

## CLOTILDE POLICAR, curriculum vitae

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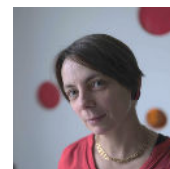
Professor at the Ecole Normale Supérieure, Université Paris Sciences et Lettres, Paris, France

Group in Metals in biology and redox homeostasis (<https://ens-bic.fr/>)

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### Career and education

Since 2021/10 President of the international Society in Bioinorganic Chemistry, [SBIC](#)

Since 2020 Dean of the sciences education at the Ecole Normale Supérieure (ENS-PSL)

2016-2020 *Directeur Adjoint Science (DAS) de l'Institut de Chimie du CNRS*, in charge of interdisciplinarity (<https://miti.cnrs.fr/>)

2010-2020 Chair of the FrenchBIC network (*Groupe Français en Chimie Bio-inorganique*, network of 25 French Institutes in bioinorganic chemistry) 2010-2015; vice-chair 2016-2020

Since 2014 Deputy director of the Research Unit LBM

2010 & 13 Invited professor at East China Normal University (Shanghai), 2\*1month

Since 2008 Professor at the Ecole Normale Supérieure-PSL

2005 Habilitation thesis Université Paris-Sud (now University Paris Saclay)

1996-2008 Assistant professor and then associate professor University Paris Saclay

1995-1996 Post-doctoral fellow under Dr. Sun Un's direction (URA 1290), (CEA) *Multifrequency EPR spectroscopy*

1992-1995 THESIS *cum laude* Speciality: chemistry, bio-inorganic systems (*Mimicks of Mn-peroxidase*)

1988-1992 Student at the Ecole normale supérieure-Paris Saclay and university Paris-Saclay (physical-chemistry)

### Research metrics

➤ Leader of a research group *Metals in biology and redox homeostasis*, LBM (CNRS-ENS-PSL-SU) (<https://ens-bic.fr/>)

➤ More than 95 articles, 4 patents, 4 book chapters (invited) — More than 65 invited conferences (among which 9 international plenaries, 38 international), 57 invited seminars (23 abroad) — 4 conferences in science history

### Popularization of sciences, outreach

3 articles in science history, 2 book chapters, 1 book (experimental chemistry) and of a compendium of popularization posters (*Le ticket d'Archimède*): posters posted in the Parisian metro (1996-2003), *Centre de Vulgarisation de la Connaissance*

Scientific theater: three stage-plays *Quand Pasteur était chimiste* ([www.savoirs.ens.fr/expose.php?id=2607](http://www.savoirs.ens.fr/expose.php?id=2607)) and *Les métaux, la vie et le chimiste* in the series "Des savants sur les planches" at the theatre *La Reine Blanche* and a modified version "*Les métaux et la vie*" at the Nuit Sciences et Lettres 2019, "*Pasteur au microscope*", 2022

Scientific committee member of the exhibition *Pasteur, the Experimentalist*, Palais de la Découverte, Paris, 2017-18

### Prizes, distinctions and fundings

-Prize "Fédération Gay-Lussac", French Academia of Sciences (2022, with Christelle Hureau, <https://www.academie-sciences.fr/fr/Laureats/laureats-2022-des-prix-thematiques.html>)

-ANR contracts (National Funding Agency): two as a PI (2021-24 and 2015-21) ; four as co-PI (2022-26, 2012-15, 2011-13 \*2)

-University contracts: Qlife initiative (PI, 2021-23); Paris-Sciences-Lettres research contract (PI, 2014-15)

-Research contract from FRM as PI (*Fédération pour la recherche médicale*, 2016-2019)

-Research fellowship François Aupetit (inflammatory bowel disease patients) obtained in 2015

-CNRS support for risky interdisciplinary research (2009)

-Young researcher grant (*ACI jeune chercheur*) (2005-08)

-Participation to CEFIPRA contracts (France-India, 2007-2009 French coPI and 2022-2025 French PI)

-Since 2008: more than 15 projects selected on synchrotron beamlines

-1997: first prize "Creation" for the French Ministry of Research for the project *Le ticket d'Archimède* (see above)

**Keywords:** Bioinorganic chemistry, cell-biology, biophysics, oxidative stress, superoxide dismutase mimics, superoxide, IR-spectromicroscopy, micro X-ray fluorescence, metal bio-imaging, analytical chemistry

### Four representative articles

\***Deciphering the metal Speciation in Low-Molecular-Weight Complexes by ion mobility spectroscopy (IMS-MS): application to the detection of manganese superoxide dismutase mimics in cell lysates**, *Angew. Chemie Int. Ed.*, **2022**, e202203066, [doi/10.1002/anie.202203066](https://doi.org/10.1002/anie.202203066), VIP (very important publication) highlighted with an inside cover

\***Superoxide dismutase mimics: from the tool box of the chemists to cellular studies**, *Curr. Op. Chem. Biol.*, **2022**, 67:102109, [doi.org/10.1016/j.cbpa.2021.102109](https://doi.org/10.1016/j.cbpa.2021.102109) Review article on invitation

\***Entasis Through Hook-and-Loop Fastening in a Glycoligand with Cumulative Weak Forces Stabilizing Cu<sup>I</sup>**, *J. Am. Chem. Soc.*, **2015**, **137**, 1141-1146; DOI: [10.1021/ja510259p](https://doi.org/10.1021/ja510259p)

\***Subcellular Imaging in the Mid-IR of a Metal-Carbonyl Moiety using Photothermal Induced Resonance**, *Angew. Chem., Int. Ed.*, **2011**, **50**, 860-864 ; [doi : 10.1002/anie.201003161](https://doi.org/10.1002/anie.201003161), Highlighted with an inside cover.