

## 2023 Chemistry Travel Awards by SCNAT and SCS

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The Platform Chemistry of the Swiss Academy of Sciences (SCNAT), in collaboration with the Swiss Chemical Society (SCS), is pleased to announce the selection of 45 winners for the Chemistry Travel Award 2023. This initiative aims to provide financial support to exceptional PhD students in the field of chemistry, enabling them to actively engage in an international conference. The rigorous selection process involved a committee comprising four distinguished chemists representing various subdisciplines of chemistry: Prof. Dr. Pablo Rivera Fuentes (SCS, University of Zurich), Dr. Alain de Mesmaeker (SCS), Prof. Dr. Catherine Housecroft (SCNAT, University of Basel), and Prof. Dr. Laura Nyström (SCNAT, ETH Zurich). Each jury member meticulously reviewed and evaluated all submitted applications (excluding those with a conflict of interest). On behalf of SCNAT and SCS, we extend our thanks to the jury for their extensive work and our heartfelt congratulations go out to this year's awardees. We wish them a productive and successful conference.



### Pardis Adams, UZH

Advisor: David Tilley  
Conference: International Conference on Materials for Advanced Technologies  
Contribution: Sequential etching and  $\text{CuCl}_2$  treatment strategy for improved performance in  $\text{Sb}_2\text{Se}_3$  water splitting photocathodes



### David Anderson, UniBe

Advisor: Eva Hevia  
Conference: 21<sup>st</sup> International Symposium in Organometallic Chemistry Directed Toward Organic Synthesis  
Contribution: Highly reactive hydrocarbon soluble alkylsodium reagents for benzylic arylation of toluenes using Weinreb amides



### Phil Becker, ETHZ

Advisor: Jonathan Hall  
Conference: 19<sup>th</sup> Annual Meeting of the Oligonucleotide Therapeutics Society  
Contribution: Advancements in targeted oligonucleotide therapeutics or splicing correction in erythropoietic protoporphyria



### Léonard Bezing, ETHZ

Advisor: Chih-Jen Shih  
Conference: Biosensors 2023, 33<sup>rd</sup> Anniversary World Congress on Biosensors  
Contribution: A paper-based electrochemical platform with embedded porous electrodes for capillary-driven diagnostic bioassays



### Andrea Blankenship, ETHZ

Advisor: Jeroen van Bokhoven  
Conference: 2023 AIChE Annual Meeting  
Contribution: Rethinking conventions for methane partial oxidation to a methyl ester with heterogeneous catalysts



### Julien Borrel, EPFL

Advisor: Jérôme Waser  
Conference: 10th Pacific Symposium on Radical Chemistry (PSRC-10)  
Contribution: Azido-alkynylation of alkenes through radical-polar crossover



### Jasmina Büchel, ETHZ

Advisor: Shana Sturla  
Conference: ACS Fall Meeting 2023  
Contribution: Single-nucleotide resolution mapping reveals profiles of O6-methylguanine formation and repair in a brain tumor cell line exposed to the anticancer drug temozolomide



### Alena Budinská, ETHZ

Advisor: Helma Wennemers  
Conference: GRC on Organic Reactions and Processes  
Contribution: Organocatalytic synthesis of triflones bearing two non-adjacent stereogenic centers



### Matthias Bütikofer, ETHZ

Advisor: Roland Riek  
Conference: EUROMAR  
Contribution: From screening to structure - Boosting NMR-based drug discovery with hyperpolarisation and label-free structure determination



### Heng-Yu Chi, EPFL

Advisor: Kumar Varoon Agrawal  
Conference: Nanoporous Materials and Their Applications GRC  
Contribution: Unblocking ion-occluded pore channels in poly(triazine imide) framework for proton conduction



**Sergio Cuesta Galisteo**, UZH  
 Advisor: Cristina Nevado  
 Conference: 27<sup>th</sup> International symposium:  
 Synthesis in organic chemistry  
 Contribution: Nickel catalyzed enantioselective  
 C-H benzylic carbamoylation



**Marie Jones**, EPFL  
 Advisor: Jeremy Luterbacher  
 Conference: Biomass to Biobased Chemicals  
 and Materials GRC  
 Contribution: Life-cycle analysis of  
 functionalized lignocellulosic sugars as  
 biobased substitutes for polymers and solvents



**Sarah Emmert**, UZH  
 Advisor: Pablo Rivera-Fuentes  
 Conference: Molecular Machinery in Real Time  
 and Space  
 Contribution: A locally activatable sensor for  
 robust quantification of organellar GSH



**Yuya Kakiuchi**, ETHZ  
 Advisor: Christophe Copéret  
 Conference: BlueSky/Incorep Polyolefin  
 Conference  
 Contribution: Surface sites of V-based olefin  
 polymerization Ziegler-Natta pre-catalyst –  
 $\text{VOCl}_3\text{-MgCl}_2$  – from  $^{51}\text{V}$  ssNMR



**Isabella Ferrara**, UZH  
 Advisor: Karl Gademann  
 Conference: IX EFMC International  
 Symposium on Advances in Synthetic and  
 Medicinal Chemistry  
 Contribution: Semi-synthesis of thioglycoside  
 derivatives of the natural product antibiotic  
 fidaxomicin



**Luisa Joëlle Kubeneck**, ETHZ  
 Advisor: Ruben Kretzschmar  
 Conference: Goldschmidt 2023  
 Contribution: Unravelling vivianite formation  
 in-situ in intertidal sediments: The role of  
 P-adsorbed ferrihydrite as a precursor



**Takuji Fujii**, EPFL  
 Advisor: Jieping Zhu  
 Conference: 22<sup>nd</sup> European Symposium on  
 Organic Chemistry  
 Contribution: [2+2] Annulation between  
 arylboronic acids and alkenes enabled by  
 $\text{Pd(II)/(IV)}$ -redox cycle



**Aline Linder**, ETHZ  
 Advisor: Klaus Eyer  
 Conference: 12<sup>th</sup> Meeting of the International  
 Society of Systemic Autoinflammatory Diseases  
 Contribution: Measuring pro-inflammatory  
 dynamics of individual secreting cells to study  
 cellular dysregulation



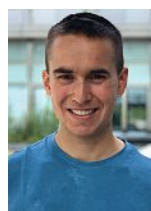
**Lucía Gallego Aibar**, UZH  
 Advisor: Michel Rickhaus  
 Conference: 17<sup>th</sup> International Symposium on  
 Macrocyclic and Supramolecular Chemistry  
 Contribution: Restricting the shape-assisted  
 self-assembly of carpyridines to one dimension



**Annabell Martin**, EPFL/UZH  
 Advisor: Pablo Rivera-Fuentes  
 Conference: FASEB The Optical Probes  
 Conference: Discovery to Application  
 Contribution: A general strategy to develop  
 fluorogenic polymethine dyes for bioimaging



**Vera Giulimondi**, ETHZ  
 Advisor: Javier Pérez-Ramírez  
 Conference: EuropaCat 2023 - the 15<sup>th</sup>  
 European Congress on Catalysis  
 Contribution: Unraveling the catalytic role  
 of Pt single atom catalysts in acetylene  
 hydrochlorination by *Operando* X-ray  
 absorption spectroscopy



**Fabio Masero**, ETHZ  
 Advisor: Victor Mougel  
 Conference: Organometallic Chemistry - GRC  
 Contribution: Tetravalent  $\beta$ -diketonate  
 molybdenum complexes as highly active  
 catalysts for allylic substitution reactions



**Illia Hutskalov**, UZH  
 Advisor: Ilija Coric  
 Conference: 17<sup>th</sup> International Symposium on  
 Macrocyclic and Supramolecular Chemistry  
 Contribution: Directional ionic bonds



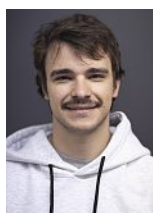
**Tom Nelis**, EPFL  
 Advisor: Jeremy Luterbacher  
 Conference: EUROPA CAT  
 Contribution: Heterogeneous catalyst  
 development for the hydrogenation of thermally  
 unstable acid-sensitive esters



**Valeriia Hutskalova**, UniBas  
 Advisor: Christof Sparr  
 Conference: 27<sup>th</sup> International symposium:  
 Synthesis in organic chemistry  
 Contribution: Modular synthesis, applications  
 and photophysical study of novel acridinium  
 photocatalysts



**Anna Nobile**, ETHZ  
 Advisor: Christophe Copéret  
 Conference: BlueSky/Incorep Polyolefin  
 Conference  
 Contribution: Designing molecularly defined  
 $\text{Cr(III)}$ -alkyl analogs to Cr-based ethylene  
 polymerization catalysts



**Robin Nussbaum**, UniGe  
 Advisor: Eric Bakker  
 Conference: IEBS 2023 XVI International Estuarine Biogeochemistry Symposium  
 Contribution: Improving constant potential coulometry for in situ ultrasensitive pH measurement



**Sven Roediger**, ETHZ  
 Advisor: Bill Morandi  
 Conference: 23<sup>rd</sup> Tetrahedron Symposium  
 Contribution: Transition metal-free cross-electrophile coupling of unactivated C(sp<sup>3</sup>)-fragments



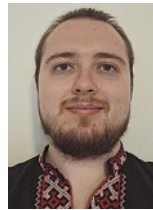
**Valery Okatenko**, EPFL  
 Advisor: Raffaella Buonsanti  
 Conference: ACS Fall 2023  
 Contribution: Ga-based nanoparticles provide new strategies for stable CO<sub>2</sub> reduction electrocatalysts



**Jeannette Ruf**, UZH  
 Advisor: Peter Hamm  
 Conference: Time Resolved Vibrational Spectroscopy  
 Contribution: The molecular mechanism of light-induced bond formation and breakage in the cyanobacteriochrome TePixJ



**Jiaming Peng**, UniBas  
 Advisor: Florian Seebeck  
 Conference: the 16<sup>th</sup> International Symposium on Biocatalysis and Biotransformations (Biotrans 2023)  
 Contribution: Exploring the scope of methyltransferase biocatalysis



**Kostiantyn Sakhatskyi**, ETHZ  
 Advisor: Maksym Kovalenko  
 Conference: PSCO23  
 Contribution: Stable perovskite single-crystal X-ray imaging detectors with single-photon sensitivity



**Marie Perrin**, ETHZ  
 Advisor: Victor Mougel  
 Conference: 6<sup>th</sup> EuChemS Conference on Green and Sustainable Chemistry  
 Contribution: Europium recovery from e-waste using redox active ligands.



**Ona Segura Lecina**, EPFL  
 Advisor: Raffaella Buonsanti  
 Conference: ACS Fall 2023 Harnessing the power of data  
 Contribution: Stable and luminescent colloidal ALD-grown quantum dot@metal-oxide hybrids



**Lauriane Pillet**, UniBe  
 Advisor: Francesca Paradisi  
 Conference: Biotrans 2023  
 Contribution: Novel triple mutant of an extremophilic glycosyl hydrolase enables the rapid synthesis of thioglycosides



**Gulsana Sissengaliyeva**, UniBe  
 Advisor: Philippe Renaud  
 Conference: 10<sup>th</sup> Pacific Symposium on Radical Chemistry  
 Contribution: Hydroperfluoroalkylation of unactivated alkenes



**Salome Püntener**, UZH  
 Advisor: Pablo Rivera-Fuentes  
 Conference: Chemical Imaging  
 Contribution: Single-molecule peptide identification using fluorescence blinking fingerprints



**Miguel Steiner**, ETHZ  
 Advisor: Markus Reiher  
 Conference: IUPAC World Chemistry Congress  
 Contribution: Steering automated mechanism exploration in chemical reaction space



**Mikus Purins**, EPFL  
 Advisor: Jérôme Waser  
 Conference: GRC - Catalysis, Methods and Strategies Empowering Organic Synthesis  
 Contribution: Chemodivergent asymmetric synthesis via a catalytically formed chiral auxiliary



**Sylvain Sudan**, EPFL  
 Advisor: Kay Severin  
 Conference: The International Symposium on Macrocyclic and Supramolecular Chemistry  
 Contribution: Palladium-based metallocsupramolecular assemblies: from complex structures to simple water-soluble anion receptors



**Perrine Robin**, EPFL  
 Advisor: Sandrine Gerber  
 Conference: Biosensors 2023  
 Contribution: DNA-biosensors for reaching attomolar detection of viruses from saliva



**Wowa Stroek**, UniBe  
 Advisor: Martin Albrecht  
 Conference: GRC Organometallic Chemistry: New Frontiers in Synthesis, Catalysis and Materials Chemistry  
 Contribution: Synthesis and reactivity of a stable organoazide iron complex and its relevance to C–H bond amination

**Kai Zhang, UZH**

Advisor: Michel Rickhaus

Conference: 17<sup>th</sup> International Symposium on Macrocyclic and Supramolecular Chemistry

Contribution: At the core of dynamic polymers: The self-assembly of twisted aryl amines

**Jiangtao Zhao, UniGe**

Advisor: Thomas Bürgi

Conference: ACS Fall 2023

Contribution: Implantation of metal complexes on Au<sub>25</sub> nanocluster for enhanced photocoupled electrocatalytic CO<sub>2</sub> reduction**Chenglian Zhu, ETHZ**

Advisor: Maksym V. Kovalenko

Conference: PSCO-2023

Contribution: Many-body Correlations and Exciton Complexes in CsPbBr<sub>3</sub> Quantum Dots

You can find further details about the activities organized by the Platform Chemistry at SCNAT by visiting [chem.scnat.ch](http://chem.scnat.ch). If you are not amongst this year's winners: make sure you don't miss out on the opportunity to participate in the 2024 Chemistry Travel Awards. The announcement will appear early 2024 on [chem.scnat.ch/travel\\_award](http://chem.scnat.ch/travel_award) and in CHIMIA.

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