

CURRICULUM VITAE



Elisabeth LOJOU

CNRS, Aix-Marseille University - 31, chemin Joseph Aiguier - 13009 Marseille, France

☎ +33 04 91 16 41 44 - ✉ lojou@imm.cnrs.fr -

Web site: <http://bip.prod.lamp.cnrs.fr/groups/bip08/>

CURRENT POSITION

CNRS Research Director DR1, UMR 7281 Bioénergétique et Ingénierie des Protéines, BIP, Marseille, France

Head of the group «Bioelectrochemistry, Biointerfaces, Biotechnologies».

CURRENT FUNCTIONS

Treasurer of BES since 2020

Chair of ISE Division 2 (Bioelectrochemistry), 2021-23

MAIN RESEARCH TOPICS

- Molecular basis for the functional immobilization of redox enzymes on nanostructured electrodes
- Development of in situ and in operando methods to study bioelectrocatalysis
- Electron transfers in extremophilic bacteria
- Cuprous oxidase activity of multi copper oxidases
- Hydrogenase based enzymatic fuel cells and sensors

EDUCATION

2003 HDR in chemistry, Aix-Marseille University, France

1988 PhD degree Paris XII University, France

1985 Engineer from Ecole Supérieure de Chimie de Rennes, France

PUBLICATIONS

112 publications, 3 book chapters, 60 invited communications and seminars, 91 oral communications.

AWARDS

1989 SAFT-Leclanché Innovation award: “High power cells with soluble cathodes“

2012 ADEME award for Innovation and Environment : « High temperature H₂/O₂ biofuel cell»

2015 Environment, Energy, Climate award : «Wireless sensor powering by a H₂/O₂ biofuel cell».

2015, 2020 CNRS awards

2020 Physics-Chemistry award of the French Society of Chemistry

CURRENT STUDENT SUPERVIZING.

- Hiu Mun MAN, PhD thesis (co-supervision with A. de Poulpique): “Mapping enzymatic activity by coupling electrochemistry to microscopy”
- Charlène Beaufile, PhD thesis (co-supervision with I. Mazurenko): “Self-powered enzymatic fuel cells”
- Wassim EL HOUSSEINI, PhD thesis (co-supervision with M. Etienne (LCPME, Nancy, France): “Hydrogenase-based bioelectrosynthesis”
- Taiki Adachi, PhD thesis, funding from the Japan Society for the Promotion of Science: “Cuprous oxidase activity of multicopper proteins”
- Camilla Artner, Erasmus M2 thesis from Vienna: “Ionomers interaction with redox enzymes”

KEYNOTE LECTURES DURING THE LAST YEARS

2019 Symposium on « Insights into Gas Diffusion Electrodes », Magdeburg, Germany

2019 Hydrogenase'19, Lisbonne, Portugal

2020 ElecNano, Plenary Conference, Paris, France

2020 Webinar Denmark University

2021 Catalysis workshop, Plenary Conference, online
2021 : Workshop of the Chemical-Physical division of the French Chemical Society, Sète, France

TEACHING ACTIVITIES

- Engineer school of Luminy, Marseille, « fuel cells and biofuel cells»
- Master 2 « MATER, Materials for Energy », Aix-Marseille University.
- Summer School on Bioelectrochemistry « SMOBE 2016, 2018», Antwert (Belgium)
- CIVIS program, M2 courses on biofuel cells, Marseille, France

INTERNATIONAL RESPONSABILITIES

2021-23 Chair of Bioelectrochemistry Division 2 of the International Electrochemical Society
2020-now Treasurer of the Bioelectrochemical Society

NATIONAL RESPONSABILITES

2021-26 Member of CNRS council, section 13 dedicated to analytical chemistry
2010-now Member of the council of the French Group of Bioelectrochemistry

CURRENT CONTRACTS

2019-22 Excellence Programm from Aix-marseille university, « ENZYM-FC », *Enzymatic ion exchange membrane fuel cells*.
2019-20 NWO Innovational Research, *Shooting for the stars : from wastewater to hydrazine with anammox hydrazine synthase*.
2019-23 ANR Energy « EPIC-H2 », *Microbial consortium study pour sustainable H₂ production*.
2022-25 ANR « MetCop », *Role of Methionines in enzymes involved in copper homeostasis*

MEMBERSHIPS OF EVALUATION BOARD

Expert for CNRS, ANR and ERC proposals.
Expert for Grants in Belgium Austria, Poland, Israël.
Selection board for Assistant Professors and Professors

CO-ORGANISATION OF SCIENTIFIC MEETINGS

2018 23rd Topical ISE Meeting in Vilnius, Lithuania
2019 Symposium Organisation « Fuel cell/Biofuel cell », ISE meeting, Durban (South Africa)
2020 Symposium Organisation “Coupling electrochemical and optical methods to study chemo- and bioobjects”, Annual ISE Meeting, Belgrad, (Serbia)
2021 BES Meeting, Cluj, Romania
2021 Symposium Organisation “Bioelectrochemistry”, Annual ISE Meeting, Jeju (Korea)

DISSIMINATION

2015-20 Supervizing Engineer projects on biofuel cells
2018 Realization of a movie "Nano and Energy" in partnership with L. Santinacci (CINAM, Marseille), and presentation in Marseille high schools

EDITORIAL ACTIVITY

2017-2021 Guest Editor special issue « Electrochimica Acta ISE Meetings» in Electrochimica Acta
2020 Guest Editor special issue « Women in Science : Chemistry », in Frontiers in Chemistry
2020 Guest Editor special issue « Enzymes for bioelectrocatalysis», in Catalysts
Editorial Advisory board of Electrochimica Acta
Editorial Advisory Board of ChemElectroChem