Curriculum Vitae of Bernard MEUNIER (November 2025)

Born in 1947 at Poitiers (France). Married (Claudine CHESNY), two children.

Current position:

- Emeritus Director of Research since September 2012. Laboratoire de Chimie de Coordination du CNRS, 205 route de Narbonne, 31077 Toulouse cedex 4 (bmeunier@lcc-toulouse.fr)

- **Distinguished Professor** at the Chemistry Department of the Guangdong University of Technology (GDUT) at Guangzhou (China) (since September 2012).

Previous positions:

- Professor at the "Collège de France", Paris, Chair of Technological Innovation Liliane Bettencourt (2014-2015).
- President-CEO of PALUMED SA (February 2006-January 2011).
- President of the CNRS "Centre National de la Recherche Scientifique" (October 2004 January 2006).
- Permanent position at the CNRS since January 1973, successively as "Attaché, Chargé, Maître, Directeur and Directeur classe exceptionnelle".
- Associate-Professor at the Chemistry Department of "l'École Polytechnique" (1993 2006).
- Assistant-Professor at the University of Montpellier (1970 -1972).

Academic cursus.

- "Doctorat de Troisième Cycle" with Robert CORRIU at the University of Montpellier in November 1971.
- "Doctorat d'Etat with Hugh FELKIN at the "Institut de Chimie des Substances Naturelles du CNRS" at Gif-sur-yvette in June 27th of 1977 (University of Paris-Orsay).
- Post-doctoral stay at the University of Oxford (October 1977 September 1978).
- Founder of the group "Biomimetic Oxidations" at the "Laboratoire de Chimie de Coordination du CNRS" at Toulouse (1979 2006).

Research activity domains (catalysis, bioinorganic and medicinal chemistry) since 1969.

- Catalytic activation of Grignard reagents with nickel, titanium or iron complexes.
- First preparation and structural characterization of an inorgano-Grignard with an iron-magnesium covalent bond.
- First use of sodium hypochlorite (NaOCl) and potassium monopersulfate (KHSO₅) as oxygen atom donors in epoxidation and hydroxylation reactions.
- Catalytic oxidation of pollutants, chemistry of metalloporphyrins, modeling of heme-containing enzymes (cytochrome P450, peroxidases, catalase, chloroperoxidase), non-heme oxidation catalysts.
- First use of metallophthalocyanines in catalytic oxidations.
- Oxidative DNA cleavage (artificial endonucleases).
- First characterization of an oxo-hydroxo tautomerism in catalytic oxidations.
- Mechanism of action of ellipticine, bleomycin and isoniazid.
- Design and development of hybrid trioxane-containing molecules (trioxaquines®) as antimalarials.
- Design and development of trioxaquines as anti-schistosomiasis drugs.
- Design and development of new copper-specific chelating agents as potential therapeutic agents for Alzheimer's disease and Wilson's disease.
- Definition of the catalytic activity for nanozymes.

Bibliometric data

429 articles, 36 patents and 458 conferences and lectures (supervisor of 42 PhD theses). On November 19th 2025, 421 articles indexed in the WoS (All data base) have been cited 27,120 times (average citations per item = 64.5). A review article on cytochrome P450 mechanisms (*Chemical Reviews 2004*, cited 2,396 times) is ranked 10th on a total of 113,503 articles dedicated to that enzyme. An article published on biomimetic oxidations in *Chemical Reviews 1992* has been cited more than 2,258 times.

The H index is 80 (Author Identifier = J-4879-2013ORCID number 0000-0003-2200-7142).

44 contributions in national new papers. Author of three books for the general public.

Membership of Academies, Professional Societies and Boards, Awards, Editorial positions, Organization of scientific meetings and Consulting positions.

- Member of the French Academy of Sciences (1999).
- Foreign Member of the Polish Academy of Sciences (2005).
- President of the CNRS (2004-2006).
- Member of the European Academy of Sciences, Arts and Letters (2006).
- Vice-President of the French Academy of Sciences (2013-2014).
- Member of the French National Academy of Pharmacy (2013).
- President of the French Academy of Sciences (2015-2106).
- Member of Academia Europaea (2015).
- Chair for Innovation at the Collège de France (2014-2015).
- Member of the "Société Française de Chimie" (Distinguished Member in 2017)
- Member of the American Chemical Society (since 1985).
- Fellow of the Royal Society of Chemistry (since 2014).
- Fellow of Chemistry-Europe (2015).

Past

- Member of the CNRS Committee on Ethics (2003-2006).
- Member of the Board of the Institut Pasteur (Paris) (2004-2006).
- Member of the Board of INSERM (2004-2006).
- Member of the Board of IRD (2004-2006).
- Member of the Board of ANDRA (2005-2006).
- Member of the Board of the "Agence de l'Innovation Industrielle (A2I) (2005-2007).
- Member of the Jury of the « Grand Prix de la Maison de la Chimie » (2007-2011).
- President of the Scientific Advisory Board of the "Pôle Balard", Montpellier (2008-2011).
- Member of the Strategic Committee for the Health Industries (2009-2012).
- President of the Balard Foundation (University of Montpellier) (2011-2012).
- Head of the Delegation for scientific informations and media relations of the French Academy of Sciences (2011-2012).
- Member of the Board of the French Chemical Society (2012-2015).
- Member of the Board of Diverchim (2013-2017).
- Guest Professor at the Southern Medical University in Guangzhou (China) (2013-2016).
- Member of the Jury of the Schering Prize (2016-2018).
- Member of the Board of the Foundation « InnaBioSanté » (2007-2018).
- President of the Foundation "Godin de Lépinay" of the Academy of sciences (2017-2019).
- Member of the Scientific Board of the Foundation « Chimie des produits naturels et leurs applications » of the French Academy of Sciences (2012-2018).
- Scientific consultant for Infinitus-Cosmetic (2016-2019).*
- Member of the National Advisory Security Committee on Biological Safety (CNCB) (2016-2022).
- Scientific consultant for Glycovax-Immunothérapeutiques Inc. (Canada) (2019-2023).*
- Member of the Scientific Advisory Board of Marubi (China) (2023-2025).*

Present

- Member of the Board of « La Maison de la Chimie » (2006-).
- President of the Board of the Foundation « CIRFC-Jean-Marie Lehn » of Strasbourg University (2007-).
- President of the Jury Pierre Potier Prize (Innovation in chemistry for sustainable development) (2016-).
- President of Scientific Advisory Committee of Segens (2016-).*
- Member of the Board of the "Domaine de Chantilly" (Foundation d'Aumale) (2019-).
- Member of the Scientific Advisory Board of Precimed (China) (2020-). Except for the activities indicated with a star *, all the other ones are unpaid.

Awards

- Silver Medal of the CNRS (1991)
- Prize of the Coordination Chemistry Division of the French Chemical Society (1994)
- Prize Clavel-Lespieau of the French Academy of Sciences (1997)
- Berthelot Medal of the French Academy of Sciences (1997)
- Prize Descartes-Huygens of the Royal Netherlands Academy of Sciences (2001)
- Prize A. von Humboldt-Gay Lussac (2002)
- Knight in the Order of Legion of Honor (2006)
- Prize Le Bel of the French Chemical Society (2007)
- Officer in the Order of Legion of Honor (2015).
- Friendship Award of the P. R. of China (2019).
- "Provincial Award for Collaboration" of the Guangdong Province, P. R. of China (2020).
- China-France Chemistry Lectureship Award of the Chinese Chemical Society (2024).

Other activites

- Co-Editor of the European Journal of Inorganic Chemistry (1998-2004).
- Associate Editor of the Bulletin de la Société Chimique de France (1996-1997).
- Member of Editorial Boards: New Journal of Chemistry (1995-1997, 2001-2007), Journal of Biological Inorganic Chemistry (1996-1999), Journal of Molecular Catalysis (1996-2006), Journal of Porphyrins and Phthalocyanines (1997-2000), J. Organomet. Chem. (1999-2008) and Comptes Rendus de l'Académie des Sciences (2000-), ChemBioChem. (2005-2010), Acc. Chem. Res. (2005-2007), J. Bioinorg. Chem. (2005-2008), Angewandte Chemie Int. Ed. (2006-2014), J. Org. Phys. Chem. (2007-2010).
- Editor of "DNA and RNA Cleavers, and Chemotherapy of Cancer and Viral Diseases", Kluwer, 1996.
- Guest Editor of "Recent Developments in Biomimetic Oxidation Catalysis", a special issue of the J. Mol. Cat., vol. 113, 1996.
- Member of the Editorial Board of Chemtracts Inorganic Chemistry (1990-2002).
- Editor of "Biomimetic Oxidations Catalyzed by Transition Metals Complexes", Imperial College Press (April 2000).
- Guest-Editor of the "Structure & Bonding" volume dedicated to 'Metal-oxo and Metal-peroxo Species in Catalytic Oxidations' (Vol. 97, May 2000).
- Vice-President of the Division of Coordination Chemistry of the French Chemical Society (1999).
- President of the Division of Coordination Chemistry of the French Chemical Society (2000-2001).
- Member of the Section 18 of the CNRS National Committee (1996-2000).
- Member of the Committee of the Division of Inorganic Chemistry of IUPAC (1999-2003).
- Member of the Committee on Chemistry Education of IUPAC (2002-2003).
- Member of the first EUROBIC Organizing Committee (merging of Sambas and Simbic meetings), Newcastle, July 1992
- Member of the Organizing Committee of the NATO Workshop "Convergent Aspects in Bioinorganic and Material Chemistry, Rhodes (Greece) June 1994.
- Chairman of the NATO Workshop "DNA Cleavers and Chemotherapy of Cancer and Viral Diseases", Toulouse, September 1995.
- Chairman of EUROBIC-5 (5th European Biological Inorganic Chemistry Conference) Toulouse, July 17-20, 2000.

- Past consultant activities (1985-2019)

ARCO Chemicals (Newtown Square, USA), GENSET (Paris), PROCTER & GAMBLE (Brussel), SANDOZ Pharma (Basel), SOLVAY (Hannover), GLAXO-WELLCOME (Stevenage, UK), UNILEVER (Port-Sunlight, UK), EUKARION (Mass., USA), UNILEVER (Vlaardingen, Hollande), UCB (Belgium). Scientific consultant for Infinitus (R. P. China) (2016- 2019).

Founder of the start-up PALUMED in December 2000.

PALUMED definitively closed down in June 2017 (lack of investments).

PALUMED has developed medicinal chemistry projects on:

- **Malaria**: development of trioxaquines[®], dual molecules actives on chloroquine-resistant strains molecules of *Plasmodium falciparum*. Co-development of these antimalarial agents has been signed with SANOFI-AVENTIS from 2002 to 2010.
- Schistosomiasis (bilharziose): development of specific trioxaquines (a PALUMED patent filed in 2007).
- Bacterial infections: design and development of new antibiotics: antibioquines®.
- Neurodegenerative diseases (Alzheimer): New specific chelating agents for copper ions (specific chelato-therapy strategy).

PALUMED has been awarded:

- South-West Price for "l'Entreprise d'Avenir" sponsored by "Ernst & Young and L'Entreprise" (Toulouse, September 2005).
- National Price for "l'Entreprise d'Avenir" sponsored by "Ernst & Young and L'Entreprise" (Paris, October 2005).
- Prize Bio&Techs, Région Midi-Pyrénées (Toulouse, 2007).