

HUREAU-SABATER Christelle - 46 years old – DR2 CNRS

Leader of the “Alzheimer, Amyloids and Bio-Inorganic Chemistry” team

<https://hureaulab.wixsite.com/equipeflcc>

Coordination Chemistry Lab - UPR 8241

205 Route de Narbonne - 31077 Toulouse - Cedex 04 - France

christelle.hureau@lcc-toulouse.fr

EDUCATION

- 2012** Habilitation degree in bio-inorganic chemistry, University Paul Sabatier, Toulouse, France
2003 PhD in coordination chemistry, Paris-Sud University, Orsay, France
2000 Molecular physical chemistry degree - Paris-Sud University, Orsay, France

POSITIONS

- 2015-** Team leader – Alzheimer, amyloids and Bio-Inorganic Chemistry”
2015-19 Co-leader of the “BIOMAPS” team-project
2007-15 CNRS researcher in the Biological Chemistry Group (headed by Prof. P. Faller)
“Role of metal ions in Alzheimer's disease”
2006-2007 Post-doctoral studies at the University Denis Diderot with Drs. B. Limoges and V. Balland
“Electrochemical studies of a Laccase immobilized on gold electrodes”
2004-2006 Post-doctoral studies at the CEA Saclay with Dr. S. Un.
“HF-EPR studies of Mn enzymes and chemical models”
2004 Post-doctoral studies at the University J. Fourier in Grenoble with Prof. L. Charlet.
“Cu binding site to the fifth site of the Prion protein”
2003 PhD at the University of Orsay, with Prof. J.-J. Girerd, Drs. G. Blondin and E. Anxolabéhère.
“Investigations of electrochemically generated PSII structural models”

PUBLICATIONS

>130 publications, including

- 1 Okafor, M.; Gonzalez, P.; Ronot, P.; El Masoudi, I.; Boos, A.; Ory, S.; Chasserot-Golaz, s.; Gasman, S.; Raibaut, L.; **Hureau, C.;*** Vitale, N.* and Faller, P.* “Development of Cu(II)-specific peptide shuttles capable of preventing Cu–amyloid- β toxicity and importing bioavailable Cu into cells.” **Chem. Sci.** **2022**, *13*, 11829-40.
- 2 Atrián-Blasco, E.; de Cremoux, L. ; Lin, X.; Mitchell-Heggs, R.; Sabater, L.; Blanchard, S. ;* Hureau, C.* “Keggin-type polyoxometalates as Cu(II) chelators in the context of Alzheimer's disease” **Chem. Commun.** **2022**, *58*, 2367-70.
- 3 Behar, A. E.; Sabater, L.; Baskin, M.; **Hureau, C.;*** Maayan, G.* “A Water-Soluble Peptoid Chelator that Can Remove Cu(II) from Amyloid- β Peptides and Stop the Formation of Reactive Oxygen Species Associated with Alzheimer's Disease” **Angew. Chem. Int. Ed.** **2021**, *60*, 24588-97.
- 4 Esmieu, C.; Ferrand, G.; Borghesani, V.; **Hureau, C.;*** "Impact of N-Truncated A β Peptides on Cu- and Cu(A β)-Generated ROS: Cu(I) Matters!" **Chem. Eur. J.** **2021**, *27*, 1777-86.
- 5 Stefaniak, E.; Atrián-Blasco, E.; Goch, W.; Sabater, L.; **Hureau, C.;*** Bal, W. "The Aggregation Pattern of A β ₁₋₄₀ is Altered by the Presence of N-Truncated A β ₄₋₄₀ and/or Cu(II) in a Similar Way through Ionic Interactions" **Chem. Eur. J.** **2021**, *27*, 2798-09.

AWARDS, HONORS and FUNDINGS (as PI)

- 2022** Prize “Fédération Gay-Lussac”, French Academy of Sciences (with Clotilde Policar, <https://www.academie-sciences.fr/fr/Laureats/laureats-2022-des-prix-thematiques.html#gaylussac>)
2021 Funding from ANR – CE06 – SUPRAMY “Polyanions to tune the supramolecular assembly of amyloid-forming peptides”
2017 -(Co-)chair of the ISABC-14 (International Symposium on Applied Bio-Inorganic Chemistry)
-Prize of the University Toulouse-III call for excellence
2016 EuroBIC medal, see https://en.wikipedia.org/wiki/European_Medal_for_Bio-Inorganic_Chemistry
2015 USIAS fellow for the project "peptides as shuttles for copper ions"
2014 Award from the ERC Starting grant (aLzINK project)
2013 -"Prix Junior" of the Coordination Chemistry Division from the French Chemical Society.
<http://onlinelibrary.wiley.com/doi/10.1002/anie.201308762/abstract>
-Award from France-Alzheimer Foundation
2012 Bronze medal of the CNRS (highest French distinction for young tenured scientist)
2011 Young Investigator Award from the Chemistry Institute of Toulouse.
2011- Bonus for scientific excellence (CNRS).