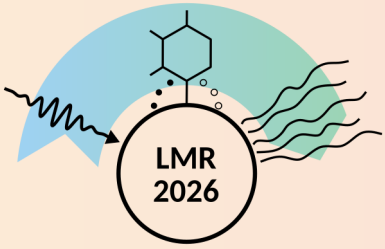
LMR 2026



Light.Metal.Reactions 2026

September 08 - 11, 2026 - University of Potsdam, Campus Neues Palais

Tuesday, September 08

14:00	Lobby	Registration
14:45	Audimax	Opening by the organizers
15:00	Audimax	Keynote **Andrea Baldi**, Vrije Universitet Amsterdam, "*Hot particles, hot spots, and hot carriers: lessons learned and (some) open questions in plasmonic catalysis*"
15:50	Audimax	Session **Plasmon-Driven Catalysis I** 15:50 **Vivek Polshettiwar**, Tata Institute of Fundamental Research, Mumbai, "*LIGHT, HOT ELECTRONS and CO2 CONVERSION*" 16:20 **Yoel Negrín Montecelo**, King's College London, "*From Plasmons to Photocatalysis: Metal–Semiconductor Nanohybrids*" 16:40 **Pramod Pillai,** Indian Institute of Science Education and Research, Pune, "*Photoredox Catalysis with Visible light Using Quantum Dot-Sensitized Photon Upconversion*"
17:00	Lobby	Coffee break
17:20	Audimax	Session **Plasmon-Driven Catalysis II** 17:20 **Priscila Vensaus**, EPFL, Lausanne, "*Unraveling hot carrier processes for advancing plasmonic energy devices*" 17:50 **Tannu Kaushik**, Indian Institute of Technology Bombay, "*Plasmonic Gold Antenna–Copper Molecular Complex Reactor Assembly for Exclusive CO2 to Formate Conversion under White-Light Irradiation*" 18:10 **Emiliano Cortés,** LMU Munich, "Plasmonic Control of Catalytic Reactivity"
18:45	Lobby	Welcome reception

Wednesday, September 09

9:00	Audimax	Keynote
		Laura Na Liu, University of Stuttgart, "*TBA*"
09:50	Audimax	Session **Preparation and Characterisation of Metal Nanostructures I**
		09:50 **Isabel Pastorizia Santos**, University of Vigo, "*TBA*"
		10:20 **Wiebke Albrecht**, AMOLF, "*TBA*"
		10:40 **Lorenzo Maria Iacomini**, University of Turin, "*Facet-Controlled Gold Nanostructures for Plasmon-Driven Catalysis*"
11:00	Lobby	Coffee break
11:30	Audimax	Session **Photoinduced Processes**
		11:30 **Wouter Koopman**, University of Potsdam, "*Capacitive Photocharging in Plasmon-Driven Catalysis*"
		11:50 **Christian Rossner**, Leibniz Institute of Polymer Research Dresden, "*Photocatalysis at the gold surface and inside the polymer shell of polymer-grafted gold nanoparticles*"
		12:10 **Arik Beck**, Karlsruhe Institute of Technology, "*Distinct Kinetic Signatures of Photodesorption from Metal Nanoparticles*"
		12:30 **Paolo Giusto**, Max Planck Institute of Colloids and Interfaces, Potsdam, "*Carbon Nitride Thin Films for Light-Induced Catalysis*"
13:00	Refectory	Lunch
14:00	Lobby	**Poster Session I**
15:40	Audimax	Session **Modelling Metal Nanooptics**
		15:40 **N. Asger Mortensen**, University of Southern Denmark, Odense M, "*Mesoscopic electrodynamics at metal surfaces*"

		16:10 **Ashwani Kumar Verma**, Politecnico di Torino, "*Collective Dipole-Multipole Oscillations and Nanometric Plasmon Rulers of End-to-End Oriented Gold Nanostar (AuNS) Dimers* " 16:30 **Gino Wegner**, Humboldt University of Berlin, "*Spectral tunability of localized surface plasmons on noble metals via shape and material*"
16:50	Lobby	Coffee break
17:20	Audimax	Session **Preparation and Characterisation of Metal Nanostructures II** 17:20 **Emilie Ringe**, University of Cambridge, "*Nanoplasmonics with magnesium*" 17:50 **Gail A. Vinnacombe-Willson**, CIC biomaGUNE (BRTA), Donostia-San Sebastián, "B*ottom-up in situ growth of gold nanoparticles in microfluidics and their application in cell models in vitro*" 18:20 **Youngsoo Kim**, Yeungnam University, Gyeongsan, "*Recyclable Multi-Tip Au Nanostructures for Thermoplasmonic Organic Synthesis*"
19:30	Restaurant "Zur Historischen Mühle"	Conference Dinner

Thursday, September 10

9:00	Audimax	Keynote **Christy Landes**, University of Illinois at Urbana-Champaign, "*Energy Transfer in Hybrid Plasmonic Nanoparticles*"
09:50	Audimax	Session **Tailoring Nanostructures for Photoreactions** 09:50 **Sangwoon Yoon**, Chung-Ang University, Seoul, "*Plasmon-Driven Phase Engineering of TiO_2 Nanoshells via Collective Thermal Accumulation in Plasmonic Core–Shell Nanoparticle Assemblies*" 10:20 **Diptiranjan Paital**, King's College London, "*Tailoring Plasmonic Heterojunctions for Synergistic Hot-Carrier and Photo-thermal Catalysis*"

		10:40 **Sergio Kogikoski Junior**, University of Potsdam, "*Not Always the Same: The Metal-Molecule Interactions in Gold and Silver Nanoparticles in Plasmonic reactions*"
11:00	Lobby	Coffee break
11:30	Audimax	Session **Chirality in Plasmon-Driven Chemistry I**
		11:30 **Jihyeon Yeom**, Korea Advanced Institute of Science and Technology, Daejeon, "*TBA*"
		12:00 **Dong-Il Won**, Ewha Womans University, Seoul, "*Polarization-Selective Efficient Hydrogen Evolution Reactions via Chiral Photocatalysis*"
		12:20 **Ziwei Zhou**, Leibniz Institute of Polymer Research Dresden, "*Tunable Plasmonic Chirality Enabled by Nanoparticle Chain Assemblies*"
		12:40 **Antonio Carone,** Max Planck Institute of Colloids and Interfaces, Potsdam, "*Bio-inspired self-assembled chiral architectures for plasmonics*"
13:10	Colonnade	Group picture
13:15	Refectory	Lunch
14:30	Audimax	Session **Ultrafast Processes**
		14:30 **Ivana Savic**, King's College London, "*Ab-Initio Simulations of Ultrafast Processes in Semiconductors*"
		15:00 **Christian Brand**, University of Duisburg, "*Ultrafast energy flow and enhanced non-equilibrium coupling among electrons and phonons in a Pb/Si nanoscale heterosystem* "
		15:20 **Henry Snowden**, University of Göttingen, "*Non-equilibrium electron dynamics in plasmonic photocatalytic biomaterials*"
		15:40 **Guobin Miao**, Vrije Universiteit Amsterdam, "*Pulsed Optical Excitation of Photothermal CO_2 Hydrogenation*"
16:00	Lobby	Coffee break
16:30	Audimax	Session **Strong Light-Matter Coupling**

16:30 **Jussi Toppari**, University of Jyväskylä, "*Polaritonic chemistry – polaritons or optical illusions*"

16:50 **Richard Gundermann**, University of Potsdam, "*Understanding Resonance-Enabled Polaritonic Control of Hydrogen Transfer Dynamics and Relaxation*"

17:10 **Gabriela Luna Amador**, Free University of Berlin, "*Engineering Losses through Light-Matter Coupling in Plasmonic Supercrystals*"

17:30 Lobby **Poster Session**

Friday, September 11

9:00 Audimax Keynote

Javier Aizpurua, University of the Basque Country (UPV/EHU), "*Ultrafast dynamics of energetic carriers induced by optical pulses in plasmonic nanogaps and nanoparticles*"

09:50 Audimax Session **Light-Driven Charge and Bond Dynamics at the Nanoscale**

09:50 **Annika Bande**, Leibniz University Hannover, "*Light.Material.Electrons*"

10:20 **Olivier Henrotte**, LMU Munich, "*Quantification of Light-Driven Charge Extraction in Plasmonic and Catalytic Metals* "

10:40 **Hyungjun Park**, University of Tokyo, "*Monitoring plasmon-induced stepwise C–O dissociation at the single-molecule level by scanning tunnelling microscopy*"

11:00	Lobby	Coffee break
11:30	Audimax	Session **Chirality in Plasmon-Driven Chemistry II**

11:30 **Lucas Vazquez Besteiro**, University of Vigo, "*A theoretical perspective on plasmonic photocatalysis and light-to-matter chirality transfer*"

12:00 **Yingying Cai**, Leibniz Institute of Polymer Research Dresden, "*Direct Printing of Chiral Plasmonic Nanocrystals with Modulated Chiroptical Responses from Conformal Semiconductive Layers*"

12:20 **JP Singh** Indian Institute of Technology, Delhi, "*SERS-based label-free enantioselective discrimination of chiral molecules using GLAD substrates*"

12:40 **Aso Rahimzadegan**, Max Planck Institute of Colloids and Interfaces, Potsdam, "*Chiroptical Emergence in Disordered Plasmonic Assemblies*"

13:10	Refectory	Lunch
14:00	Audimax	Session **Emerging Directions in Plasmonic Design, Emission and Catalysis**

14:00 **Stephan Link**, University of Illinois at Urbana-Champaign, "*Carrier dynamics in plasmonic nanostructures*"

14:30 **Christian Schäfer**, TU Wien, "*Few-emitter lasing and defect-enhanced plasmonic catalysis: Exploring novel directions in plasmonic design*"

14:50 **Rishi Verma**, Tata Institute of Fundamental Research, Mumbai, "*Harnessing Plasmonic Effects in Black Gold-Nickel for Solar Catalysis*"

15:10 **Alina Gorbunova**, TU Wien, "*Toward Better Model Reactions in Plasmon Catalysis: from Azo Coupling to Alkoxyamine Homolysis*"

15:30 **Martin Reifarth**, University of Potsdam, "*Rethinking Gold Surface Chemistry through Copper N-Heterocyclic carbene (NHC) Complexes*"

15:50	Audimax	Closing remarks

Poster Session I, Wednesday, September 09, 14:00:

01. **Gunjan Sharma**, Tata Institute of Fundamental Research, Mumbai, "*Hot-electron Driven Selective Olefin Transformations Using Plasmonic 'Black Gold' Nanoreactors*"

02. **Svetlana Santer**, University of Potsdam, "*Surface-Confined Polymer Growth Guided by Plasmonic Near-Field Interference*"

03. **Alexander Spears**, University of Vienna, "*Electronic friction simulations of laser-driven hydrogen evolution. Does surface coverage matter?*"

04. **Jaipreet Singh**, Tata Institute of Fundamental Research, Mumbai, "*From Black Gold to Black Nickel: Defect-Engineered Catalysts for Visible Light CO_2 Reduction*"

05. **Nicolas Jahn,** University of Potsdam, "*Nonadiabatic Molecular Dynamics Enables Direct Modeling of Plasmon-Driven Processes at the Single Molecule Level*"

06. **Ziwen Yu**, Leibniz Institute of Polymer Research Dresden, "*2D wrinkle assisted zigzag plasmonic chains for isotropic SERS enhancement*"

07. **Niklas Bier**, University of Potsdam, "*In situ monitoring of plasmon driven chemical reactions by NMR spectroscopy*"

08. **Radwan Mohamed Radwan**, University of Potsdam, "*Plasmon-induced tandem chemical transformations of thiolated benzylamine derivative*"

09. **Jonathan Eifler**, University of Potsdam, "*A MACE-Based Machine Learning Potential for GNR Formation on Au (111)"*

10. **Anton Plech**, Karlsruhe Institute of Technology, "*Thermal dynamics of noble metal colloids in photo-excitation and fragmentation*"

11. **Jon Scouten**, University of Potsdam, "*Plasmon-Driven Enhancement of Interfacial Electronic Excitations at Metal–Molecule Contacts*"

12. **Jonas Grumm**, University of Potsdam, "*Theory of Electron Relaxation Under Optically Induced Non-Equilibrium Conditions in Plasmonic Noble Metals*"

13. **Shreya Sinha**, University of Potsdam, "*Unraveling Intermode Couplings in Water under Vibrational Strong Coupling via IR Spectroscopic Signatures: A Full-Dimensional Quantum Dynamics Approach*"

14. **Peter Saalfrank**, University of Potsdam, "*Ultrafast photoinduced dynamics of hydrogen on gold surfaces*"

15. **Elham Mazarei**, University of Potsdam, "*Electronic states of diarylethene switch on gold nanoclusters*"

16. **Tobias Eckardt**, University of Potsdam, "*Light Meets Nano - Development of a student lab module on the topic of light and its interaction with metal nanoparticles*"

17. **Olga Artemyeva**, University of Potsdam, "*Chemical Reactivity of Pd (111) Surface*"

18. **Namitha Deepak**, University of Potsdam, "*The Metal Organic Interface of Halogenated Thiophenol Functionalized Silver Nanoparticles*"

19. **Lars Dannenberg**, Humboldt University of Berlin, "*Hot-Electron-Induced Oligomerization of Allyl mercaptan*"

20. **Xiaofeng Zhou**, LMU Munich, "*Ferroelectricity-enabled CO2-to-methane photoreduction through dual interfacial Schottky junctions*"

21. **Nour el Houda Chetoui**, University of Potsdam, "*Temperature Dependence of Electron-Phonon Coupling in Gold Nanoparticles*"

22. **Robert Lemke**, Technische Universität Berlin, "*Optical Response of Noble Metals based on Boltzmann-Bloch Equations*"

23. **Alexandra Faber**, University of Potsdam, "*Setting University of Potsdam Dark-Field Spectroscopy for Measuring Photocharging of Single Gold Nanorods*"

24. **Kimiya Setayeshmehr**, Vrije Universiteit Amsterdam, "*Towards tuning the selectivity of the CO_2 reduction reaction on single silver nanoparticles*"

25. **Shivani Kesarwani**, University of Potsdam, "*Synthesis of gold nanoparticle based hybrid materials*"

26. **Sufian Rasheed**, University of Potsdam, "*Monitoring the reaction pathway of a plasmon-induced retro-Diels-Alder reaction using few-molecule SERS*"

27. **Zahra Sartipi**, University of Potsdam, *Canonically Consistent Quantum Master Equation for Proton-Transfer Reactions*"

28. **Aji Alexander**, University of Potsdam, "*Investigating the growth mechanism of KBr on glass by nc-AFM*"

29. **Mitra Esfandiari**, University of Potsdam, "*Plasmonic Au Nanoparticles with Covalent Ru–Polypyridyl Polyelectrolyte Copolymer: Synthesis, Characterization & Photocatalysis*"

30. **Anton S. Zverev,** University of Potsdam, "*SERS-tracked plasmonic photocatalysis: beyond thiol-functionalized model systems*"

31. **Jannes Manglani-Dreßler**, Berliner Hochschule für Technik, "*Role of Ligands in the Photocatalytic Conversion of 4-Nitrophenol by Gold Nanoparticles*"

32. **Carsten Henkel**, University of Potsdam, "*Infrared Response of Metals — Colossal Magnetic Susceptibility*"

33. **Helena Poulose**, University of Potsdam, "*Understanding Vibrational Strong Coupling through non-linear IR spectroscopy*"

34. **Samanwita Biswas**, University of Potsdam, "*Electronic properties of lithography-fabricated Pd nanocontacts*"

35. **Grace Hsiao-Han Chuang**, Max Planck Institute for the Physics of Complex Systems, "*Calculating excitonic interactions using transition currents with application to PTCDA*"

36. **Yulia Gordievskaya**, University of Potsdam, "*Microgels as a Tool for Detecting Laser-Induced Heating of Plasmonic Metal Structures"*

37. **Nafsika Mouti**, University of Potsdam, "*Comparative Deposition of SERS-Active Nanoparticles for Biosensing Applications"*

Poster Session Session II, Thursday, September 10, 17:30:

01. **Naincy Mall**, University of Potsdam, "*Two-photon processes and plasmon-induced nitroxide-mediated radical polymerization (NMP)*"

02. **Veronika Adolfs,** Leibniz University Hannover, "*Fiber-based Plasmonic Microreactor for Flow Chemistry*"

03. **Jaya Bharti**, University of Potsdam, "*Interfacing Ionic Carbon Nitride with Molecular Catalysts for Tunable Photocatalytic CO2 Reduction*"

04. **Hari Haran Srinivasalu**, University of Potsdam, "*Plasmon-Induced Mizoroki-Heck Cross-Coupling Reaction on Au@Pd Nps*"

05. **Alexandre Chícharo,** nanoSpec Technologies, Berlin, "*High-density plasmonic hotspots in nanofabricated Au SERS substrates*"

06. **J. Mark Young**, University of Potsdam, "*From photons to fertilizer"*

07. **Biswajit Bhattacharyya**, University of Potsdam, "*Ternary Sulfide-Based Semiconductor Nanocrystals: An Efficient Alternate Plasmonic Photocatalyst*"

08. **Ajay Kumar**, University of Potsdam, "*Modelling and Measurement of the distance-Dependant Electrostatic Interactions on Pb Islands on Si (111) substrate*"

09. **Fariha Binte Rahman**, Humboldt University of Berlin, "*Monitoring Local Interactions in Biomolecules by Surface Enhanced Linear and Nonlinear Raman Scattering*"

10. **Jorik Schaap**, University of Twente, "*Probing Carrier Dynamics in Plasmonic Silver Nanoparticles Under Electrochemical Bias*"

11. **Anant Mantha**, Humboldt University of Berlin, "*Metal film over nanosphere substrates for plasmonic catalysis*"

12. **Anahita Heraji Esfahani**, University of Potsdam, "*Plasmon-Enhanced RAFT Polymerization*"

13. **Christopher Penschke**, University of Potsdam, "*Accurate optoelectronic properties of CuFeS2 from quantum-chemical calculations*"

14. **Leo Cordsmeier**, Helmholtz-Zentrum Berlin, "*The influence of plasmonic nanoparticles on the surrounding solution probed by soft X-ray absorption spectroscopy*"

15. **Wagner Ribeiro da Silva Neto**, Helmholtz-Zentrum Berlin, "*Can kinetic inertness be overcome upon photoexcitation? A demonstration of site-selective photoaquation of [Co(en)3] 3+ , a strongly chelated and inert metal complex*"

16. **Lisa Mehner**, University of Potsdam, "*Inverted Temperature Gradients in Au-Pd core-satellite systems*"

17. **Athena Majlesi**, University of Potsdam, "*Momentum Resolved Raman Microscopy: From Solid State Phonons to Vibro-Polaritons*"

18. **Mathis Noell**, University of Potsdam, "*Polariton Composition in a Dispersive Tavis-Cummings Model*"

19. **Sonia Zoltowska**, University of Potsdam, "*Merging Triazine-Based COFs with Plasmonic Nanoparticles: Interface Design for Visible-Light Polymer upcycling*"

20. **Sarah von Chamier Gliszczinski**, University of Potsdam, "*Investigations into light-driven C-C-bond forming reactions catalysed by Pd-Au-nanoparticles*"

21. **Jan Kutschera**, University of Potsdam, "*From Anti-Stokes Thermometry to Ultrafast Probing of Energy Transfer*"

22. **Christina Beresowski**, University of Potsdam, "*Probing few molecule chemical reactions using DNA-origami-assembled nanoparticle dimers*"

23. **Wira Muliarta**, Humboldt University of Berlin, "*Mie theory for charged spheres*"

24. **Hubert Czternastek**, Helmholtz-Zentrum Berlin, "*Mechanistic studies of light induced reactions using X-ray absorption spectroscopy*"

25. **Victoria Chua**, University of Potsdam, "*Synthesis and biological assessment of photoactivatable AuNP/Platinum complex nanohybrids as therapeutic agents*"

26. **Guilherme Carraro Carella**, Humboldt University of Berlin, "*MMie-esfera: A modular Mie-theory solver for nanospheres probed by light, dipoles, and swift electrons*"

27. **Sivoney Ferreira de Souza**, University of Potsdam, "*PFOA mineralization via photocatalytical reaction*"

28. **Shashank Kumar Gahlaut**, University of Potsdam, "*Bridging Chiral Plasmon-Driven Catalysis and Enantiomeric SERS Discrimination via Gold Helicoid Nanostructures*"

29. **Andreas Taubert**, University of Potsdam, "*Metal halide ionic solids - not plasmonic yet, but maybe soon?*"

30. **Aritra Biswas**, Seoul National University, "*Chiral Gold-Helicoid Nanoparticle for Driving Organic Reactions*"

31. **Julius Schwarz**, DESY, "*Towards Time-Resolved XPS of 2-Thiouracil treated Au Nanospheres*"

32. **Arseniy Epishin**, Free University of Berlin, "*Quadrupolar plasmon-polaritons in metallic nanoparticle supercrystals*"

33. **Carsten Henkel**, University of Potsdam, "*Bridging Atomic and Mesoscopic Scales for the Electron Density of a (Surface) Plasmon*"

34. **Florian Schmitt**, University of Potsdam, "*Surface modification in confined nanospaces via NHC ligands on gold nanoparticles*"

35. **Jonas Strobelt**, University of Potsdam, "*Light-Directed Fabrication of Plasmonic Nanobelt Arrays via Opto-Mechanical Stresses in Photosensitive Polymer Films*"

36. **Anisha Pathak**, University of Potsdam, "*DNA origami assisted programmable plasmonic nanoreactors for single molecule catalysis*"

37. **Jon Scouten,** University of Potsdam, "*Towards Understanding Chiroptical Response in 432 Helicoid Gold Nanocube Supercrystals*"