

# CURRICULUM VITAE

## Dr. Gilles Gasser

Chimie ParisTech  
PSL University  
CNRS  
Institute of Chemistry for Life and Health Sciences  
Laboratory for Inorganic Chemical Biology  
11, Rue Pierre et Marie Curie  
F-75005 Paris  
France

+ 33 1 85 78 41 51

[gilles.gasser@chimieparistech.psl.eu](mailto:gilles.gasser@chimieparistech.psl.eu)

[www.gassergroup.com](http://www.gassergroup.com)



## PERSONAL DETAILS

<b>Date and Place of Birth</b>	16 / 12 / 1976, Neuchâtel, Switzerland.
<b>Nationality</b>	Swiss.
<b>Marital Status</b>	Married.
<b>Languages</b>	French (mother tongue), English (fluent), German (fluent).

## PROFESSIONAL POSITIONS

### a) Faculty

- Since 2019** *Deputy Head of the Institute of Chemistry for Life and Health Sciences*, Chimie ParisTech, PSL University, CNRS (France).
- Since 2016** *Principal Investigator*, Chimie ParisTech, PSL University (France).
- 2016** *Offer for an Associate Professorship in Inorganic Chemistry*, University of Fribourg (Switzerland). *Declined*.
- 2015** *Offer for an Associate Professorship in Medicinal Chemistry*, University of Hamburg (Germany). *Declined*.
- 2011-2016** *Swiss National Science Foundation Assistant Professor*, Department of Chemistry, University of Zurich (Switzerland).
- 2010-2011** *Swiss National Science Foundation Ambizione Research Fellow*, Institute of Inorganic Chemistry, University of Zurich (Switzerland).

### b) Post-doctorate

- 2007-2009** *Alexander von Humboldt Post-Doctoral Research Fellow* in the group of Prof. Nils Metzler-Nolte, Ruhr-University Bochum (Germany).
- 2006** *Exchange Post-doctoral Research Fellow* in the group of Dr Holger Stephan, Helmholtz Research Centre Dresden-Rossendorf (Germany).
- 2004-2007** *Swiss National Science Foundation Post-doctoral Research Fellow* in the group of Prof. Leone Spiccia, Monash University (Australia).

### c) Industrial

- 2000-2001** *Research Chemist* at Lonza Ltd., Research and Development Division, Visp (Switzerland).

## EDUCATION

- 2003 **ERASMUS exchange PhD Student** with Dr J.H.R. Tucker, University of Exeter (UK) (now at the University of Birmingham).
- 2001- 2004 **PhD Student** in the group of Prof. Helen Stoeckli-Evans, University of Neuchâtel (Switzerland).
- 1995- 2000 **Chemistry Student**, University of Neuchâtel (Switzerland).

## AWARDS / FELLOWSHIPS

- 2020 **Pierre Fabre Award** from the French Therapeutic Association for therapeutic innovation.
- 2020 **Churchill College Fellowship** for a 5-month stay at Cambridge University (UK).
- 2018 **EuroBIC Medal Award** for work in Bioinorganic Chemistry.
- 2018 **Top 5% of the Reviewers for *Angew. Chem. Int. Ed.*** in 2017
- 2016 **Ernest Th. Jucker Prize** from the Ernest Th. Jucker Foundation for research against cancer.
- 2016 **PSL Chair of Excellence Program Grant.**
- 2016 **Top 10 Outstanding Reviewer for *Chem. Sci.*** in 2016 – see this [link](#).
- 2016 **2016 J. Med. Chem Award** for the highly cited Article of 2014.
- 2016 **Thieme Chemistry Journal Award.**
- 2015 **ERC Consolidator Grant** (2'000'000 €).
- 2015 **Werner Prize** from the Swiss Chemical Society for outstanding independent chemical research.
- 2015 Inclusion in the **ACS Select Virtual List** of one of the 20 **Emerging Investigators in Bioinorganic Chemistry.**
- 2014 Extension of a **Swiss National Science Foundation Professorship** (CHF 690'978.-).
- 2013 **2013 J. Med. Chem Award** for the highly cited Perspective of 2011.
- 2011 **Swiss National Science Foundation Professorship** (CHF 1'517'692.-).
- 2010 **Rubitec Award** for the best patent application at the Ruhr-University Bochum (Germany) in 2009.
- 2009 **Swiss National Science Foundation Ambizione Research Fellowship** (CHF 448'341.-).
- 2008 Extension of an **Alexander von Humboldt Research Fellowship.**
- 2007 **Alexander von Humboldt Research Fellowship.**
- 2004 **Swiss National Science Foundation Fellowship for Prospective Researchers.**
- 2004 **Syngenta Award** for the best PhD Thesis in Chemistry of the University of Neuchâtel in 2004 (Switzerland).
- 2000 **Jean Landry Award** of the University of Neuchâtel for Excellence in the MSc. Hons. in Chemistry (Switzerland).
- 2000 **Jürg Engi Award** of the University of Neuchâtel for the student with the best marks in organic chemistry (Switzerland).

## AWARDS / FELLOWSHIPS Obtained by Post-Docs/PhD Students

- 2020 **Reaxys PhD Prize**, Dr. Johannes Karges.
- 2020 **ARC Foundation post-doctoral Fellowship**, Dr. Albert Gandosio-Ubieto.

- 2020 **CSC PhD Scholarship**, Youchao Wang.
- 2019 **Marie Skłodowska-Curie post-doctoral Fellowship**, Dr. Marta Martinez-Alonso.
- 2018 **Alexander von Humboldt post-doctoral Fellowship**, Dr. Sarah Keller.
- 2018 **Swiss National Science Foundation Fellowship for Prospective Researchers**, Dr. Sarah Keller.
- 2018 **CSC PhD Scholarship**, Yan Lin.
- 2017 **ARC Foundation post-doctoral Fellowship**, Dr. Luke McKenzie.
- 2014 **Swiss Government post-doctoral Fellowship**, Dr. Loganathan Rangasamy.
- 2014 **Swiss Government post-doctoral Fellowship**, Dr. Konstantis Konidaris.
- 2015 **Victorian Research post-doctoral Fellowship**, Dr. Phuc Ung
- 2014 **UBS Promedica Stiftung post-doctoral Fellowship**, Dr. Riccardo Rubbiani.

## RESEARCH GRANTS

- 2019-2021 **INSERM Plan Cancer Research Grant** for the Project “Targeted Photodynamic Therapy towards Head and Neck Cancer with Novel Ruthenium-based Photosensitizers” with Dr. Christian Gaidon and Dr. Alain Jung (€ 208'448.-). Project Coordinator.
- 2019-2020 **PSL QLife Research Grant** for the Project “Therapeutic Application of Ruthenium-containing Polymers for Ovarian Cancers” (€ 80'000.-) with Dr. Didier Decaudin and Prof. Christophe Thomas. Project Coordinator.
- 2019-2020 **PSL Pre-Maturation Research Grant** for the Project “Ruthenium Polypyridyl Complexes as Photosensitizers for Selective Photodynamic Therapy” (€ 70'000.-).
- 2017-2021 **Swiss National Science Foundation Sinergia Research Grant** for the Project “Ruthenium Complexes for the Treatment of Protozoan Diseases of Medical and Veterinary Importance” with Dr. Julien Furrer and Prof. Andrew Hemphill (CHF 1'547'903.-).
- 2017-2018 **France-Stanford Centre Collaborative Project** for the Project “Novel Theranostic Agents for Imaging in the near-Infrared-II Region and for Photodynamic Therapy” with Prof. Hongjie Dai (€ 7'500.-).
- 2017-2018 **New York University-PSL International Collaborative Project** for the Project “Targeting and Inhibition of Deacetylases with Photosensitizer-Aptamer Conjugates” with Dr. Marcel Hollenstein, Prof. Daniela Buccella and Prof. Yingkai Zhang (€ 10'000.-).
- 2015-2016 Extension of the **UBS Promedica Stiftung Research Grant** for the Project “Metalloenyl Antifungal Agents” (CHF 120'000.-).
- 2015-2018 **Swiss National Science Foundation Research Grant** for the Project “Novel Multidentate Bifunctional Chelating Agents for the Development of Zirconium-89 Based Molecular Imaging Probes” with Prof. Thomas Mindt (CHF 350'000.-).
- 2014-2015 **UBS Promedica Stiftung Research Grant** for the Project “Metalloenyl Antifungal Agents” (CHF 110'000.-).
- 2013 **Alfred Werner Research Equipment Grant** (CHF 32'400.-).
- 2013-2016 **Stiftung für wissenschaftliche Forschung Research Grant** for the Project “Towards the Development of Metal-Based Antiparasitic Drug Candidates for the Livestock Industry” (CHF 23'081.-).
- 2013-2014 **Swiss National Science Foundation Research Grant** for the Project “Photo-Induced Uncaging of Metal Complexes in Living Cells” (CHF 66'720.-).
- 2013-2014 **Novartis Jubilee Foundation Research Grant** for the project “Towards Metallocene-Based Antifungal Agents” (CHF 50'000.-).

- 2012 **Alfred Werner Research Equipment Grant** (CHF 16'690.-).  
2011 **Alfred Werner Research Equipment Grant** (CHF 14'464.-).  
2010 **Alfred Werner Research Equipment Grant** (CHF 24'638.-).  
2010-2013 **Swiss National Science Foundation Research Grant** for the Project "Photo-Induced Uncaging of Metal Complexes in Living Cells" (CHF 197'244.-).

## INDUSTRIAL GRANTS

7 industrials grants since 2017 at Chimie ParisTech for a total amount of > 850'000 €.

## PUBLICATIONS

Author of 1 book, 5 book chapters, 28 reviews, 139 articles, 11 patent applications and 7 patents ([www.gassergroup.com](http://www.gassergroup.com) for a full list). Current *h* index: 40. Total Citations: > 7500.

### 5 Key Recent Publications

- 1. Targeted Photoredox Catalysis in Cancer Cells**  
H. Huang, S. Banerjee, K. Qiu, P. Zhang, O. Blacque, T. Malcomson, M.J. Paterson, G.J. Clarkson, M. Staniforth, V.G. Stavros, **G. Gasser**,\* H. Chao,\* and P.J. Sadler,\* *Nature Chem.*, **2019**, *11*, 1041-1048.  
DOI: <http://dx.doi.org/10.1038/s41557-019-0328-4>
- 2. Rationally Designed Long-Wavelength Absorbing Ru(II) Polypyridyl Complexes as Photosensitizers for Photodynamic Therapy**  
J. Karges, F. Heinemann, M. Jakubaszek, F. Maschietto, C. Subecz, M. Dotou, R. Vinck, O. Blacque, M. Tharaud, B. Goud, E. Viñuelas Zahínos, B. Spingler,\* I. Ciofini,\* and **G. Gasser**,\* *J. Am. Chem. Soc.*, **2020**, *142*, 6578-6587.  
DOI: <https://pubs.acs.org/doi/10.1021/jacs.9b13620>
- 3. Increasing the Cytotoxicity of Ru(II) Polypyridyl Complexes by tuning the Electronic Structure of Dioxo Ligands**  
A. Notaro, M. Jakubaszek, N. Rotthowe, F. Maschietto, R. Vinck, P.S. Felder, B. Goud, M. Tharaud, I. Ciofini, F. Bedioui, R.F. Winter, and **G. Gasser**,\* *J. Am. Chem. Soc.*, **2020**, *142*, 6066-6084.  
DOI: <https://pubs.acs.org/doi/10.1021/jacs.9b12464>
- 4. A Multiaction and Multitarget Ru(II)-Pt(IV) Conjugate Combining Cancer Activated Chemotherapy and Photodynamic Therapy to Overcome Drug Resistant Cancers**  
J. Karges, T. Reddy, M. Tharaud, D. Gibson,\* and **G. Gasser**,\* *Angew. Chem. Int. Ed.*, **2020**, *59*, 7069-7075.  
DOI: <http://dx.doi.org/10.1002/anie.201916400>
- 5. Polymeric Encapsulation of Novel Homoleptic Bis(dipyrrinato) Zinc(II) Complexes with Long Lifetimes for Applications as Photodynamic Therapy Photosensitisers**  
J. Karges, U. Basu, O. Blacque, H. Chao,\* and **G. Gasser**,\* *Angew. Chem. Int. Ed.*, **2019**, *58*, 14334-14340.  
DOI: <http://dx.doi.org/10.1002/anie.201907856>

## TEACHING AND STUDENT EVALUATION

- Since 2020** Lecturing at the Master of Chemistry of Chimie ParisTech.  
*Duties:* Preparing and lecturing the subject "Bioinorganic Chemistry" to MSc students.

- Since 2019** Lecturing at the Master of Chemistry of Paris-Centre.  
*Duties:* Preparing, lecturing (part of) and coordinating the subject “Molecules, Metal Ions and Metal Complexes in Biology and Medicine” (UE 5C407) to MSc students.
- Since 2018** Lecturing at the Master PSL Chemical Frontiers of Living Matter.  
*Duties:* Organising and coordinating scientific seminars to MSc students. Marking Reports on the Seminars.
- Since 2017** Lecturing at the Master of Chemistry of Ecole Polytechnique.  
*Duties:* Preparing and lecturing (part of) the subject “*Chemistry and Biology*” to MSc students.
- Since 2016** Representative of Chimie ParisTech at the Master PSL Chemical Frontiers of Living Matter.  
*Duties:* Representing Chimie ParisTech in this multi-institutional Master.
- 2018-2019** Lecturing at the Master of Chemistry of Chimie ParisTech.  
*Duties:* Preparing, lecturing (part of) and coordinating the subject “*Analytical and Biological Chemistry*” to MSc students.
- 2018** Lecturing at the Master of Chemistry of Paris-Centre.  
*Duties:* Preparing, lecturing (part of) and coordinating the subject “*Biologie Chimique: Chimie des Processus Biologiques*” (UE 5C407) to MSc students.
- 2016-2017** Lecturing at the Master of Chemistry of Paris-Centre.  
*Duties:* Preparing and lecturing (part of) the subject “*Biologie Chimique: Chimie des Processus Biologiques*” (UE 5C407) to MSc students.
- 2015** Invited Lecturer at Sun Yat-Sen University (Guangzhou, China).  
*Duties:* Preparing and lecturing the subject “*Medicinal Inorganic Chemistry*” to BSc students.
- Since 2014** Lecturing at the Swiss Federal Institute of Technology Zurich (Switzerland).  
*Duties:* Preparing and lecturing part of the subject “*Vertiefte Grundlagen der Chemie A*” to chemistry teachers.
- Since 2012** Lecturing at the University of Zurich (Switzerland)  
*Duties:* Preparing, lecturing (part of) and coordinating the subject “*Inorganic Chemistry V – Bioinorganic Chemistry*” to BSc students.
- Since 2010** Lecturing at the University of Zurich (Switzerland).  
*Duties:* Preparing and lecturing the subject “*Medicinal Inorganic Chemistry*” to MSc students.
- 2006** Lecturing at the Victorian College of Pharmacy, Monash University (Australia)  
*Duties:* Preparing and lecturing the subject “*Coordination Chemistry and Inorganic Medicinal Chemistry*” to 2<sup>nd</sup> year Undergraduate students.  
*Student Evaluation:* 4.7 / 5.0.
- 1995-2004** Science and sports teacher in a secondary school, Peseux (Switzerland).  
*Duties:* Teaching chemistry, mathematics, informatics, biology and unihockey.

## SCIENTIFIC SERVICES AND ORGANISATION

- 2019** Organiser of the *Metals in Medicine Workshop*, Paris, November 2019.
- Since 2019** Editorial Advisory Board Member of *J. Biol. Inorg. Chem.*
- Since 2018** Editorial Board Member of *Metallomics*.
- Since 2018** Co-Founder and Co-organiser of the *PSL Bioinorganic Chemistry Seminars*.

- Since 2017** President of the European Platform for Photomedicine (EPPM).
- 2016** International Advisory Board Member of the International Symposium on Bioorganometallic Chemistry (ISBOMC).
- 2016** Editorial board member of *Inorganics*.
- 2016** Scientific Committee Organiser of the International Symposium on Bioorganometallic Chemistry (ISBOMC) held in Moscow (Russia).
- Since 2015** Editorial Advisory Board Member of *ChemBioChem*.
- Since 2015** Vice-President of the European Platform for Photomedicine (EPPM).
- Since 2014** Editorial board member of *Photodiagn. Photodyn. Ther.*
- 2014** Co-organiser of the *Young Faculty Meeting* held in Berne in 2014.
- 2014** Local organiser of the *European Conference on Bioinorganic Chemistry* held in Zurich in 2014.
- Since 2013** Review editor for *Frontiers in Inorganic Chemistry* (Nature publisher).
- Since 2010** Active reviewer for numerous peer-reviewed journals such as *Nature Chem.*, *Nature Commun.*, *Nature Protocols*, *J. Am. Chem. Soc.*, *Angew. Chem. Int. Ed.*, *ACS Nano*, *Chem. Sci.*, etc.
- Since 2010** External expert for numerous funding agencies such as the *European Research Council* (ERC), *Swiss National Science Foundation* (SNSF), the *Swiss Academy of Engineering Sciences*, the *German Research Foundation* (DFG), the *UK Medical Research Council*, the *French National Research Agency* (ANR), the *Netherlands Organisation for Scientific Research* (NWO), the *Natural Sciences and Engineering Research Council of Canada* (NSERC), the *Genesis Oncology Trust New Zealand*, the *Innovation and Technology Commission* (ITC) of Hong Kong, the *South African National Research Funding Agency*, the *National Science Centre Poland*, the *Fundação para a Ciência e a Tecnologia Portugal* (FCT), etc.
- Since 2010** External PhD thesis examiner at the *University of Zurich* (Switzerland), the *University of Basel* (Switzerland), the *University of Fribourg* (Switzerland), the *University of Neuchâtel* (Switzerland), the *Ecole Nationale Supérieure de Chimie de Paris* (France), the *Ecole Normale Supérieure de Paris*, the *University of Lille 2* (France), the *University of Strasbourg* (France), the *University of Burgundy* (France), the *CEA* (France), the *University of Toulouse* (France), the *University of Brest*, *Leiden University* (the Netherlands), the *Ruhr-University Bochum* (Germany), the *University of Vienna* (Austria), *Trieste University* (Italy), the *University of Leeds* (UK), the *Royal College of Surgeons Dublin* (Ireland), *Trinity College Dublin* (Ireland), *Hong Kong Baptiste University* (Hong Kong), *Monash University* (Australia), the *University of the Free State Bloemfontein* (South Africa) and the *University of Cape Town* (South Africa).

## RESEARCH INTERESTS

Medicinal Organometallic Chemistry, Anticancer and Antiparasitic Drug Development, Inorganic Chemical Biology, Phototherapy, Bioorganometallic Chemistry.

## RESEARCH GROUP (CURRENT MEMBERS)

- Post-docs:** Dr. Yih Ching Ong (10/2017-current), Dr. Joseph Cowell (05/2018-current), Dr. Luke McKenzie (05/2018-current), Dr. Sarah Keller (11/2018-current), Dr. Robin Vinck (01/11/2019-current), Anna Notaro (01/2020-current), Dr. Marta Martinez-Alonso (3/2020-current)
- PhD Students:** Marie Flamme (10/2017-current), Nancy Soliman (10/2017-current), Lin Yan (10/2018-current), Maria Dalla Pozza (09/2020-current), Lisa Gourdon (10/2020-current), Germain Niogret (02/2020-current).

## RESEARCH GROUP (FORMER MEMBERS)

**Post-docs:** Dr. Tanmaya Joshi (08/2012-10/2013), Dr. Malay Patra (08/2011-09/2013), Dr. Giuseppe Martano (04/2014-10/2014), Dr. Rangasamy Loganathan (09/2014-09/2015), Dr. Konstantis Konidakis (09/2014-09/2015), Dr. Vanessa Pierroz (05/2015-12/2015), Dr. Riccardo Rubbiani (04/2013-11/2015), Dr. Saonli Roy (06/2016-02/2017), Dr. Phuc Ung (04/2015-06/2017), Dr. Malay Patra (12/2015-08.2017), Dr. Maggie Aulsebrook (07/2017-05/2018), Dr. Uttara Basu (09/2017-09/2018), Dr. Elise Villemin (09/2017-09/2018).

**PhD Students:** Dr. Anna Leonidova (08/2010- 08/2014), Dr. Philipp Anstätt (04/2011-09/2014), Dr. Vanessa Pierroz (04/2011-04/2015), Dr. Cristina Mari (06/2011-06/2015), Dr. Huaiyi Huang (08/2015-05/2016), Dr. Jeannine Hess (01/2012-06/2016), Lauren Fernandez Vega (01/2019-current, exchanged PhD student), Johannes Karges (11/2016-11/2019), Franz Heinemann (11/2016-11/2019), Anna Notaro (01/2017-11/2019), Patrick Felder (02/2017-01/2020), Marta Jakubaszek (04/2017-03/2020).

**BSc/Msc Students:** Jeannine Hess (02/2011-12/2011), Sandro Konatschnig (02/2012-04/2013), Angelo Frei (02/2013-12/2013), Assia Nouar (04/2014-09/2014), Lea Gemperle (02/2014-12/2014), Sandra Morard (02/2014-12/2014), Seraina Hügli (05/2014-09/2015), Elisa Fusini (02/2015-12/2015), Luciano Mastrobuoni (02/2015-12/2015), Faustine d'Orchymont (01/2016-07/2016), Franz Heinemann (01/2016-08/2016), Severin Jeger (02/2016-12/2016), Severin Koch (02/2016-12/2016), Ryad Karda (01/2017-07/2017), Scandeur Dakhlaoui (02/2017-07/2017), Michèle Clerc (02/2017-01/2018), Emma Clarke (09/2017-05/2018), Germain Martinez (01/2018-05/2018), Clara Berg (02/2018-05/2018), Chloé Subecz (01/2018-current), Maëlle Baude (11/2018-01/2019), Maximilian Fellert (10/2018-02/2019), Mazzarine Dotou (01/2019-07/2019), Nicolas Berenguer (02/2019-07/2019), Karen Junghans (02/2019-07/2019), James Ng (05/2019-12/2019), Lisa Gourdon (02/2020-07/2020), Germain Niogret (02/2020-07/2020).

## MAIN COLLABORATIONS (IN ALPHABETICAL ORDER)

- Prof. Enzo Alessio, University of Trieste, Italy, *Synthesis of Photosensitizers*.
- Dr. Olivier Blacque, University of Zurich, Switzerland. *X-ray Crystallography*.
- Prof. Annie Castonguay, INRS Montreal, Canada, *Biological Evaluation of Metal Complexes on Zebrafish*.
- Prof. Hui Chao, Sun Yat-Sen University, China. *2P-PDT*.
- Dr. Ilaria Ciofini, Chimie ParisTech, France. *DFT Calculations*.
- Prof. Hongjie Dai, Stanford University, USA. *Imaging*.
- Prof. Paul Dyson, EPFL, Switzerland. *Metal Complexes for PDT Applications*.
- PD Stefano Ferrari, University of Zurich, Switzerland. *Biological Evaluation of Metal Complexes on Cancer Cells*.
- PD Julien Furrer, University of Berne, Switzerland. *Biological Evaluation of Metal Complexes on Parasites*.
- Prof. Markus Gallei, Technical University Darmstadt, Germany. *Drug Release*.
- Prof. Robin Gasser, University of Melbourne, Australia. *Biological Evaluation of Metal Complexes on Parasites*.
- Prof. Santiago Gomez Ruiz, Spain. *Synthesis of Nanoparticles for PDT*.
- Dr. Bruno Goud, Institut Curie, PSL University, France, *Biological Evaluation of Metal Complexes on Cancer Cells*.

- Dr. Marcel Hollenstein, Pasteur Institute (Paris), France. *Preparation of novel Ru-containing aptamers.*
- Prof. Jennifer Keiser, Swiss Tropical Institute, Basel, Switzerland. *Biological Evaluation of Metal Complexes on Parasites.*
- Prof. Caroline Maake, University of Zurich, Switzerland. *Biological Evaluation of Metal Complexes on Tumor Models.*
- Prof. Thomas Mindt, Medical University Vienna, Austria. *Synthesis of new chelators for <sup>89</sup>Zr labelling.*
- Prof. Clotilde Policar, PSL – Ecole Normale Supérieure, Paris. *Bioimaging.*
- Prof. Bernhard Spingler, University of Zurich, Switzerland, *Biological Evaluation of novel PDT Photosensitizers.*
- Dr. Holger Stephan, Helmholtz Research Centre Dresden-Rossendorf, Germany. *Radiolabelling and Biological Evaluation of Metal-Bioconjugates.*
- Prof. Christophe Thomas, Chimie ParisTech, France. *Delivery of PDT Photosensitizers.*
- Dr. Kristof Zarschler, Helmholtz Research Centre Dresden-Rossendorf, Germany. *Radiolabelling and Biological Evaluation of Metal-Bioconjugates.*
- Dr. Felix Zelder, University of Zurich, Switzerland. *Biosensing.*

## INVITED TALKS

22 plenary/keynote speaker invitations, 57 invited talks at universities/Companies and 30 offered talks at conferences.

### a) Plenary/Keynote/Invited Speaker Invitations at Conferences/Summer Schools

- 1) *“Metal Complexes in Medicinal Chemistry”*, Royal Australian Chemical Institute (RACI) Conference, Wollongong (Australia), December 2019.
- 2) *“Metal Complexes as Diagnostics and Therapeutics”*, Workshop on Imaging of diagnostic and Therapeutic Biomarkers in Oncology, Vannes (France), September 2019.
- 3) *“Organometallic Compounds against Human and Livestock Animal Parasitic Diseases”*, International Symposium on Bioorganometallic Chemistry (ISBOMC 2019), York (UK), August 2019.
- 4) *“Metal Complexes in Medicinal Chemistry”*, 4<sup>th</sup> Meeting of the Lisbon University Chemistry College, Lisbon (Portugal), July 2019.
- 5) *“Organometallic Compounds against Parasitic Diseases”*, Nara International Conference on Applied Bioinorganic Chemistry (NICAB), Nara Women’s University (Japan), June 2019.
- 6) *“Towards Targeted Photodynamic Therapy with Metal-based Photosensitizers”*, 15<sup>th</sup> International Symposium on Applied Bioinorganic Chemistry, Nara (Japan), June 2019.
- 7) *“Targeted Photodynamic Therapy with Metal-based Photosensitizers”*, PDT and PD Update Conference, Kochel am See (Germany), September 2018.
- 8) *“Organometallic Compounds as Antiparasitical and Antifungal Drug Candidates”*, XXXV GEQO Congress Organometallic Chemistry Group Conference, Zaragoza (Spain), August 2018.
- 9) *“Metal Complexes and Medicinal Chemistry: what a Combination!”*, EuroBIC Conference, Birmingham (UK), August 2018.
- 10) *“Organometallic Compounds against Human and Livestock Animal Parasitic Diseases”*, COST Meeting Chemotherapy Towards Diseases Caused by Endoparasites, Lausanne (Switzerland), October 2017.
- 11) *“Metal Complexes as Photosensitizers in Photodynamic Therapy”*, SolChem Conference 2017, Ulm (Germany), October 2017.



- 12) *“Towards the Use of Ru(II) Polypyridyl Complexes as Photosensitizers in One-Photon and Two-Photon Photodynamic Therapy”*, Gordon Conference on Photochemistry, Maine (US), July 2017.
- 13) *“Organometallic Compounds against Human and Livestock Animal Parasitic Diseases”*, International Symposium on Bioorganometallic Chemistry (ISBOMC 2016), Moscow (Russia), September 2016.
- 14) *“Bioorganometallic Chemistry to fight Schistosomiasis”*, 27th International Conference on Organometallic Chemistry (ICOMC 2016), Melbourne (Australia), July 2016.
- 15) *“Metal Complexes as Phototoxic Anticancer Agents”*, Gordon Conference on Metals in Medicine, New Hampshire (US), June 2016.
- 16) *“Metal Complexes in Medicinal Chemistry”*, Summer School in Supramolecular Chemistry, Borovets (Bulgaria), June 2016.
- 17) *“Towards the Selective Photo-Release of Organometallic-based Enzyme Inhibitors in Living Cells”*, BioChem Forum, Strasbourg (France), June 2016.
- 18) *“Towards Organometallic Antischistosomal Candidates”*, 21<sup>th</sup> European Association for Chemical and Molecular Sciences Conference on Organometallic Chemistry (EuCOMC XXI), Bratislava (Slovakia), July 2015.
- 19) *“New Perspectives in the use of Metal Complexes in Medicinal Chemistry”*, Swiss Chemical Society Meeting, Basel (Switzerland), April 2015.
- 20) *“Novel Opportunities in PDT using Metal Complexes”*, The International Congress on Photodynamic Applications, Dundee (Scotland), May 2014.
- 21) *“Metal Complexes in Photodynamic Therapy”*, 5<sup>th</sup> International Meeting of the European Platform for Photodynamic Medicine, Ustron (Poland), November 2013.
- 22) *“Novel Concepts in Medicinal Inorganic Chemistry”*, Young Faculty Meeting, Bern (Switzerland), June 2012.
- 23) *“A Journey through the Preparation and Biological Applications of Metal-Containing Peptide Nucleic Acids”*, XXVI edition of the symposium “New Trends in Organic Synthesis”, University of Milan (Italy), November 2011.

## **b) Invited Talks at Universities/Companies**

- 1) *“Metal Complexes in Medicinal Chemistry”*, Macquarie University, December 2019.
- 2) *“Metal Complexes in Medicinal Chemistry”*, University of Hong Kong, December 2019.
- 3) *“Metal Complexes in Medicinal Chemistry”*, University of Brest (France), December 2019.
- 4) *“Metal Complexes in Medicinal Chemistry”*, University of Barcelona (Spain), October 2019.
- 5) *“Metal Complexes in Medicinal Chemistry”*, McGill University (Canada), May 2019.
- 6) *“Metal Complexes in Medicinal Chemistry”*, INRS-Institut Armand Frappier (Canada), May 2019.
- 7) *“Metal Complexes in Medicinal Chemistry”*, University of Montpellier (France), March 2019.
- 8) *“Metal Complexes in Medicinal Chemistry”*, Descartes University (France), March 2019.
- 9) *“Metal Complexes in Medicinal Chemistry”*, Newcastle University (UK), March 2019.
- 10) *“Metal Complexes in Medicinal Chemistry”*, ITQB Lisbon (Portugal), February 2019.
- 11) *“Metal Complexes in Medicinal Chemistry”*, University of Durham (UK), February 2019.
- 12) *“Metal Complexes in Medicinal Chemistry”*, King’s College (UK), November 2018.
- 13) *“Metal Complexes in Medicinal Chemistry”*, University of Tübingen (Germany), October 2018.
- 14) *“Metal Complexes in Medicinal Chemistry”*, University of Bretagne Occidentale (France), October 2018.

- 15) "*Metal Complexes in Medicine*", ICSN, University Paris-Saclay (France), June 2018.
- 16) "*Metal Complexes in Medicine*", New York University (USA), May 2018.
- 17) "*Metal Complexes in Medicine*", University of Burgos (Spain), April 2018.
- 18) "*Metal Complexes in Medicine*", CEA, University Paris-Saclay (France), April 2018.
- 19) "*Metal Complexes in Medicinal Chemistry*", Institut Pasteur (France), April 2018.
- 20) "*Metal Complexes in Medicinal Chemistry*", Laboratoire de Chimie de Coordination de Toulouse (France), February 2018.
- 21) "*Metal Complexes in Medicinal Chemistry*", Ecole Normale Supérieure de Lyon (France), February 2018.
- 22) "*Metal Complexes as Photosensitizers in Photodynamic Therapy*", University of Reading (UK), July 2017.
- 23) "*Metal Compounds in Medicinal Chemistry*", University of Sussex (UK), April 2017.
- 24) "*Metal Complexes in Medicinal Chemistry*", University of Zurich (Switzerland), *Ernest Th. Jucker Prize Ceremony*, April 2017.
- 25) "*Metal Complexes in Medicinal Chemistry*", Paris Descartes University (France), February 2017.
- 26) "*Metal Complexes in Medicinal Chemistry*", Chimie ParisTech (France), December 2016.
- 27) "*Combination of Light and Metal Complexes to kill Cancer Cells and Bacteria*", University of Sydney (Australia), July 2016.
- 28) "*Lightening up Metal Complexes to kill Cancer Cells and Bacteria!*", Monash Institute of Pharmaceutical Sciences (Australia), July 2016.
- 29) "*Metal Complexes, Light, Anticancer Action!*", National University of Singapore (Singapore), July 2016.
- 30) "*Combination of Light and Metal Complexes to fight Cancer!*", Nanyang Technological University (Singapore), July 2016.
- 31) "*Lightening up Metal Complexes to kill Cancer Cells and Bacteria!*", University of Galway (Ireland), April 2016.
- 32) "*New Insights in the Use of Metal Complexes in Medicinal Chemistry*", University Pierre et Marie Curie, (France), April 2016.
- 33) "*Lightening up Metal Complexes to kill Cancer Cells and Bacteria!*", BASF, Basel (Switzerland), January 2016.
- 34) "*Metal Complexes, Light, Anticancer Action!*", University of Fribourg, (Switzerland), October 2015.
- 35) "*Metal Complexes, Light, Anticancer Action!*", Swiss Federal Institute of Technology Zurich, (Switzerland), September 2015.
- 36) "*Metals and Medicine: a Successful Combination*", University of Basel, (Switzerland), August 2015.
- 37) "*New Perspectives in the Use of Metal Complexes in Medicinal Chemistry*", Helmholtz-Zentrum Dresden-Rossendorf (Germany), July 2015.
- 38) "*Towards the Use of Ru(II) and Re(I) Complexes as Anticancer Agents*", Sun Yat-Sen University (China), January 2015.
- 39) "*Metal Complexes, Light, Anticancer Action!*", University of Hamburg (Germany), December 2015.
- 40) "*Towards the Use of Ru(II) and Re(I) Complexes as Anticancer Agents*", University of Belgrade (Serbia), September 2014.
- 41) "*Novel Strategies in Photodynamic Therapy using Metal Complexes*", University of Macau (Macau), May 2014.
- 42) "*Phototherapy with Metal Complexes*", University of Leiden (the Netherlands), March 2014

- 43) *"Metal Complexes in Medicinal Chemistry"*, Institute of Anatomy, University of Zurich (Switzerland), December 2013.
- 44) *"New Progresses in the Development of Antiparasitic Drug Candidates"*, Ecole Nationale Supérieure de Chimie (France), September 2013.
- 45) *"Novel Opportunities in Chemical Biology and Nanoscience with Metal-Containing Peptide Nucleic Acids"*, University of Wollongong (Australia), January 2013.
- 46) *"In vitro and in vivo Investigations of novel Metal-Based Antiparasitic and Anticancer Drug Candidates"*, Monash University (Australia), February 2013.
- 47) *"Towards Novel Metal-Based Antiparasitica and Anticancer Drug Candidates"*, University of Sydney (Australia), January 2013.
- 48) *"In Vitro and in Vivo Evaluation of Metal-Based Anthelmintic and Anticancer Drug Candidates"*, University of Melbourne (Australia), January 2013.
- 49) *"Preparation and Biological Evaluation of Novel Anthelmintic and Anticancer Metal-Based Candidates"*, Ruhr-University Bochum (Germany), November 2012.
- 50) *"Mitochondria-mediated Apoptosis as Mode of Action for a Novel Ru(II) Complex"*, University of Lille 1 (France), September 2012.
- 51) *"Metal Complexes for Medicinal Applications"*, Helmholtz-Zentrum Dresden-Rossendorf (Germany), August 2012.
- 52) *"Novel Anticancer Ru(II) and Re(I) Agents: Towards the Elucidation of their Mechanism of Action"*, University of Auckland (New Zealand), January 2012.
- 53) *"A Journey through the Preparation and Biological Applications of Metal-Containing Peptide Nucleic Acids"*, University of Birmingham (England), June 2011.
- 54) *"A Journey through the Preparation and Biological Applications of Metal-Containing Peptide Nucleic Acids"*, Technical University Braunschweig (Germany), December 2010.
- 55) *"Biological Applications of Metal-Containing Peptide Nucleic Acids"*, Helmholtz-Zentrum Dresden-Rossendorf (Germany), October 2009.
- 56) *"Metal Complexes containing Peptide Nucleic Acids for Medicinal and Biosensing Applications"*, University of Neuchâtel (Switzerland), October 2008.
- 57) *"Metal Complexes containing Peptide Nucleic Acids for Medicinal and Biosensing Applications"*, University of Zurich (Switzerland), October 2008.
- 58) *"Modified Peptide Nucleic Acids for Medicinal Applications"*, Helmholtz-Zentrum Dresden-Rossendorf (Germany), November 2007.
- 59) *"Use of Ferrocenyl Complexes and Peptide Nucleic Acids for Different Biological Applications"*, Helmholtz-Zentrum Dresden-Rossendorf (Germany), October 2006.
- 60) *"Signalling and Controlling Guest Complexation using New Ligand Derivatives of Ferrocene as Redox-active Supramolecular Receptors"*, Monash University (Australia), October 2004.

### **c) Offered Talks at International Conferences**

- 1) *"Complexes de Ruthénium comme Photosensibilisateurs pour la Thérapie Photodynamique"*, 2ème Journée Française sur la Thérapie Photodynamique, Lille (France), November 2019
- 2) *"Metalocene-containing Complexes as Antiparasitic and Antifungal Drug Candidates"*, 9ème Journée du Consortium anti-Parasitaire et anti-Fongique (CaPF), Rouen (France), March 2019.
- 3) *"Metal Complexes and Medicinal Chemistry: what a Combination"*, 1<sup>st</sup> Singapore-Paris Chemical Biology Symposium, Singapore (Singapore), March 2019.

- 4) *"Metallocene-containing Complexes as Antiparasitic and Antifungal Drug Candidates"*, 9<sup>th</sup> Asian Biological Inorganic Chemistry (AsBIC) Conference, Singapore (Singapore), December 2018.
- 5) *"Organometallic Compounds as Antiparasitical and Antifungal Drug Candidates"*, 8<sup>ème</sup> Journée du Consortium anti-Parasitaire et anti-Fongique (CaPF), Lyon (France), March 2018.
- 6) *"Metal Complexes as Photosensitizers in Photodynamic Therapy"*, 22<sup>nd</sup> International Symposium on Photochemistry and Photophysics of Coordination Compounds, Oxford (UK), July 2017.
- 7) *"Metal Complexes as Photosensitizers in Photodynamic Therapy"*, 14<sup>th</sup> International Symposium on Applied Bioinorganic Chemistry, Toulouse (France), June 2017.
- 8) *"Organometallic Compounds against Human and Livestock Animal Parasitic Diseases"*, FrenchBIC, Toulouse (France), June 2017.
- 9) *"Ru(II) Polypyridyl Complexes in (2-Photon Excitation) Photodynamic Therapy"*, Excited States in Complex Systems, Paris (France), November 2016.
- 10) *"Ru(II) Polypyridyl Complexes as Photosensitizers in (Two-Photon Excitation) Photodynamic Therapy"*, Photodynamic Therapy & Photodiagnosis (PDT PDD) Symposium, Nancy (France), October 2016.
- 11) *"Selective Photo-release of Organometallic-containing Enzyme Inhibitors"*, 4<sup>th</sup> Whole Action Meeting of the COST Action CM1105, Palma de Mallorca (Spain), April 2016.
- 12) *"Towards the Use of Ru(II) Polypyridyl Complexes as Photosensitizers in Photodynamic Therapy"*, 1<sup>st</sup> International Symposium on Clinical and Experimental Metallodrugs in Medicine: Cancer Chemotherapy" (CEMM), Honolulu (USA), December 2015.
- 13) *"Evaluation of novel Ru(II) Polypyridyl Complexes as Photosensitizers in Photodynamic Therapy"*, COST Meeting, Belgrade (Serbia), September 2015.
- 14) *"Ru(II) Polypyridyl Complexes as potent Photosensitizers in Photodynamic Therapy"*, ACS Conference – Fall Meeting, Boston (USA), September 2015.
- 15) *"Ru(II) Complexes as potent Photosensitizers in Photodynamic Therapy"*, International Photodynamic Association Conference, Rio de Janeiro (Brazil), May 2015.
- 16) *"Phototoxic Metal Bioconjugates with a Dual Mode of Action"*, COST Meeting, Zurich (Switzerland), August 2014.
- 17) *"Organometallic Compounds to fight Schistosomiasis"*, International Symposium on Bioorganometallic Chemistry, Vienna (Austria), July 2014.
- 18) *"Towards Novel the Use of Re(I) and Ru(II) in Photodynamic Therapy"*, The International Congress on Photodynamic Applications, Dundee (Scotland), May 2014.
- 19) *"Photodelivery of Cytotoxic Metal Complexes in Living Cells"*, COST Meeting, Madrid (Spain), April 2014.
- 20) *"Towards the Use of Re<sup>I</sup> and Ru<sup>II</sup> Complexes as Photosensitizers in Photodynamic Therapy"*, Swiss-Kyoto Symposium, Zurich (Switzerland), November 2013.
- 21) *"Towards Novel the Use of Re(I) and Ru(II) in Photodynamic Therapy"*, WHAM Meeting, Barcelona (Spain), September 2013.
- 22) *"Towards Novel Organometallic-Based Anthelmintic Drug Candidates"*, International Conference on Biological Inorganic Chemistry, Grenoble (France), July 2013.
- 23) *"Towards the Elucidation of the Mechanism of Action of an inert Ruthenium Anticancer Drug Candidate"*, ACS Conference – Spring Meeting, New Orleans (USA), April 2013.
- 24) *"Towards Novel Metal-Based Anthelmintic and Anticancer Drug Candidates"*, COST Action Meeting CM 1105, Groningen (The Netherlands), February 2013.
- 25) *"Novel Anticancer Ru(II) agents: Towards the Elucidation of their Mechanism of Action"*, WHAM Meeting, Granada (Spain), September 2012.

- 26) *"(Multi)-Ferrocene-Containing Peptide Nucleic Acid Bioconjugates"*, Ferrocene Colloquium, Braunschweig (Germany), February 2012.
- 27) *"Preparation and Biological Applications of novel Organometallic-Containing Peptide Nucleic Acids"*, International Conference on Biological Inorganic Chemistry, Vancouver (Canada), August 2011.
- 28) *"Multi-Organometallic-Containing PNAs: Preparation and Biological Applications"*, International Symposium on Bioorganometallic Chemistry, Bochum (Germany), July 2010.
- 29) *"Ferrocenyl Metal Complexes for Electrochemical Detection of DNA Nucleosides and Anions"*, Ferrocene Colloquium, Prague (Czech Republic), February 2008.
- 30) *"Recognition of Thymine and related Nucleosides by a Zn<sup>II</sup>-Cyclen Complex bearing a Ferrocenyl Pendant"*, International Conference of Coordination Chemistry", Cape Town (South Africa), August 2006.
- 31) *"Towards Electrochemical Detection of Specific DNA/RNA Strands with Peptide Nucleic Acids bearing a Ferrocenyl Moiety"*, ARC Centre of Excellence for Electromaterials Science Workshop, Melbourne (Australia), May 2006.

## AFFILIATIONS

- Swiss Chemical Society.
- American Chemical Society.
- Society of Biological Inorganic Chemistry.
- International Photodynamic Association.
- European Platform for Photodynamic Medicine.
- COST Action CM1105 (Functional Metal Complexes that Bind to Biomolecules).
- Société de Chimie Thérapeutique de France.
- Société Chimique de France

## SPORTING ACHIEVEMENTS

<b>Snowboarding</b>	Qualified Snowboard Instructor.
<b>Unihockey as player</b>	Semi-finalist in the Swiss Cup (2003). Quarter finalist in the Swiss Cup (2002 and 2004). Promotion from 4 <sup>th</sup> to 3 <sup>rd</sup> Division of the Swiss League (1999). Promotion from 3 <sup>rd</sup> to 2 <sup>nd</sup> Division of the Swiss League (2001). Promotion from 2 <sup>nd</sup> to 1 <sup>st</sup> Division of the Swiss League (2003).
<b>Unihockey as coach</b>	Qualified Floorball Coach. Australian Champion with the Victorian Women's Team (2006). Victorian Men's State Trainer (2005). Semi-finalist in the Swiss Cup (2003). Quarter finalist in the Swiss Cup (2004). Promotion from 2 <sup>nd</sup> to 1 <sup>st</sup> Division of the Swiss League (2003).

## REFEREES

1. Prof. Roger Alberto  
Department of Chemistry  
University of Zurich  
Winterthurerstrasse 190  
CH-8057 Zurich  
Switzerland  
☎ +41 44 635 46 31  
✉ [ariel@chem.uzh.ch](mailto:ariel@chem.uzh.ch)
2. Prof. Nils Metzler-Nolte  
Lehrstuhl für Anorganische Chemie I  
Ruhr-University Bochum  
Universitätsstrasse 150  
D-44780 Bochum  
Germany  
☎ +49 234 32 28152  
✉ [nils.metzler-nolte@rub.de](mailto:nils.metzler-nolte@rub.de)
3. Prof. Helen Stoeckli-Evans  
Faculty of Science  
University of Neuchâtel  
Rue Emile-Argand 11  
CH-2009 Neuchâtel  
Switzerland  
☎ +41 32 718 24 26  
✉ [helen.stoeckli-evans@unine.ch](mailto:helen.stoeckli-evans@unine.ch)