels for the treatment of Glioblastoma | Amel DJOUDI • Angers Univ. - CRCINA, France |
| 14:15 | Biocompatible photoacoustic nanoparticulate contrast agents based on BODIPY-scaffold and polylactide polymers | Jean-Baptiste BODIN • Paris-Saclay Univ. - ISMO, France |
| 14:30 | All-organic, intrinsically stealth nanoparticles for single particle tracking and bioimaging | Morgane ROSENDALE • Bordeaux Univ. - ISM, France |
| 14:45 | Hybrid Cationic Elastin-like Polypeptides for Nucleic Acids Delivery | Monica BRAVO • CNRS - ISCR, France |

15:10 Coffee break

NANOSCALE HEAT TRANSFER - MEASUREMENT

| | | |
|-------|---|---|
| 14:00 | Scanning thermal microscopy: probing temperature & heat dissipation down to the few-nanometer scale | Pierre-Olivier CHAPUIS • CNRS - CETHIL, France |
| 14:30 | Traceability of thermal conductivity measurements at nanoscale by SThM technique and associated uncertainties | Sarah DOURI • LNE - CETHIL, France |
| 14:45 | Near-field thermal radiation: material and temperature effects | Pierre-Olivier CHAPUIS • CNRS - CETHIL, France |

15:10 Coffee break

14:00

THEMATIC SESSIONS

NANOCHEMISTRY & NANOPARTICLES

| | | |
|-------|---|--|
| 14:00 | 40 years of PDF in Toulouse | Pierre LECANTE • CNRS - CEMES, France |
| 14:15 | Synthesis of SiO ₂ Nanoparticles as reference material : nanometrology and in situ kinetics in lab by Small angle -X-ray scattering measurements | Olivier TACHE • CEA - NIMBE, France |
| 14:30 | Self-assembled monolayers of CdTe quantum dots: chemisorption versus physisorption | Thomas NOBLET • Liège Univ. - GRASP-Biophotonics, Belgium |
| 14:45 | Bottom-up design and realisation of stable fullerene spin systems | Chris EWELS • CNRS - IMN, France |

15:10 Coffee break

NANOMATERIAL FOR ENERGY

| | | |
|-------|---|--|
| 14:00 | On the UV-visible light synergetic mechanisms in hybrid Au/TiO ₂ nanostructures achieving photo-reduction of water | Maria Isabel MENDOZA DIAZ • CNRS - LAAS, France |
| 14:15 | Nb/Ta, N co-doped TiO ₂ nanoparticles for broad spectrum solar light activation photocatalysis | Qingyang XI • CNRS - ICPEES, France |
| 14:30 | Fabrication of nanostructured permanent magnet by magnetophoresis for MEMS applications | Pierre MORITZ • CNRS - LAAS, France |
| 14:45 | Growth, structure and dynamics of ferroelastic domains in GeTe thin films on Si(111) | Boris CROES • AMU - CINaM, France |

15:10 Coffee break

15:30 BEST TALKS & POSTERS & SCIENCES IMAGES AWARDS CEREMONY

16:00 CLOSING SESSION