



## Dr. Christian Lorber

<http://orcid.org/0000-0003-1361-5373>  
<http://www.researcherid.com/rid/G-5490-2012>

*Senior Researcher*

Laboratoire de Chimie de Coordination du CNRS  
205, route de Narbonne  
31077 Toulouse Cedex 04 (France)  
Phone : (+33) (0)5 61 33 31 44, Fax : (+33) (0)5 61 55 30 03  
e-mail : [christian.lorber@lcc-toulouse.fr](mailto:christian.lorber@lcc-toulouse.fr)

## Brief CV

Christian Lorber did his undergraduate studies at *Louis Pasteur University* in Strasbourg (France) (1985-1989). In 1989 he joined the group of the Late Professor John A. Osborn at the Chemistry Department of *Louis Pasteur University* (Strasbourg, France) where he studied the Homogeneous Catalysis with Oxo Complexes of Transition Metals (Oxidation, Isomerization). He obtained his Ph.D. diploma in 1995 and spent one year and a half as a Postdoctoral Fellow at the Inorganic Chemistry Department of *Lund University* (Sweden) with *Dr. Ebbe Nordlander*, followed by one year and a half in the group of *Professor Richard H. Holm* at the Chemistry Department of *Harvard University* (Cambridge, USA) where he participated to the synthesis and studies of New Models of Mo- and W-Oxotransferase Enzymes. In 1998 he obtained a CNRS position and moved in France to the Laboratoire de Chimie de Coordination in Toulouse (France). His interests include the inorganic and organometallic chemistry of high oxidation state early metal complexes (especially those that contain an amido, imido, diamido, alkyl, alkoxy group, and related cationic species, as well as N-Heterocyclic Carbenes (NHC)), catalytic reactions and mechanisms of reactions involving these complexes, especially in olefin oligomerization and polymerization reactions, the controlled synthesis of polymers prepared using well-defined organometallic initiators, and alkynes hydroamination. He is also involved in: (i) the synthesis of vanadium complexes with TCNE or TCNQ ligands as models of molecule-based magnets, (ii) the synthesis of nanoparticles and their use in different kind of catalytic transformations or as precursors for materials, (iii) the design of new vanadium complexes for their anti-cancer activity.

## Interests

- Organometallic chemistry of group 4 and 5 metal complexes
- Homogeneous catalysis
- Olefin polymerization and oligomerization
- Alkyne hydroamination
- Molecule-based magnets based on vanadium and TCNE or TCNQ
- Nanoparticles and catalysis/materials
- Vanadium anti-cancer drugs

*Postdoctoral positions, PhD grants, or short-term stay for undergraduates are available from time to time. Please send me a resume by e-mail.*

# Publications (in chronological order)

Reprints are available in pdf format on request ([christian.lorber@lcc-toulouse.fr](mailto:christian.lorber@lcc-toulouse.fr)).

## [1995-1999]

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- (10) Musgrave, K.B.; Donahue, J.P.; Lorber, C.; Holm, R.H.; Hedmann, B.; Hodgson, K.O. *J. Am. Chem. Soc.*, **1999**, 121, 10297-10307. ([link pdf](#))  
"An X-ray spectroscopic investigation of bis(dithiolene)-Molybdenum(IV,V,VI) and -Tungsten (IV,V,VI) complexes: symmetrized structural representations of the active sites of molybdoenzymes in DMSO reductase family and of tungstoenzymes in the AOR and F(M)DH families".

## [2000-2004]

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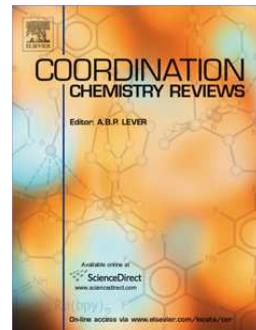
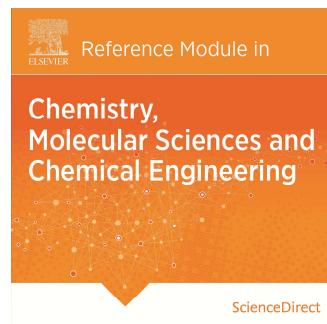
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[2015-2019]



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[2020-20xx]

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*Semibatch terpolymerization of Ethylene, Propylene and 5-Ethylidene-2-norbornene: Heterogeneous High-Ethylene EPDM Thermoplastic Elastomers.*