

Jean-François Nierengarten



Curriculum vitae

PERSONAL INFORMATION

- Date of birth: December 16th, 1966
- Place of birth: Strasbourg (France)
- Nationality: French
- Marital status: Married, two children
- Personal address: 28 rue Gounod, 67000 Strasbourg (France)
- Phone: +33 (0)6 16 27 65 58

EDUCATION

2003: *Habilitation à Diriger des Recherches*

University of Strasbourg – France

1994: PhD in Chemistry (under the supervision of Jean-Pierre Sauvage)

Faculty of Chemistry – University of Strasbourg – France

1991: Master (*DEA de Chimie des Métaux de Transition et d'Ingénierie Moléculaire*)

Faculty of Chemistry – University of Strasbourg – France

CURRENT POSITION

- *Directeur de Recherche de Classe Exceptionnelle* (CNRS) and head of the *Laboratoire de Chimie des Matériaux Moléculaires*

University of Strasbourg and CNRS – LIMA – UMR 7042

- Work address: Laboratoire de Chimie des Matériaux Moléculaires, Université de Strasbourg, Ecole Européenne de Chimie, Polymères et Matériaux, 25 rue Becquerel, 67087 Strasbourg Cedex 2 (France)

- Phone: +33 (0)3 68 85 27 63

- E-mail: nierengarten@unistra.fr

- URL for web site: <http://nierengartengroup.com>

- Researcher unique identifiers:

<http://orcid.org/0000-0002-3333-9372>

<http://www.researcherid.com/rid/D-2597-2010>

PREVIOUS POSITIONS

2007 – 2010: Full Professor (on secondment)

Ecole Européenne de Chimie, Polymères et Matériaux – University of Strasbourg – France

2005 – 2007: Senior research scientist (CNRS) and head of the *Groupe de Chimie des*

Fullerènes et des Systèmes Conjugués

Laboratoire de Chimie de Coordination– UPR 8241 – CNRS – Toulouse – France

1996 – 2005: Research scientist (CNRS)

Institut de Physique et Chimie des Matériaux de Strasbourg – UMR 7504 – University of Strasbourg and CNRS – France

1994 – 1996: Post-doctoral fellow (under the supervision of François Diederich)
Department of Chemistry and Applied Biosciences – ETH-Zürich – Switzerland

1991 – 1994: PhD student (under the supervision of Jean-Pierre Sauvage)
University of Strasbourg and CNRS – France

RESEARCH INTEREST

- *Synthetic chemistry*: fullerenes – porphyrins – transition metal complexes – π -

conjugated systems – dendrimers – macrocyclic compounds

- *Supramolecular chemistry*: self-assembly – dynamic covalent chemistry – liquid crystals – thin ordered films

- *Fields of application*: materials science (solar cells, OLEDs, optical limiting) – biology (transfection, multivalent ligands for lectin recognition and enzymatic inhibition)

SCIENTIFIC CONTRIBUTIONS

294 publications – 17 book chapters – 232 conferences and seminars – 5 books as Editor

SUPERVISION

28 PhD Thesis – 14 Post-doctoral Fellows – 36 Master II Students – 40 Master I Students

BIBLIOMETRICS

ISI Web of Knowledge: H-index: 63 – Number of citations: 13044 (February 23, 2025)

Most cited paper (360 citations): *J. Am. Chem. Soc.* **2000**, 122, 7467.

Number of papers with more than 100 citations: 31

Number of papers with more than 50 citations: 83

Number of papers with more than 25 citations: 163

FELLOWSHIPS AND AWARDS

2021: **Doctor honoris causa** – Faculty of Science – University of Neuchâtel Switzerland

2020: Elected **Fellow of Chemistry Europe**

2019: **Prize from the Organic Chemistry Division** – French Chemical Society

2019: **CNRS Silver Medal**

2018: **Prize from the Coordination Chemistry Division** – French Chemical Society

2013: **Catalan-Sabatier Prize** from the Spanish Royal Society of Chemistry

2007: **Grammaticakis-Neuman Prize** from the French Academy of Science

2006: Elected **Fellow of the Royal Society of Chemistry**

2004: **ACROS Prize** from the Organic Division of the French Chemical Society

2001: **CNRS Bronze Medal**

1994: **Post-doctoral fellowship** from the European Communities – Human Capital and Mobility Program

1991: **PhD Fellowship** from the French Ministry of Research

INVITED PROFESSORSHIP

2023: POLYMAT, University of the Basque Country – Spain

2018: University of Kyoto – Japan

2017: University of Castilla-La Mancha – Toledo – Spain

2005: University of Hokkaido – Japan

2009: University of Castilla-La Mancha – Toledo – Spain

2003: University of Kyoto – Japan

2003: Universidad Nacional Autonoma de Mexico – Mexico

COMMISSIONS OF TRUST

Since 2019: Co-chair of the Editorial Board of *Chemistry-A European Journal* (Wiley-VCH)

2016-2020: Foreign expert for the Swiss National Science Foundation – *Synergia* program – Switzerland

Since 2014: Member of the Editorial Board of *Chemistry-A European Journal* (Wiley-VCH)

2012 – 2023: Member of the Editorial Advisory Board of *Chemical Communications* (RSC)

2008 – 2013: Secretary of the *Fullerenes, Nanotubes and Carbon Nanoclusters* Division, Electrochemical Society (ECS)

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Member of the French Chemical Society

REPRESENTATIVE PUBLICATIONS

- 1) Stable luminescent [Cu(NN)(PP)]⁺ complexes incorporating a β -cyclodextrin-based diphosphane ligand with metal-confining properties. T.-A. Phan, N. Armaroli, A. Saavedra Moncada, E. Bandini, B. Delavaux-Nicot, J.-F. Nierengarten, D. Armspach, *Angew. Chem. Int. Ed.* **2023**, 62, e202214638.
- 2) Pentafluorophenyl esters as exchangeable stoppers for the construction of photoactive [2]rotaxanes. M. Rémy, I. Nierengarten, B. Park, M. Holler, U. Hahn, J.-F. Nierengarten, *Chem. Eur. J.* **2021**, 27, 8492-8499.
- 3) Topological and steric constraints to stabilize heteroleptic copper(I) complexes combining phenanthroline ligands and phosphines. M. Holler, B. Delavaux-Nicot, J.-F. Nierengarten, *Chem. Eur. J.* **2019**, 25, 4543-4550.
- 4) Heteroleptic copper(I) pseudorotaxanes incorporating macrocyclic phenanthroline ligands of different sizes. M. Mohankumar, M. Holler, E. Meichsner, J.-F. Nierengarten, F. Niess, J.-P. Sauvage, B. Delavaux-Nicot, E. Leoni, F. Monti, J. M. Malicka, M. Cocchi, E. Bandini, N. Armaroli, *J. Am. Chem. Soc.* **2018**, 140, 2336-2347.
- 5) Coordination-driven folding in multi-Zn(II)porphyrin arrays constructed on a pillar[5]arene scaffold. T. M. N. Trinh, I. Nierengarten, H. Ben Aziza, E. Meichsner, M. Holler, M. Chessé, R. Abidi, C. Bijani, Y. Coppel, E. Maisonhaute, B. Delavaux-Nicot, J.-F. Nierengarten, *Chem. Eur. J.* **2017**, 23, 11011-11021.
- 6) Synthesis of giant globular multivalent glycofullerenes as potent inhibitors in a model of Ebola virus infection. A. Muñoz, D. Sigwalt, B. M. Illescas, J. Luczkowiak, L. Rodríguez, I. Nierengarten, M. Holler, J.-S. Remy, K. Buffet, S. P. Vincent, J. Rojo, R. Delgado, J.-F. Nierengarten, N. Martín, *Nature Chem.* **2016**, 8, 50-57.
- 7) Self-organization of dodeca-dendronized fullerene into supramolecular discs and helical columns containing a nanowire-like core. S. Guerra, J. Iehl, M. Holler, M. Peterca, D. A. Wilson, B. E. Partridge, S. Zhang, R. Deschenaux, J.-F. Nierengarten, V. Percec, *Chem. Sci.* **2015**, 6, 3393-3401.
- 8) Photoinduced electron transfer in a carbon nanohorn-C₆₀ conjugate. M. Vizuete, M. J. Gomez-Escalonilla, J. L. G. Fierro, K. Ohkubo, S. Fukuzumi, M. Yudasaka, S. Ijiima, J.-F. Nierengarten, F. Langa, *Chem. Sci.* **2014**, 5, 2072-2080.
- 9) Synthesis of optically pure [60]fullerene e,e,e-tris-adducts. S. Guerra, F. Schillinger, D. Sigwalt, M. Holler, J.-F. Nierengarten, *Chem. Commun.* **2013**, 49, 4752-4754.
- 10) The high yielding synthesis of pillar[5]arene under Friedel-Crafts conditions explained by dynamic covalent bond formation. M. Holler, N. Allenbach, J. Sonet, J.-F. Nierengarten, *Chem. Commun.* **2012**, 48, 2576-2578