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Research Director at CNRS, member of the group "*Electron Transfer and Molecular Changes. Chemical Reactivity and Catalysis*".

Education : Magistère in Chemistry – Univ. Paris 7 (1985-1988); PhD in Molecular Electrochemistry - Univ. Paris 7 (1991); Habilitation à Diriger les Recherches Univ Paris-Sud (2005).

Appointments: CNRS researcher at UMR 8182-ICMMO Université Paris-Sud-P11 (1992-2008), and UMR 7591, Université Paris Diderot-P7 (2008-); Visiting researcher at Stanford University, CA, USA (1997-1999) and Lawrence Berkeley National Laboratory, Mel Klein Laboratory, Berkeley, CA, USA (1998-1999);

Bibliometric data: **55** international publications, 1 patent, **24** conferences (9 invited, including 5 international and 4 national) and **24** invited seminars at various institutions. Direction or co-direction of 10 PhD theses, 5 post-doc associates.

Selection of 5 Significant Oral Communication in International and National Congress:

1. Intermediates of water oxidation in the OEC. Chemical and electrochemical access to Mn-oxo and Mn-peroxo model complexes E. Anxolabéhère-Mallart, *Gordon Conferences, Metals in Biology*, Ventura, CA, USA, January 27th- February 3rd, 2008. **Invited speaker**
2. Intermediates of Water Oxidation process. Chemical and electrochemical access to Mn-oxo and Mn-peroxo model complexes E. Anxolabéhère-Mallart, *13th International Conference on Biological Inorganic Chemistry (ICBIC 13)*, Vienna, Autriche, July 15-20, 2007
3. Electrochemical O₂ reduction in presence of a Mn(II) complex. Formation and reactivity of a Mn(III)OO complex E. Anxolabéhère-Mallart, H.Y. V. Ching, C. Costentin, P. Dorlet, C. Policar, M. Robert, *16th International Conference on Biological Inorganic Chemistry (ICBIC 16)*, Grenoble, France, July 22-26, 2013
4. Formation et coupure de la liaison O–O: complexes de Mn, électrons et protons. Complexes de Co et électrocatalyse de réduction des protons. E. Anxolabéhère-Mallart *GecomConcoord*, Vers , Lot, France, May 18-23, 2014. **Invited speaker**
5. Electrochemistry to probe the reactivity of metal-(hydro)peroxo species derived from reductive activation of O₂ E. Anxolabéhère-Mallart, *251st ACS National Meeting*, SanDiego, March 13-17, 2016, **Invited lecturer**

Selection of 5 Significant articles (2011-2015)

1. "Geometric and electronic structures of peroxomanganese (III) complexes supported by pentadentate amino-pyridine and -imidazole ligands." R. A. Geiger, D.F. Leto, S. Chattopadhyay, P. Dorlet, E. Anxolabéhère-Mallart, T. A. Jackson, *Inorg. Chem.*, **2011**, 50, 10190-10203.
2. "Electrochemical formation and EPR characterization of Mn(III)-peroxo complexes supported by pentadentate amino pyridine and imidazole ligands." S. El Ghachtouli, H.Y. V. Ching, B. Lassalle-Kaiser, R. Guillot, D. F. Leto, S. Chattopadhyay, T. A. Jackson, P. Dorlet, E. Anxolabéhère-Mallart. *Chem. Commun.*, **2013**, 49, 5696-5698.
3. "Electrochemical Formation and Reactivity of a Manganese Peroxo Complex: Acid Driven H₂O₂ Generation vs. O-O Bond Cleavage." H.Y. V. Ching, E. Anxolabéhère-Mallart, H.E. Colmer, C. Costentin, P. Dorlet, T. A. Jackson, C. Policar, M. Robert *Chem. Science*, **2014**, 5, 2304- 2310.
4. "Electrochemical study of a nonheme Fe(II) complex in the presence of dioxygen. Insights into the reductive activation of O₂ at Fe(II) centers" N. Ségaud, E. Anxolabéhère-Mallart, K. Sénéchal-David, L. Acosta-Rueda, M. Robert, F. Banse *Chem. Science* **2015**, 6, 639-647.
5. "Molecular Catalysis of the Electrochemical and Photochemical Re-duction of CO₂ with Earth Abundant Metal Complexes. Selective Production of CO vs HCOOH by Tuning of the Metal Center." L. Chen, Z. Guo, X.G. Wei, C. Gallenkamp, J. Bonin, E. Anxolabéhère-Mallart, K.C. Lau, T.C. Lau, M. Robert *J. Am. Chem. Soc.* **2015**, 137, 10918–10921.

Recent key results:

- Formation, characterization and reactivity of MnOO peroxo complexes
- Electrochemical activation of small molecules (O₂, H₂O, CO₂) using metal complexes (Mn, Fe, Co)
- Electrochemical approach of proton coupled electron transfer
- Catalytic reduction of H⁺ using Co complexes-Evidence for pre-catalyst formation