



Jean-Pierre **Sauvage**

Élu Correspondant le 26 mars 1990, puis membre le 24 novembre 1997, dans la section de chimie

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Professional Career :

- 2009 ~present Professor Emeritus (University of Strasbourg), CNRS Director of Research Emeritus, Distinguished Visiting Scholar at Northwestern University (2010-2012) and Visiting Professor at University of Zurich (2009-2010)
- 1979~2009 CNRS Director of Research
- 1981~1984 University Professor
- 1971~1979 CNRS Research Fellow

20 Representative Publications :

- 1) C.O. Dietrich-Buchecker, J.-P. Sauvage, J.-P. Kintzinger, "Une Nouvelle Famille de Molécules : les Métallo-Caténanes", *Tet. Letters*, **24**, 5095 (1983).
- 2) C.O. Dietrich-Buchecker, J.-P. Sauvage, J.-M. Kern, "Templated Synthesis of Interlocked Macrocyclic Ligands : The Catenands", *J. Am. Chem. Soc.*, **106**, 3043 (1984).
- 3) M. Beley, J.-P. Collin, R. Ruppert, J.-P. Sauvage, "Nickel(II)-cyclam : An Extremely Selective Electrocatalyst for Reduction of CO₂ in Water", *Chem. Comm.*, 1315 (1984).



- 4) M. Cesario, C.O. Dietrich-Buchecker, J. Guilhem, C. Pascard, J.-P. Sauvage, "Molecular Structure of a Catenand and its Copper(I) Catenate : Complete Rearrangement of the Interlocked Macrocyclic Ligands by Complexation", *Chem. Comm.*, 244 (1985).
- 5) J.-C. Chambron, J.-P. Sauvage, E. Amouyal, P. Koffi, "Ru(bipy)₂(dipyridophénazine)²⁺ : A Complex with a Long Range Directed Charge Transfer Excited State", *Nouv. J. Chim.*, **9**, 527 (1985).
- 6) C.O. Dietrich-Buchecker, A. Khemiss, J.-P. Sauvage, "High Yield Synthesis of Multiring Copper(I) Catenates by Acetylenic Oxidative Coupling", *Chem. Comm.*, 1376 (1986).
- 7) C.O. Dietrich-Buchecker, J.-P. Sauvage, "A Synthetic Molecular Trefoil Knot", *Angew. Chem. Int. Ed. Engl.*, **28**, 189 (1989).
- 8) J.-P. Collin, S. Guillerez, J.-P. Sauvage, F. Barigelletti, L. De Cola, L. Flamigni, V. Balzani, "Photoinduced Processes in Dyads and Triads Containing a Ruthenium(II)-bis(Terpyridine) Photosensitizer Covalently Linked to Electron Donor and Acceptor Groups", *Inorg. Chem.*, **30**, 4230 (1991).
- 9) J.-C. Chambron, A. Harriman, V. Heitz, J.-P. Sauvage, "Effect of the Spacer Moiety on the Rates of Electron Transfer within Bis-Porphyrin-Stoppered Rotaxanes", *J. Am. Chem. Soc.*, **115**, 7419 (1993).
- 10) A. Livoreil, C.O. Dietrich-Buchecker, J.-P. Sauvage, "Electrochemically Triggered Swinging of a [2]-Catenate", *J. Am. Chem. Soc.*, **116**, 9399 (1994).
- 11) J.-P. Sauvage, J.-P. Collin, J.-C. Chambron, S. Guillerez, C. Coudret, V. Balzani, F. Barigelletti, L. De Cola, L. Flamigni, "Ruthenium(II) and Osmium(II) bis(Terpyridine) Complexes in Covalently-Linked Multicomponent Systems : Synthesis, Electrochemical Behavior, Absorption Spectra, and Photochemical and Photophysical Properties", *Chem. Rev.*, **94**, 993 (1994).
- 12) J.-P. Sauvage, "Transition Metal-Containing Rotaxanes and Catenanes in Motion : Toward Molecular Machines and Motors", *Acc. Chem. Res.*, **31**, 611 (1998).
- 13) M.-C. Jimenez, C. Dietrich-Buchecker, J.-P. Sauvage, "Towards Synthetic Molecular Muscles : Contraction and Stretching of a Linear Rotaxane Dimer ", *Angew. Chem. Int. Ed.*, **39**, 3284 (2000).



- 14) I.M. Dixon, J.-P. Collin, J.-P. Sauvage, F. Barigelletti, L. Flamigni, "Charge Separation in a Molecular Triad Consisting of an Iridium(III)-bis-terpy Central Core and Porphyrins as Terminal Electron Donor and Acceptor Groups", *Angew. Chem. Int. Ed.*, **39**, 1292 (2000).
- 15) L. Flamigni, J.-P. Collin, J.-P. Sauvage, "Iridium Terpyridine Complexes as Functional Assembling Units in Arrays for the Conversion of Light Energy", *Acc. Chem. Res.*, **41**, 857-871 (2008).
- 16) J.-P. Collin, F. Durola, J. Lux, J.-P. Sauvage, "A Rapidly Shuttling Copper-Complexed [2]Rotaxane with Three Different Chelating Groups in Its Axis", *Angew. Chem. Int. Ed.* **48**, 8532 (2009).
- 17) J.-P. Collin, J. Frey, V. Heitz, J.-P. Sauvage, C. Tock, L. Allouche, "Adjustable Receptor Based on a [3]Rotaxane Whose Two Threaded Rings Are Rigidly Attached to Two Porphyrinic Plates : Synthesis and Complexation Studies", *J. Am. Chem. Soc.* **131**, 5609 (2009).
- 18) J.-P. Collin, F. Durola, J. Frey, V. Heitz, F. Reviriego, J.-P. Sauvage, Y. Trolez and K. Rissanen, "Templated Synthesis of Cyclic [4]Rotaxanes Consisting of Two Stiff Rods Threaded through Two Bis-macrocycles with a Large and Rigid Central Plate as Spacer", *J. Am. Chem. Soc.* **132**, 6840 (2010).
- 19) R. S. Forgan, J.-P. Sauvage, J. F. Stoddart, "Chemical Topology : Complex Molecular Knots, Links and Entanglements", *Chem. Rev.*, **111**, 5434 (2011).
- 20) F. Niess, V. Duplan, J.-P. Sauvage "Interconversion between a Vertically Oriented Transition Metal-Complexed Figure-of-Eight and a Horizontally Disposed One", *J. Am. Chem. Soc.* **136**, 5876 (2014).

Awards and Honours:

A few selected awards are listed below :

1978 Bronze Medal from the CNRS



1979	French Chemical Society Award in Coordination Chemistry
1980	Jean-Baptiste Dumas Award from the French Academy of Sciences
1987	French Chemical Society Award in Organic Chemistry
1988	CNRS Silver Medal
1991	Izatt-Christensen Award in Macrocyclic Chemistry
1994	Prelog Gold Medal, ETH-Zürich (Switzerland)
1995	World Nessim Habif Award, University of Geneva
1997	Member of the French Academy of Sciences
2000	Centenary Lecturer and Medal (Royal Society of Chemistry, United Kingdom)
2000	Chevalier de la Légion d'Honneur
2005	Pierre Süe Prize of the French Society of Chemistry
2005	Catalan Sabatier Prize of the Royal Spanish Society of Chemistry (RSEQ)
2007	Chair of the 21st Solvay Conference in Chemistry, "From noncovalent assemblies to molecular machines", Brussels, 28 November – 1st December
2008	RB Woodward Award in Porphyrin Chemistry
2009	Japan Coordination Chemistry Award
2010	Honorary Doctorate, University of Zurich
2012	"Luigi Tartufari" International Prize, Accademia Nazionale dei Lincei (Italy) Blaise Pascal Medal 2012 in Chemistry of the European Academy of Sciences Elected as Fellow of the European Academy of Sciences
2014	"Grand Prix de la Fondation de la Maison de la Chimie"

Named Lectures:

Albright and Wilson Lecturer, University of Warwick (UK), **1988**; Donders Lectureship, University of Utrecht (Netherlands), **1992**; University of Pavia (Italy), **1992**; University of Bern (Switzerland), **1992**; University of Bologna (Italy), **1993**; The Pfizer Lecture, University of Sheffield (UK), **1993**; University of Louvain la Neuve (Belgium), **1994**; "Andrews Lecturer", University of Sydney (Australia), **1994**; "Earl Muetterties Memorial Lecturer", University of Berkeley, (USA), **1995**; "H.H King Lecturer", Kansas State University (USA), **1995**; "Reilly Lecturer", Notre Dame University (USA), **1996**; "Frontiers in Chemical Research" Lecturer, Texas A & M University, **1996**; "Morris S. Kharasch" Lecturer, University of Chicago, **1998**; "Taft" Lecturer, University of California, Irvine **1999**; "Barré Lecturer", University of Montréal, **1999**; Centenary Lecturer (Royal Society of Chemistry, United Kingdom), **2000**; "Descartes Lecture" of the Royal Netherland Academy of Arts and Sciences, **2000**; University of La Laguna (Spain), **2001**; University of Santiago de Compostela



(Spain), **2001**; "Musher Lecture", The Hebrew University of Jerusalem (Israël), **2001**; "Les Power" Lecture, James Cook University, Townsville (Australia), **2004**; "Steinhofer Lecture 2006", Technical University of Kaiserslautern (Germany), **2007**; University of Hokkaido, Sapporo (Japan), **2010**; Institute for Molecular Science, Okazaki (Japan), **2010**; The Henlein Hall Lectures, Bowling Green State University (USA), **2012**; University of Geneva (Switzerland), **2012**; The R.J.P. Williams Lecture, Oxford University (UK), **2013**.

On the **Editorial Board** of the following journals (passed and present) :

Bulletin de la Société Française de Chimie, Compte Rendu Chimie, New Journal of Chemistry, Bulletin of the Chemical Society of Japan, Acta Chimica Scandinavia, Bioorganic Chemistry Frontiers, Structure and Bonding (1997-2012), Inorganic Chemistry (1997-1999 and 2004-2007), Chemical Society Reviews : Editor-in-Chief (1997-2000), Inorg. Chemistry Communication (2003- 2012), Chemistry Letters (2010-)

Publications and Citations :

More than 500 publications between 1969 and December 2014; more than 600 lectures and seminars at international or French meetings, in universities and in industrial or governmental research centres. According to ISI Web of Knowledge, Jean-Pierre Sauvage is a "HighlyCited" chemist (more than **32 000 citations** with an average citation number of 68 per publication). His h-index is equal to **92** (data of January 2015).

Scientific Achievements :

When Sauvage and his group started to work in the field of **interlocking rings** (catenanes), the situation was very different from what it is nowadays. These compounds had been much discussed in the 1960s but, unfortunately, their synthesis was exceedingly difficult (Schill and co-workers). A practical synthesis of catenanes seemed to be out of reach and the organic chemistry community was gradually losing interest for such compounds.

In 1983, Sauvage and Dietrich-Buchecker proposed a novel strategy for making **catenanes**, based on the three-dimensional template effect of a metal centre (copper(I)). This first report clearly demonstrated that catenanes are accessible species which can be obtained on a macroscopic scale. It was a new birth for molecules which had fascinated chemists for decades but which were more discussion objects or laboratory curiosities than real chemical species. From 1983 to now, the concept has been generalized and used to create a wide family of topologically and



chemically fascinating molecules, including catenane oligomers and multiply interlocking ring systems.

By applying a strategy derived from that described in the first report on catenanes, the first molecular knot, namely the **trefoil knot**, was synthesized in 1989 by Sauvage and Dietrich-Buchecker. The compound is a topologically fascinating object (the simplest non trivial knot). Its preparation represents an interesting link between topology, art and biology. This first chemical knot can be considered as a real synthetic achievement since chemists had discussed knots as hypothetical chemical objects for several decades before they were actually made.

The synthetic procedures for making interlocking and knotted rings have been very significantly improved since the beginning of the work done by Sauvage. In relatively recent work, performed in collaboration with Grubbs and co-workers (CALTECH), the original preparation of the [2]catenane (consisting of 2 interlocking rings), published in the 1980s, was improved in a spectacular fashion by using a methodology based on ruthenium carbene-catalysed ring-closing metathesis of olefins. Equally promising is the use a second metal centre (palladium(II)) to close the rings. This work, carried out in association with Fujita and his group (Tokyo), as well as the collaborative work done with Grubbs, demonstrates that catenanes can now be obtained using very simple procedures and almost quantitatively.

A rapidly expanding field of research is that of controlling and triggering motion at the molecular level. This very active area of research, referred to as "**molecular machines**" has been pioneered by a few groups, including those of Balzani, Stoddart and Sauvage. Bi- or multi-stable highly functional [2]catenanes, which can be set in motion in a precisely defined fashion, have been elaborated by Sauvage as early as in 1994. One ring glides within the other ring under the action of an electro-chemical signal, the process being reversible. Recent improvements of the previous systems have been made, affording new "pirouetting" machines, able to move within milliseconds or even less, after an electro-chemical signal has been sent to the molecule. The group has also proposed a new family of dynamic systems, incorporating octahedral ruthenium(II) complexes of the rotaxane or catenane family. These new compounds behave as light-driven molecular machines.

Another contribution (2000) from the group of Sauvage is that of a rotaxane dimer whose behaviour is reminiscent of natural muscles. In this particular case, two filaments can glide along one another in a controlled fashion. The overall effect is that the synthetic rotaxane dimer can be stretched or contracted at will, using a chemical signal. Recently (2008-2010), Sauvage's group could make a "molecular press", able to compress given molecules between two plates. The systems is based on a [3]rotaxane with two mobile plates –incorporating zinc-complexed porphyrins- whose mutual distance can be adjusted by a chemical reaction. Recently, a [4]rotaxane, consisting of two "rails" and



two threaded fragments incorporating zinc-complexed porphyrins was reported by the group. An X-ray structure of this huge compound (MW~9000) could even be obtained by Prof. Rissanen (Finland). This [4]rotaxane behaves as a switchable receptor. Simple substrates complexed between the porphyrinic "plates" can be expelled or re-coordinated by using a chemical signal.

The field of catenanes and rotaxanes has undergone a real revolution since the beginning of the 80s. When the team led by Sauvage started to work in this research area, very few scientists were interested in catenanes but this situation changed after a few years. The first report on templated synthesis of catenanes (Sauvage, Dietrich-Buchecker and Kintzinger, 1983) was followed by outstanding contributions from other teams describing the templated synthesis of new catenanes, either using purely organic templates (Stoddart et al., 1989; Hunter, Voegtle, 1992) or based on transition metal-incorporating assemblies (Fujita, 1994), to cite just a few. These pioneering contributions have been followed by numerous highly interesting and innovative reports in the literature, which make the field particularly active and promising nowadays, at the border between molecular chemistry, materials and information sciences, and molecular biology. By their ingenious use of templation, Sauvage and Stoddart, in particular, have opened up a new materials world of mechanically interlocked molecular compounds and, in so doing, have produced the blueprint for the subsequently growth of functional molecular nanotechnology.

Apart from his work in the field of chemical topology and molecular machines, Sauvage has made important contributions to the fields of inorganic photochemistry and artificial photosynthesis. In particular, with J.-M. Lehn, he developed new photochemical systems related to photochemical splitting of water to H_2 and O_2 . In 1977, they proposed one of the very first systems leading to catalytic reduction of H_2O to H_2 under the action of light and, in 1979, the symmetrical reactions (oxidation of H_2O to O_2 by visible light irradiation) was made possible, using related reaction and photochemical principles. In order to elaborate efficient models of the natural photosynthetic systems, and in view of realising the complete water splitting cycle in the future, Sauvage's group has synthesised numerous multicomponent complexes, either incorporating metal-complexed porphyrins or second or third row transition metal complexes (Ru, Os, Rh and Ir) able to undergo light-induced charge separation. Following the synthetic work, the photochemical and photophysical properties of most of the compounds were investigated in Bologna by renowned photochemists (Balzani and his co-workers, University of Bologna, or Flamigni and Barigelletti, CNR Centre). Some of the charge separated states are remarkably long-lived, thus paving the way to real artificial photosynthetic devices reminiscent of the photosynthetic apparatus of green plants or photosynthetic bacteria.



Publication List – Jean-Pierre Sauvage

THESE de Doctorat d'Etat (November 20, 1971, Strasbourg)

"Les diaza-polyoxa-macrobicycles et leurs cryptates".

Thesis Jury : **G. OURISSON** (President), **R. WEISS** (Examiner), **J.M. LEHN** (Supervisor and Examiner) et **W. SIMON** (invited member).

1969

1. **B. DIETRICH, J.-M. LEHN, J.-P. SAUVAGE**,
"Diaza-polyoxa-macrocycles et macrobicycles",
Tet. Letters, 2885 (1969).
2. **B. DIETRICH, J.-M. LEHN, J.-P. SAUVAGE**,
"Les cryptates",
Tet. Letters, 2889 (1969).

1970

3. **J.-M. LEHN, J.P. SAUVAGE, B. DIETRICH**,
"Cryptates-cation exchange rates",
J. Am. Chem. Soc., 92, 2916 (1970).
4. **B. DIETRICH, J.-M. LEHN, J.P. SAUVAGE**,
"Oxathia-macrobicyclic diamines and their cryptates",
Chem. Comm., 1055 (1970).

1971

5. **J.-M. LEHN, J.-P. SAUVAGE**,
"Cation selectivities of alkali and alkaline-earth cryptates",
Chem. Comm., 440 (1971).

1972

6. **J. CHENEY, J.M. LEHN, J.P. SAUVAGE, M.E. STUBBS**,
"Cryptates : Metal cation inclusion complexes with a macrotricyclic ligand",
Chem. Comm. 1100 (1972).

1973

7. **B. DIETRICH, J.-M. LEHN, J.-P. SAUVAGE**,
"Cryptates : Control over divalent/monovalent cation selectivity",
Chem. Comm. 15 (1973).



8. **B. DIETRICH, J.-M. LEHN, J.-P. SAUVAGE, J. BLANZAT,**
"Cryptates X : Synthèse et propriétés physiques des systèmes diaza-polyoxa-macrobicycliques",
Tetrahedron, 1629 (1973).
9. **B. DIETRICH, J.-M. LEHN, J.-P. SAUVAGE, J. BLANZAT,**
"Cryptates XI : Complexes macrobicycliques, formation, structure, propriétés"
Tetrahedron, 1647 (1973).
10. **B. DIETRICH, J.-M. LEHN, J.-P. SAUVAGE,**
"Kryptate : Makrocyclische Metallkomplexe",
Chemie in unserer Zeit, **4**, 120 (1973).

1975

11. **J.M. GIRODEAU, J.-M. LEHN, J.-P. SAUVAGE,**
"A polyfunctional chiral macrocyclic polyether derived from L-(+)- tartaric acid",
Angew. Chem. Intern. Ed., **14**, 764 (1975).
12. **J.-M. LEHN, J.-P. SAUVAGE,**
"2-cryptates : Stability and selectivity of alkali and alkaline-earth macrobicyclic complexes",
J. Am. Chem. Soc., **97**, 6700 (1975).

1976

13. **E. KAUFFMANN, J.-M. LEHN, J.-P. SAUVAGE,**
"Enthalpy and entropy of formation of alkali and alkaline-earth macrobicyclic cryptate complexes",
Helv. Chim. Acta, **59**, 1099 (1976).

1977

14. **G. BALAVOINE, M.L.H. GREEN, J.P. SAUVAGE,**
"Studies on some- η^5 -cyclopentadienyliron derivatives with chelate diphosphine ligands",
J. Organometal. Chem., **128**, 247 (1977).
15. **J.-M. LEHN, J.-P. SAUVAGE, 1977,**
Brevet : "Procédé de préparation d'hydrogène et complexe de coordination du rhodium mis en oeuvre dans ce procédé".
16. **J.-M. LEHN, J.-P. SAUVAGE,**
"Chemical storage of light energy : Catalytic generation of hydrogen by visible light or sunlight irradiation of neutral aqueous solutions",
Nouv. J. Chim., **1**, 449 (1977).

1979



17. **M. KIRCH, J.-M. LEHN, J.-P. SAUVAGE,**
"Hydrogen generation by visible light irradiation of aqueous solutions of metal complexes. An approach to the photochemical conversion and storage of solar energy",
Helv. Chim. Acta, **62**, 1345 (1979).
18. **J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL,**
"Thermal and photoinduced oxidation of water. Continuous generation of oxygen by visible light irradiation of aqueous solutions of metal complexes",
Nouv. J. Chim., **3**, 423 (1979).

1980

19. **J.-P. SAUVAGE,**
"Design and synthesis of ligands",
Bioenergetic and Thermodynamic of Model Systems, NATO Adv. Study Inst. Ser., Ser. C, **55**, 33-42 (1980).
20. **J.-P. SAUVAGE,**
"Testing of ligands",
Bioenergetic and Thermodynamic of Model Systems, NATO Adv. Study Inst. Ser., Ser. C, **55**, 63-73 (1980).
21. **J.-M. LEHN, M. KIRCH, J.-P. SAUVAGE, R. ZIESSEL,**
"Une étape de plus vers la photolyse de l'eau, source d'hydrogène",
La Recherche, **11**, 203 (1980).
22. **J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL,**
"Zeolite supported metal oxide catalysts for the photoinduced oxygen generation from water",
Nouv. J. Chim., **4**, 355 (1980).
23. **J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL,**
"Photochemical water splitting. - Continuous generation of hydrogen and oxygen on irradiation of aqueous suspensions of metal loaded strontium titanate",
Nouv. J. Chim., **4**, 623 (1980).
24. **J.-P. BEHR, J.M. GIRODEAU, R.C. HAYWARD, J.-M. LEHN, J.-P. SAUVAGE,**
"Molecular receptors. Functionalized and chiral macrocyclic polyethers derived from tartaric acid",
Helv. Chim. Acta, **63**, 2096 (1980).
25. **J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL, 1980,**
Brevet n° 8023595 : "Photocatalyseur, procédé pour sa préparation et ses applications".

1981

26. **J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL,**
"Photochemical hydrogen production : Development of efficient heterogeneous redox catalysts",



Nouv. J. Chim., **5**, 291 (1981).

27. **P.A. MARNOT, R.R. RUPPERT, J.-P. SAUVAGE**,
"Catalysis of the water gas shift reaction by complexes of rhodium and iridium with 2,2'-bipyridine and similar ligands",
Nouv. J. Chim., **5**, 543 (1981).
28. **P.A. MARNOT, R.R. RUPPERT, J.-P. SAUVAGE, 1981**,
Brevet ANVAR n° 8119910 : "Catalyse de la réaction de déplacement du gaz à l'eau par des complexes de rhodium et d'iridium",

1982

29. **R. RUPPERT, J.-P. SAUVAGE, J.-M. LEHN, R. ZIESSEL**,
"Heterogeneous water gas shift reaction catalyzed by titanium dioxide supported noble metals",
Nouv. J. Chim., **6**, 235 (1982).
30. **J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL, L. HILAIRE**,
"Water photolysis by UV irradiation of rhodium loaded strontium titanate catalysts",
Isr. J. Chem., **22**, 168 (1982).
31. **C.O. DIETRICH-BUCHECKER, P.A. MARNOT, J.-P. SAUVAGE**,
"Direct synthesis of disubstituted aromatic polyimines chelates",
Tet. Letters, **23**, 5291 (1982).

1983

32. **J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL, L. HILAIRE, P. KELLER, A. MORADPOUR, E. AMOUYAL**
"Photochemical dissociation of water : development and study of new heterogeneous catalysts",
Photochemical, Photoelectrochemical and Photobiological Processes, pp. 116-124, D. Reidel (CEC) ed., 1983.
33. **N. ALONSO-VANTE, V. ERN, P. CHARTIER, C.O. DIETRICH-BUCHECKER, D.R. McMILLIN, P.A. MARNOT, J.P. SAUVAGE**,
"Spectral sensitization of semiconductors by copper(I) complexes in photoelectrochemical systems",
Nouv. J. Chim., **7**, 3 (1983).
34. **C.O. DIETRICH-BUCHECKER, P.A. MARNOT, J.-P. SAUVAGE, J.R. KIRCHHOFF, D.R. McMILLIN**,
"Bis(2,9-diphenyl-1,10-phenanthroline) copper(I) : a copper complex with a long-lived charge-transfer excited state",
Chem. Commun., 513 (1983).
35. **J.-M. LEHN, J.-P. SAUVAGE, J. SIMON, R. ZIESSEL, C. PICCINNI-LEOPARDI, G. GERMAIN, J.P. LECLERCQ, M. VAN MEERSSCHE**,



"Synthesis and metal complexes of a conformationally restricted quaterpyridine. Crystal structure of its dimeric dinuclear Cu(I) complex, $(\text{Cu}_2(\text{pQP})_2)^{2+}$ ",
Nouv. J. Chim., **7**, 413 (1983).

36. **C.O. DIETRICH-BUCHECKER, J.-P. SAUVAGE,**
"Synthèse de composés polyéthers macrocycliques dérivés de la phénanthroline-1,10 diphényle-2,9",
Tet. Letters, **24**, 5091 (1983).
37. **C.O. DIETRICH-BUCHECKER, J.-P. SAUVAGE, J.-P. KINTZINGER,**
"Une nouvelle famille de molécules : les métallo-caténanes",
Tet. Letters, **24**, 5095 (1983).

1984

38. **C.O. DIETRICH-BUCHECKER, J.-P. SAUVAGE, J.-M. KERN,**
"Templated synthesis of interlocked macrocyclic ligands : The catenands",
J. Am. Chem. Soc., **106**, 3043 (1984).
39. **A. EDEL, P.A. MARNOT, J.-P. SAUVAGE,**
"Photochemical reduction of water via energy transfer from a copper(I) complex",
Nouv. J. Chim., **8**, 495 (1984).
40. **M. BELEY, J.P. COLLIN, R. RUPPERT, J.-P. SAUVAGE,**
"Nickel(II)-cyclam : An extremely selective electrocatalyst for reduction of CO_2 in water",
Chem. Comm., 1315 (1984).
41. **C.O. DIETRICH-BUCHECKER, P.A. MARNOT, J.-P. SAUVAGE, J.-P. KINTZINGER, P. MALTESE,**
"Complexes du cuivre(I) ou du ruthénium(II) à coordinats encastrés : Synthèse et propriétés spectroscopiques",
Nouv. J. Chim., **8**, 573 (1984).
42. **J.P. GISSELBRECHT, M. GROSS, J.-M. LEHN, J.-P. SAUVAGE, R. ZIESSEL, L. PICCINNI-LEOPARDI, J.M. ARRIETA, G. GERMAIN, M. VAN MEERSSCHE,**
"*p*-Quaterpyridine complexes : Crystal structure of the mononuclear Cu(II) complex. Electrochemical studies of the monomeric Cu(II) and dimeric Cu(I) complexes, of their interconversion and of the bis-Ru(II)(bipy)₂ complex",
Nouv. J. Chim., **8**, 661 (1984).

1985

43. **J.-M. LEHN, J.-P. SAUVAGE, M.A. MORADPOUR,**
"Conversion photochimique : photolyse de l'eau",
Combustibles fluides de remplacement (Rapport de l'Académie des Sciences),
Gauthiers-Villars, 109, 1985.
44. **A. EDEL, P.A. MARNOT, J.-P. SAUVAGE,**
"Unexpected synthesis of 2-methyl 1,3-diazapyrene from 1,8-diamino naphthalene",
Tet. Letters, **26**, 727 (1985).



45. **M. CESARIO, C.O. DIETRICH-BUCHECKER, J. GUILHEM, C. PASCARD, J.-P. SAUVAGE,**
"Molecular structure of a catenand and its copper(I) catenate : Complete rearrangement of the interlocked macrocyclic ligands by complexation",
Chem. Comm., 244 (1985).
46. **J.R. KIRCHHOFF, D.R. McMILLIN, P.A. MARNOT, J.-P. SAUVAGE,**
"Photochemistry and photophysics of bis(terpyridyl) complexes Ru(II) in fluid solution. Evidence for the formation of an η^2 - diphenylterpyridine complex",
J. Am. Chem. Soc., **107**, 1138 (1985).
47. **A.M. ALBRECHT-GARY, Z. SAAD, C.O. DIETRICH-BUCHECKER, J.-P. SAUVAGE,**
"Interlocked macrocyclic ligands : A kinetic catenand effect in copper(I) complexes",
J. Am. Chem. Soc., **107**, 3205 (1985).
48. **C.O. DIETRICH-BUCHECKER, J.-M. KERN, J.-P. SAUVAGE,**
"An air-stable d^9 nickel(I) catenate : Stabilisation of monovalent nickel by interlocked macrocyclic ligands",
Chem. Comm., 760 (1985).
49. **J.-P. SAUVAGE,**
"Les caténands",
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09.10.1975 : University of Clermont-Ferrand (France).

1977

20.04.1977 : University of Grenoble (France).

1978

05.06 to

09.06.1978 : EUCHEM Conference, Gargnano (Italy).

12.06.1978 : University of Parma (Italy).

14.09.1978 : Symposium on Organic Chemistry , Ecole Polytechnique, Palaiseau (France).

10.11.1978 : University of Strasbourg (France).

13.12 to

14.12.1978 : Conference DGRST, Paris (France).

1979

24.04 to

26.04.1979 : GECAT 79, Chalmazel (France).

16.05 to Workshop on Photochemistry of Coordination Compounds

17.05.1979 : Paris (France).

21.05 to

01.06.1979 : NATO Summer School, Tabiano, Parma (Italy).

20.09 to



28.09.1979 : Summer school of CNRS, "Electrochimie et bioconversion de l'énergie solaire", La Grande-Motte (France).

24.10 to SERI-PIRDES Workshop on Photoconversion,
26.10.1979 : Keystone, Colorado (USA).

06.12.1979 : University of Rennes-Beaulieu (France).

1980

27.03.1980 : University of Reims (France).

20.04 to GECOM VII (Groupe d'Etude Chimie Organométallique).
25.04.1980 : Carry-Le-Rouet (France).

12.06.1980 : CNRS/PIRDES, Paris (France).

08.09 to XI^e Congrès des Chimistes Théoriciens d'Expression Latine,
11.09.1980 : Pau (France).

13.10 to Conference of "Action Thématique Programmée",
14.10.1980 : Solar Energy, Nancy (France).

04.11.1980 : Ecole Normale Supérieure de Paris, Paris (France).

06.11 to Photochimie en milieu organisés (Société Française de Chimie),
07.11.1980 : Paris (France).

14.11.1980 : C.E.N.G., Grenoble (France).

21.11.1980 : Ecole Supérieure de Chimie, Journée sur le Stockage Chimique de l'Energie, Marseille (France).

27.11.1980 : Centre de Recherche sur les Macromolécules.
Strasbourg (France).

1981

21.01.1981 : GR 12, CNRS, Thiais (France).

26.03.1981 : Université Pierre et Marie Curie, Paris (France).

04.05 to
08.05.1981 : Semaine d'Etude de Chimie Organique, (SECO), Brest (France).



10.12.1981 : Université de Clermont-Ferrand, Clermont-Ferrand (France).

20.12.1981 : Colloques de l' "Action Thématique Programmée" Photochimie Solaire
Ecole Nationale Supérieure de Chimie de Lille, Lille (France).

1982

30.08 to 03.09.1982 : 3rd International Symposium on Homogeneous Catalysis,
Milan (Italy).

06.12 to 08.12.1982 : Meeting on Solar Energy Conversion, European Communities
Brussels (Belgium).

1983

29.03 to 30.30.1983 : Institut National Supérieur de Chimie Industrielle de Rouen,
Rouen (France).

01.09 to 02.09.1983 : 3° Colloque National du GRECO "Oxydes de Carbone",
Ecully (France).

14.10.1983 : Institut de Chimie, Strasbourg (France).

16.12.1983 : Collège de France, Paris (France).

1984

24.04.1984 : Institut de Recherche sur la Catalyse (CNRS), Villeurbanne (France).

02.07.1984 : Organisch-Chemisches Kolloquium, Karlsruhe (Germany)

17.09 to 21.09.1984 : Congrès de la Société Française de Chimie,
Nancy (France).

10.12.1984 : University of Sheffield (UK).

12.12.1984 : Mini-Symposium on Macrocyclic Chemistry, Cambridge (UK).

1985

31.01.1985 : Meeting organised by "l'Agence Française pour la Maîtrise de
l'Energie", Sophia-Antipolis (France).



20.05.1985 : SECO XXII, Strasbourg (France).

20.06.1985 : Department of Physical Chemistry, Centre d'Etudes Nucléaires, Saclay (France).

31.07.1985 : University of Tokyo (Japan).

02.08.1985 : University of Kyoto (Japan).

09.08.1985 : Tohoku University, Sendai (Japan).

23.09 to 26.09.1985 : Symposium organised by the European Communities, University of Lille (France).

14.10.1985 : Symposium annuel de Chimie Organique de l'Université Libre de Bruxelles, (Belgique).

08.11.1985 : University of Louvain-La-Neuve (Belgium).

02.12.1985 : University of Rochester (USA).

04.12.1985 : University of Princeton (USA).

05.12.1985 : University of Purdue (USA).

10.12.1985 : National Laboratory, Brookhaven (USA).

1986

28.05.1986 : C.E.N.G. Grenoble (France).

02.07.1986 : Laboratoire de Chimie de Coordination, Toulouse (France).

20.07 to 25.07.1986 : 4th. International Symposium on Inclusion Phenomena, Lancaster (UK).

01.09 to

04..09.1986 : XIth. International Symposium on Macrocyclic Chemistry, Florence (Italy).

09.10 to

11.10.1986 : ORCHEM'86, Bad Nauheim (Germany).

1987



- 13.01.1987 : Organisch Chemisches Kolloquium,
University of Bonn (Germany).
- 24.03.1987 : Université de Rennes (France).
- 09.04.1987 : GECOM XV, Bouvine (France).
- 13.05.1987 : The Royal Society of Chemistry, Perkin Division,
Université de Liverpool (UK).
- 21.05.1987 : Congrès de l'Association Canadienne-Française pour l'Avancement des
Sciences, Ottawa (Canada).
- 01.06.1987 : Université de Montpellier (France).
- 20.07 to 23.07.1987 : The 12th. International Symposium on Macrocyclic Chemistry,
Hiroshima (Japan).
- 24.07.1987 : University of Hiroshima (Japan).
- 27.07.1987 : University of Kumamoto (Japan).
- 16.11.1987 : Albert-Ludwigs University, Freiburg (Germany).
- 17.11.1987 : University of Fribourg (Switzerland).
- 09.12.1987 : Journée de la Division de Chimie Organique de la SFC
ENSCP, Paris (France).

1988

- 07.01.1988 : One-Day Macrocyclic Symposium,
University of Birmingham (UK).
- 18.01.1988 : Institute of Inorganic Chemistry, University of Basel (Switzerland).
- 01.02.1988 : Organisch-Chemisches Kolloquium, University of Cologne (Germany).
- 04.02 to 05.02.1988 : Rencontre entre les Universités de Strasbourg et de
Stuttgart, Baden-Baden (Germany).
- 15.03.1988 : Albright and Wilson Lecturer,
University of Warwick (UK).



02.05.1988 : EUCHEM Stereochemistry, Bürgenstock Conference 1988 (Switzerland).

27.05.1988 : University of Orsay (France)

07.06.1988 : Institut für Anorganische Chemie, University of Stuttgart (Germany).

20.6.1988 : Organisch-Chemisches Institut, University of Heidelberg (Germany).

05.07.1988 : Université de Brest (France).

26.09 to XIIIth European Colloquium on Heterocyclic Chemistry,
28.09.1988 : Fribourg (Switzerland).

11.10.1988 : Dutch National Science Foundation, Lunteren (The Netherlands).

12.10.1988 : University of Twente (The Netherlands).

13.10.1988 : University of Groningen (The Netherlands).

14.10.1988 : University of Nijmegen (The Netherlands).

28.11.1988 : ETH, Zürich (Switzerland).

14.12.1988 : University of Lausanne (Switzerland).

15.12.1988 : University of Geneva (Switzerland).

1989

13.03.1989 : Université Louis Pasteur, Faculté de Pharmacie, Strasbourg (France).

15.03.1989 : Institut de Chimie des Substances Naturelles, CNRS
Gif-sur-Yvette (France).

16.03.1989 : Université Joseph Fourier, LEDSS, Grenoble (France).

18.04 to

21.04.1989 : EEC Workshop on Photoelectrochemical and Photobiological Research and Development, London (UK).

25.06 to XIV International Symposium on Macrocyclic



- 28.6.1989 : Chemistry, Townsville (Australia).
- 02.07 to XVII International Conference on Coordination Chemistry (Plenary
Lecturer), Brisbane
- 07.07.1989 : Gold Coast (Australia).
- 28.09 to "Strasbourg-Stuttgart Meeting on Chemistry",
29.09.1989 : Strasbourg (France).
- 12.10.1989 : Bayer AG, Leverkusen (Germany).
- 02.11.1989 : University of Ferrara (Italy).
- 03.11.1989 : University of Bologna (Italy).
- 30.11 to RCP 25, Rencontre entre Physiciens Théoriciens et Mathématiciens,
02.12.1989 : Institut de Recherche de Mathématiques Avancées, Strasbourg
(France).

1990

- 22.01.1990 : University of Saarbrücken (Germany).
- 23.03.1990 : Université de Dijon (France).
- 02.04 to
04.04.1990 : Weizmann Institute-Bordeaux Meeting, Université de Bordeaux
(France).
- 03.05.1990 : Université de Rennes (France).
- 17.5.1990 : 6ème Journée d'Etude "Chimie-Biologie", Toulouse (France).
- 27.05 to 6th. FEACHEM Conference on Heterocycles in Bio-Organic Chemistry,
30.05.1990 : Solbacka (Sweden).
- 18.09.1990 : University of Tokyo (Japan).



19.09.1990 : IPRI-MITI Research Centre, Tsukuba (Japan).

20.09.1990 : Tohoku University, Sendai (Japan).

21.09.1990 : Tohoku University, Sendai (Japan).

25.09.1990 : University of Kyushu, Fukuoka (Japan).

27.09.1990 : University of Kyoto (Japan).

29.11.1990 : University of Erlangen-Nürnberg (Germany).

14.12 to

15.12.1990 : Foundation Carlo Erba, Milano (Italy).

1991

28.01.1991 : GDCh lectures for the Winter semester,
Technische Universität Berlin (Germany)

05.02.1991 : Ecole Normale Supérieure, Paris (France).

20.02.1991 : Université Pierre et Marie Curie, Paris (France)

28.03.1991 : Ecole Supérieure de Physique et Chimie Industrielle, Paris (France).

05.04.1991 : Centre de Recherches Nucléaires, (CNRS) Strasbourg (France).

08.04 to MIT-Harvard joint seminars, University of Harvard, Cambridge, (USA).

14.04.1991 : University of New York, Stony Brook, (USA).

21.05 1991 : Centre d'Elaboration des Matériaux et d'Etudes Structurales (CNRS),
Toulouse, (France).

22.05 to

24.05.1991 : Groupe de Recherche "Electronique Moléculaire", Ile d'Oléron (France).



- 05.07 to European Research Conference on Supramolecular Chemistry,
08.07.1991 : Le Bischenberg, Obernai (France).
- 01.09 to XVI International Symposium on Macrocyclic Chemistry
06.09.1991 : University of Sheffield, Sheffield (UK).
- 26.09.1991 : One-day Symposium, Société Française de Chimie, Section Nord,
Lille (France).
- 25.10.1991 : Université de Rennes I, Rennes (France).
- 04.12 to Colloque : "Tendances en Chimie Supramoléculaires",
06.12.1991 : Ecole Normale Supérieure de Lyon, Lyon (France).
- 12.12.1991 : Technische Hochschule Darmstadt,
Darmstadt (Allemagne).
- 15.12 to II NATO Science Forum on Supramolecular Chemistry,
18.12.1991 : Taormina, Sicily (Italy).

1992

- 06.01.1992 : ETH-Zürich, Organisch-Chemisches Kolloqium, Zurich, (Suisse).
- 05.02.1992 : Séminaires de Chimie Inorganique, Institut de Chimie Moléculaire
d'Orsay, (ICMO), Orsay (France).
- 27.03 to Rencontre Internationale du GERSULP,
28.03.1992 : ULP Strasbourg (France).
- 27.04.1992 : Journée du Centre de Recherche de Chimie, Strasbourg (France).
- 15.05 to Colloquium of the German Chemical Society (GDCh),
16.05.1992 : Philipps Universität Marburg, Marburg (Germany).
- 19.05.1992 : Journée Scientifique Henri Kagan, ICMO, Orsay (France).



- 21.05.1992 : F.C. Donders Lecture 1992, University of Utrecht, Utrecht (The Netherlands).
- 04.06 to One-day Symposium of the "Société Française de Chimie",
05.06.1992 : Section Bretagne-Pays de Loire, La Pommeraye (France).
- 30.08 to
04.09.1992 : GECO XXXIII, Lozari, Corse (France).
- 07.09 to BASF Seminar on Supramolecular Chemistry
11.09.1992 : BASF Studienhaus St. Johann (Germany).
- 11.09 to 2 lectures at the "Summer School on Supramolecular Chemistry"
19.09.1992 : Le Bischenberg, Obernai (France).
- 20.09 to 2 lectures at the "EPA Summer School on Photoinduced Processes
25.09.1992 : in Supramolecular Species", Rimini (Italy).
- 30.09.1992 : University of Pavia (Italy).
- 14.10 to Symposium organisé par le Laboratoire Chauvin (Programme Euréka
16.10.1992 : sur les analogues du Super Oxyde Dismutase), Montpellier (France).
- 30.10.1992 : Institute of Organic Chemistry, University of Basel (Switzerland).
- 18.11.1992 : University of Nijmegen (The Netherlands).
- 27.11 to II International Symposium "The Future of Science has begun"
28.11.1992 : Foundation Carlo Erba, Milano (Italy).
- 16.12.1992 : University of Bern (Switzerland).

1993



- 06.01 to 07.01.1993 : Royal Society of Chemistry, Macrocyclic Group Meeting, University of Oxford (UK).
- 08.01.1993 : Organic Chemistry Research Colloquia, half-day meeting, University of Birmingham, (UK).
- 06.02.1993 : One-day symposium in honour of Professor Kimura, University of Hiroshima (Japan).
- 20.02.1993 : "Ski-Hut" Seminar (Professor Ringsdorf), Schauinsland (Germany).
- 05.04 to 08.04.1993 : Annual Congress of the Royal Society of Chemistry, Southampton (UK).
- 12.04 to 14.04.1993 : XIV Reunion Bienal del Grupo de Quimica Organica, Palma de Mallorca, (Balears, Spain).
- 26.04 to 27.04.1993 : University of Bologna (Italy).
- 19.05.1993 : The Pfizer Lecture 1993 : Sheffield (UK).
- 20.05.1993 : University of Sheffield (UK).
- 08.06.1993 : University of Bologna (Italy).
- 27.06 to 02.07.1993 : International Symposium of Macrocyclic Chemistry, Univesity of Twente, Enschede (The Netherlands).
- 17.09 to 01.10.1993 : Nozaki Conference, Kurashiki (Japan).
OMCOS 7 (Organometallic Chemistry applied to Organic Synthesis), Kobe (Japan).
University of Hiroshima (Japan).
Kyushu University, Fukuoka (Japan).
Osaka University, Osaka (Japan).
Kyoto University, Kyoto (Japan).
National Institute of Materials and Chemical Research (MITI), Tsukuba (Japan).
Sendai, Tohoku University (Japan).
- 10.11.1993 : BASF – Ludwigshafen (Germany).
- 15.11 to : University of Messina, Messina (Italy).



17.11.1993 : Accademia Peloritana dei Pericolanti, Messina (Italy).
University of Catania (Italy).

1994

20.01.1994 : Quantum Chemistry Laboratory, Strasbourg (France).

25.01.1994 : Institut für Organische Chemie, University of Heidelberg (Germany).

11.02.1994 : Colloque " Synthèse Multi-étape ciblée" : Ecole Polytechnique,
Palaiseau, (France).

02.03 to "Série de 6 Cours de 3ème Cycle",
07.03.1994 : Département de Chimie de l'Université Catholique de Louvain
(Belgium).

24.03.1994 : Université Joseph Fourier, Grenoble (France).

25.03.1994 : CEA - Centre d'Etudes Nucléaires de Grenoble (France).

14.04.1994 : NATO Advanced Research Workshop on Transition Metals in
Supramolecular Chemistry, Santa Margherita Ligure (Italy).

09.05.1994 : Université Pierre et Marie Curie, Paris (France).

20.05.1994 : Semaine d'Etude de Chimie Organique, SECO XXXI, Saint Lunaire
(France).

24.05.1994 : Department of Chemistry, University of Odense, Odense (Denmark).

26.05.1994 : 58ème rencontre entre Physiciens Théoriciens et Mathématiciens,
Institut de Recherche Mathématique Avancée, Université Louis
Pasteur, Strasbourg (France).

30.05.1994 : Académie des Sciences, Paris (France).

18.07.1994 : Tohoku University, Sendai (Japan).

19.07.1994 : Series of lectures and tutorials, Tohoku University,
Sendai (Japan).



- 22.07.1994 : Mini-Symposium on "Molecular Recognition Involving Metal Complexes", Hiroshima (Japan).
- 27.07.1994 : 30th International Conference on Coordination Chemistry (plenary lecture), Kyoto (Japan).
- 31.07.1994 : Post ICCC meeting on "Macrocyclic Chemistry Toward Supramolecular Functions", Okayama (Japan).
- 01.08.1994 : Shizuoka University, Hamamatsu (Japan).
- 02.08.1994 : Shizuoka University, Hamamatsu (Japan).
- 16.08.1994 : NATO-Advanced Research Workshop on Supramolecular Stereochemistry, Reykjavik (Iceland).
- 3-4.10.1994 : University of Nijmegen (The Netherlands).
- 10.10 to 11.10.1994 : Symposium sur la Chimie Supramoléculaires des Métaux de Transition, University of Bordeaux (France).
- 18.10 to 25.10.1994 : The Andrews Lectures 1994 : 3 lectures, University of Sydney (Australia).
- 24.10.1994 : Australian National University, Canberra (Australia).
- 14.11.1994 : "The Prelog Lecture 1994", ETH-Zürich (Switzerland).
- 17.11 to 18.11.1994 : French-German meeting on Photochemistry, Strasbourg (France).
- 05.12 to 06.12.1994 : REGIO MACRO V, Polymeric Systems, Centre Saint Thomas, Strasbourg (France).
- 15.12.1994 : Roussel-Uclaf, Romainville (France).
- 20.12.1994 : University of Siegen (Germany).

1995

- 20.01.1995 : The Scripps Research Institute, La Jolla (California).
- 22.01 to 26.01.1995 : Gordon Research Conference on "Metals in Biology", Ventura (California).



- 27.01.1995 : Los Angeles City College, Los Angeles (California).
- 07.02.1995 : Institut Charles Sadron , CNRS, Strasbourg (France).
- 20.02.1995 : Faculté de Pharmacie, Strasbourg (France).
- 23.03.1995 :
- 24.03.1995 : The Muetterties memorial lectures in Chemistry (2 lectures), 1994-1995, Berkeley, California (USA).
- 27.03.1995 : The H.H. King Lecture, Kansas State University (Lecture 1), Manhattan, Kansas (USA).
- 28.03.1995 : The H.H. King Lecture, Kansas State University (Lecture 2), Manhattan, Kansas (USA).
- 30.03.1995 : University of Utrecht (The Netherlands).
- 31.03.1995 : Conference COST D4 of the European Commission, Utrecht (The Netherlands).
- 12.04.1995 : Quest International, Amsterdam (The Netherlands).
- 27.04 to « Nature » meeting : The science of complex molecular systems,
28.04.1995 : Paris (France).
- 12.05.1995 : CEA-CENG, Grenoble (France).
- 18.05 to Workshop on "Electron and energy transfer in model systems and their
19.05.1995 : implication for molecular electronics",
University of Louvain (Belgium).
- 07.06.1995 : University of Geneva, Geneva, (Switzerland).
- 16.06 to European Network on Transition Metals in Supramolecular Catalysis,
18.06.1995 : Pavia (Italy).
- 05.09 to Pre-doctoral and Autumn meeting of the Royal Society of Chemistry,
08.09.1995 : Sheffield (UK).
- 16.09 to NATO-ARW, "Magnetism : a supramolecular function",
20.09.1995 : Carcans-Maubuisson (France).
- 27.09 to
29.09.1995 : 15th Regio-Symposium, Falkau (Germany).



- 23.10.1995 : University of Stuttgart (Germany).
24.10.1995 : University of Giessen (Germany).
20.11.1995 : Tohoku University, Sendai (Japan).
21.11.1995 : Chiba University, Chiba-Tokyo (Japan).
24.11.1995 : National Institute of Materials and Chemical Research, Tsukuba (Japan).
26.11 to 30.11.1995 : Vth International Conference on "Intelligent Molecular Systems with Controlled Functionality", Hayama (Japan).
15.12.1995 : University of Bonn (Germany).

1996

- 04.01 to 06.01.1996 : "Supramolecular Chemistry" Le Bischenberg (France).
12.01.1996 : Université de Rennes (France).
05.02.1996 : Vorträge des Organischen Kolloquiums der Universität Würzburg, Würzburg, (Germany).
14.02.1996 : The University of Hong Kong, (Hong Kong).
15.02.1996 : The Hong Kong University of Science and Technology, HKUST, (Hong Kong).
16.02.1996 : The Chinese University of Hong Kong, CUHK, (Hong Kong).
24.02.1996 : Third Symposium on Chemistry Postgraduate Research in Hong Kong,
The University of Hong Kong, (Hong Kong).
26.02.1996 : The University of Hong Kong, (Hong Kong).
04.03 to 07.03.1996 : The Reilly Lectures, 1995-1996, University of Notre Dame, Indiana (USA)
01.04.1996 : Hoffmann-La Roche Ltd., Basel (Switzerland).
14.04 to Frontiers in Chemical Research Lecturer, 1995-1996, Texas



- 18.04.1996 : A & M University, College Station, Texas (USA).
- 08.05.1996 : Werner Chemische Gesellschaft,
University of Bern (Switzerland).
- 23.05.1996 : Karlsruher Chemische Gesellschaft,
University of Karlsruhe (Odense (Denmark).).
- 29.05.1996 : Ecole Supérieure de Chimie Physique Electronique de Lyon (CPE),
Lyon (France).
- 12.06.1996 : Max-Planck Institut für Polymer Forschung,
Mainz (Germany).
- 17.06 to
18.06.1996 : University of Leuven (Belgium).
- 30.06. to
04.07.1996 : Inorganic Division National Conference IC' 96,
Townsville (Australia).
- 08.07 to
12.07.1996 : 6th Belgian Organic Synthesis Symposium (BOSS 6),
Gent (Belgium).
- 09.09 to
14.09.1996 : Prima Scuola di Chimica Inorganica, Pavia, (Italy).
- 20.09.1996 : Université de Bordeaux, (France).
- 24.09 to
28.09.1996 : 1996 Gordon Research Conference on Organic Structures and
Properties, Fukuoka (Japan).
- 07.10.1996 : Symposium « At the Frontiers of Organic Chemistry »,
Free University of Brussels (Belgium)
- 04.12.1996 : Chimie et Topologie,
Ecole Normale Supérieure, Paris (France).
- 07.12.1996 : Symposium in honour of Professor Vincenzo Balzani,
University de Bologna (Italy).
- 19.12.1996 : Ecole Normale Supérieure, Lyon (France).

1997



- 04.02.1997 : Université de Nantes, Nantes (France).
- 05.02.1997 : Johann Wolfgang Goethe-Universität,
Frankfurt am Main (Germany).
- 16.03. to "6th meeting of the French-American Chemical Society",
21.03.1997 : (FACS) Tucson, Arizona (USA).
- 21.03.1997 : University of Reno, Nevada (USA).
- 01.04 to TMR-CEE Artificial Photosynthesis workshop,
04.04.1997 : Saint-Rémy les Chevreuses (France).
- 06.05.1997 : Institut für Physikalische und Theoretische Chemie,
Technische Universität München (Germany).
- 26.05.1997 : Organisches Kolloquium,
Albert-Ludwigs-Universität Freiburg (Germany).
- 13.06.1997 : Journée en l'honneur d'Olivier KAHN,
University of Bordeaux (France).
- 03.08 to XXII International Symposium on Macrocyclic Chemistry, Seoul,
08.08.1997 : Seoul, (Republic of Korea).
- 18.08 to 36th IUPAC Congress,
20.08.1997 : University of Geneva (Switzerland)
- 10.09. to Annual Meeting of the "Société Française de Chimie",
11.09.1997 : Université de Bordeaux 1 (France).
- 30.10 to Centre Scientifique de l'Académie Polonaise des Sciences,
31.10.1997 : Paris (France).
- 04.11.1997 : Institut de Biologie Moléculaire et Cellulaire,
Strasbourg (France).
- 17.11.1997 : Academia Nazionale Dei Lincei,
University of Rome, (Italy).
- 08.12 to Asian Academy Seminar, Nehru Centre,
14.12.1997 : Bangalore, (India).
- 11.12 to International Chemical Conference (ICCT-97),



14.12.1997 : Taipei, (Taiwan).

1998

13.03.1998 : Laboratoire de Chimie de Coordination, Toulouse (France).

07.04 to Morris S. Kharash Visiting Professor, 1997-1998,

24.04.1998 : University of Chicago (USA).

05.05.1998 : Université de Lyon (France).

13.05.1998 : VIIème journée de l'Ecole Doctorale "Louis Pasteur" des Universités de Bourgogne et Franche-Comté, Besancon (France).

16.05 to Workshop of the TMR Network "Ru-Mn Artificial Photosynthesis",
20.05.1998 : Sigtuna, (Sweden).

23.05.1998 : Institut de Chimie de la Matière Condensée de Bordeaux,
Bordeaux (France).

28.05.1998 : Séminaire à l'Ecole Polytechnique, Palaiseau (France).

29.05.1998 : 2ème journée de Chimie Organique et Chimie Organique-Biologique
de la Montagne Ste Geneviève, Institut Curie, Paris (France).

07.06 to XXIII International Symposium on Macrocyclic Chemistry,
12.06.1998 Turtle Bay, Oahu (Hawaii, USA).

19.06 to Human Capital and Mobility meeting (European communities),
22.06.1998 : Santa Margherita di Ligure (Italy).

29.06.1998 : Séance solennelle à l'Académie des Sciences Paris (France).

12.07 to International Conference on Science and Technology of
18.7.1998 : Synthetic Metals (ICSM'98), Le Corum, Montpellier (France).

30.08 to XXXIII International Conference on Coordination Chemistry,
04.09.1998 Firenze (Italy).

06.09 to 28ème séminaire Hors-Ville 1998, 3 lectures,
10.9.1998 Champéry (Switzerland).

05.10 to XVIIIème European Congress on Heterocyclic chemistry,
07.10.1998 Rouen (France).



- 23.11 to "New Trends in Organic Synthesis",
24.11.1998 : Bracco s.p.a., Milan (Italy).
- 27.11 to Sixth meeting of the National Institute of Advanced Interdisciplinary
29.11.1998 : Research (NAIR Advisory Board), Tsukuba (Japan).

1999

- 10.01 to 62nd Okazaki Conference : Structural Hierarchy in Molecular Science,
13.01.1999 Okasaki (Japan).
- 19.01.1999 : Meeting of the "Observatoire Français des Techniques Avancées",
Paris (France).
- 09.02 to Münchener Chemische Gesselschaft und Gesellschaft
10.2.1999 : Deutscher Chemiker, Ortsverband München,
Lecture at Ludwig-Miximilians University, München (Germany).
- 23.02.1999 : Ruprecht-Karls-University, Heidelberg (Germany).
- 25.03.1999 : Conférence Publique : Sciences en Tête,
Université de Nantes (France).
- 14.04.1999 : "Les Frontières de la Chimie Organique",
Université Pierre et Marie Curie
Paris (France).
- 24.04 to Stereochemistry Conference,
30.04.1999 : Bürgenstock (Switzerland).
- 16.05 to "CONCOORD-GECOM 99",
21.05.1999 : Landerneau, Bretagne (France).
- 09.06 to
10.06.1999 : University of Lausanne (Switzerland).
- 11.06.1999 : Wilhems-Universität Münster, Münster (Germany).
- 30.06.1999 : University of Bielefeld, Bielefeld (Germany).
- 25.07 to 7th International Conference on the Chemistry of the Platinum Group
30.07.1999 : Metals, University of Nottingham (UK).



- 19.09 to "Forum Scientia Europaea n°4" ,
20.09.1999 : Centre Le Bischenberg, Bischoffsheim (France).
- 22.09.1999 : Ecole Normale Supérieure de Paris (France).
- 30.09 to 1999 Robert W. Taft Memorial Lecturer.
6.10.1999 University of California,
Irvine, California (USA).
- 26.10 to Conference "Barré 1999",
01.11.1999 : University of Montréal, Québec (Canada).
- 13.12 au Colloque organisé par la Fondation de la Maison de la
14.12.1999 : Chimie "Chimie et Beauté", Paris (France).
- 16.12.1999 : Les Conférences du Jardin des Sciences,
Université Louis Pasteur, Strasbourg.

2000

- 21.01.2000 : Seminarvortrag an der Anorganisch-Chemisches Institut der
Universität Zürich, Zürich (Switzerland).
- 31.01 to Seventh Descartes Lecture at the Royal Netherlands Academy of Arts
04.02.2000 : and Sciences and in other universities :
University of Amsterdam (The Netherlands).
University of Leiden (The Netherlands).
University of Utrecht (The Netherlands).
University of Enschede (The Netherlands).
University of Nijmegen (The Netherlands).
- 25.02.2000 Université de Paris-Sud-Orsay,
Orsay (Paris).
- 26.02 to Annual meeting TMR CEE,
29.02.2000 : Dublin (Ireland).
- 11.03 to



- 15.03.2000 : Symposium on « Contemporary Inorganic Chemistry » - F. Albert Cotton, Texas A&M University, College Station, Texas (USA).
- 23.02.2000 : "Journée de l'Ecole Doctorale",
Université Joseph Fourier, Grenoble (France).
- 27.03 to 07.04.2000 : The Centenary Lectures of the Royal Society of Chemistry
Lectures at various Universities or Research Centres :
University of Edinburgh (UK).
University of Manchester (UK).
University of Wales, Bangor (UK).
University of Leicester (UK).
Robinson College, Cambridge, (UK).
University of Exeter, King's College, London (UK).
- 25.06 to 30.06.2000 : First International Conference on Porphyrins and Phthalocyanines
(plenary lecture), (ICPP-1), Dijon (France).
- 12.07.2000 : Special event on the occasion of the "Remise de l'Épée d'Académicien"
in honour of Bernard Meunier", Université Paul Sabatier, Toulouse
(France).
- 22.09 to 24.09. 2000 : IV Symposium "Selective Reaction of Metal-Activated Molecules",
University of Würzburg, Würzburg (Germany).
- 24.09 to 28.09.2000 : ISCD12 Chirality 2000 "The International Symposium on Chirality",
Chamonix - Mont Blanc (France).
- 12.10 to 13.10.2000 : Department of Organic Chemistry at Chalmers
University of Technology, Göteborg (Sweden).
- 17.10.2000 : Ecole Polytechnique, Palaiseau (France).
- 16.10 to 22.10.2000 : "Fête de la Science", Académie de Strasbourg – Rectorat de
Strasbourg (France).
- 10.11.2000 : "Journée en Hommage à la mémoire de Olivier KAHN",
Ecole Nationale Supérieure de Chimie de Paris
Paris (France).
- 14.11.2000 : University of Darmstadt - Darmstadt (Germany).



17.11.2000 : 8th Meeting of the Advisory Board of the "National Institute for Advanced Interdisciplinary Research (NAIR)" and Lecture, Tokyo (Japan).

06.12.2000 : Université d'Angers, Angers (France).

2001

19.01.2001 : Université de Nantes (France).

25.01.2001 : Journée du "30ème anniversaire de la section de Champagne-Ardenne", Société Française de Chimie, Université de Reims (France).

08.02.2001 : Conférence à l'Université du temps libre de Strasbourg, Université Louis Pasteur, Strasbourg (France).

15.02.2001 : Journée thématique sur la chimie supramoléculaire, Ecole Doctorale de Chimie Moléculaire de Marseille, Marseille (France).

18.02 to 25.02.2001 : 3 lectures and seminars, Course of Bioinorganic Chemistry, University of La Laguna, Tenerife, (Canary Islands, Spain).

16.03.2001 : Université de Brest (France).

23.03.2001 : CEA-LETI, Observatoire des Micro et Nanotechnologies – CEA-CENG, Grenoble (France).

27.03 to 01.04.2001 : "Jeremy Musher Lecturer for 2001", Hebrew University of Jerusalem, Jerusalem (Israël).

23.04 to 30.04.2001 : Polytechnic University of Valencia and Valencia University (Burjassot), Valencia (Spain).

02.05 to 05.05.2001 : Several seminars in the frame of the "Graduate Program of Organic Chemistry" (invited professor), University of Santiago, Santiago de Compostela (Spain).

15.05 to 17.05.2001 : Meeting of the committee on "Intra- and Intermolecular Electron Transfer", Volkswagenstiftung, Chemnitz (Germany).

29.05.2001 : Université de Fribourg,



Pérolles, (Suisse).

06.06.2001 : Observatoire Français des Techniques Avancées, Ministère de la Recherche, Paris (France)

15.06 to "9th Meeting on Stereochemistry",
18.06.2001 : Institute of Chemical Technology, Prague (Czech Republic).

03.07.2001 : University of Siegen (Germany).

12.07 to The 26th ISMC-Satellite-Symposium : "Dreaming Chemistry for
14.07.2001 : the New Millennium",
Faculty of Medicine, University of Hiroshima, Hiroshima (Japan).

15.07 to "26th International Symposium on Macrocyclic Chemistry",
20.07.2001 : Kyushu University, Fukuoka (Japan).

01.09 to ESOR-8, "8th European Symposium on Organic Reactivity",
06.09.2001 : Dubrovnik (Croatia).

01.10 to "A Rhine-Ruhr-Meeting",
02.10.2001 : Symposium at the Max-Planck Institut für Kohlenforschung,
Mülheim/Ruhr (Germany).

11.10 to "Leopoldina Symposium - Chemistry and Mathematics : Two
13.10.2001 : Scientific Languages of the 21st Century",
Göttingen (Germany).

13.11.2001 : DSM Research Centre,
Geleen (The Netherlands).

16.11 to Workshop 2001 "Molecular Systems and Devices",
17.11.2001 : University of Ulm (Germany).

19.11 to International Workshop "Molecular Motors",
20.11.2001 : DECHEMA, Frankfurt am Main (Germany).

2002

09.01 to Meeting "Intra- and Intermolecular Electron Transfer",
11.01.2002 : Volkswagen Stiftung, Leuven (Belgium).



- 04.02. to 05.02.2002 : International Symposium on Nanochemistry, Institute of Chemical Technology, Valencia (Spain).
- 22.03.2002 : 3rd Half-Day Symposium on Supramolecular Chemistry, Trinity College, Dublin (Ireland).
- 24.03. to 28.03. 2002 : 9ème Rencontre de Chimie Organique Biologique, Centre Paul Langevin, Aussois (Savoie - France).
- 16.04. to 19.04. 2002 : Istituto (FRAE) ISOF-CNR, Bologna and University of Ferrara (Italy).
- 30.05. to 04.06. 2002 : Fifth International Symposium on Functional p-Electron Systems, University of Ulm/Neu Ulm (Germany).
- 07.06 to 08.06.2002 : Premières Rencontres Strasbourgeoises de Chimie des Métaux de Transition (RSCMT 1), Ecole Européenne de Chimie, Matériaux et Polymères (ECPM), Campus de Cronenbourg, Strasbourg (France).
- 13.06 to 15.06.2002 : Inter REU Workshop. 1st US/France Chemistry and Communication Meeting, Université Louis Pasteur, Strasbourg (France).
- 24.06 to 26.06.2002 : 2 lectures, meeting on "RNA Secondary Structures", Université de Bourgogne, Dijon (France).
- 04.08 to 09.08.2002 : ICPOC16 - Structure and Mechanism in Organic Chemistry, University of California, San Diego, (USA).
- 27.08 to 01.09.2002 : The 12th Jyväskylä Summer School (NATO), University of Jyväskylä (Finland), 12 lectures.
- 06.09 to 08.09.2002 : 9th Irish Inorganic Chemistry Conference, National University of Ireland, Dublin (Ireland).
- 13.09.2002 : University of Barcelona (Spain).
- 14.09 to 19.09.2002 : EURESCO Conference on "Supramolecular Chemistry", San Feliu de Guixols (Spain).
- 20.09.2002 : 8èmes Rencontre des Chimistes Théoriciens Francophones. Université Louis Pasteur, Strasbourg (France).



- 27.09 to 29.09.2002 : Second Year's Meeting of the Network "Molecular-Level Devices and Machines" Collegio Nuovo, Pavia (Italy).
- 16.10.2002 : Ecole Européenne de Chimie, Matériaux et Polymères (ECPM), Campus de Cronenbourg, Strasbourg (France).
- 25.10 to 03.11.2002 : 70th Annual Meeting, Chemistry Colloquium, The Chinese Chemical Society, Institute of Chemistry, Taipei (Taiwan) and other lectures in various universities:
Department of Applied Chemistry, National Chiao-Tung University
Institute of Chemistry, Academia Sinica, Taipei
Department of Chemistry, National Taiwan University, Taipei
- 26.11 to 11.12.2002 : IUPAC Polymer Conference on the Mission and Challenges of Polymer Science and Technology, Kyoto (Japan) and another lectures at The University of Tokyo (Japan),
- 06.12 to 10.12.2002 : Japan - US Seminar on Advanced Polymer Chemistry for the 21st Century, Westin Nagoya Castle Hotel, Nagoya (Japan).

2003

- 06.03 to 07.03.2003 : Nanoarchitectonics Workshop 2003 (NSENA 2003), National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba (Japan).
- 19.03.2003 : University of Fribourg (Switzerland).
- 20.03.2003 : Conférences du Groupe Séminaires. ENS Lyon (France).
- 25.03.2003 : Chimie et Nanosciences, Conférence-Débat, Académie des Sciences, Paris (France).
- 11.04 to 12.04.2003 : Mid-Term Review of the Network "Molecular-Level Devices and Machines", Institut de Sciences et d'Ingénierie Supramoléculaires (ISIS) Strasbourg, (France).
- 07.05 to 08.05.2003 : Three lectures in the framework of the "Annual Course on Advanced Organic Materials", University of Zaragoza, Zaragoza (Spain).
- 13.05.2003 : "Séminaires été 2003", University of Geneva (Switzerland).



12.07.2003 : "Universités Européennes d'été 2003"
ULP - UFR de Sciences Physique, Strasbourg (France).

07.09 to "VI Italian Congress on Supramolecular Chemistry",
10.09.2003 : University of Urbino, Urbino (Italy).

26.09. to "From molecular wires to functional materials" meeting,
27.09.2003 : ULP - Strasbourg (France).

25.10.2003 : "Journées Nationales de l'Union Des Physiciens (UDP)",
Lycée Jean Rostand, Strasbourg (France).

2004

27.02.2004 : Institut Curie, Paris (France).

18.04 to Midterm Review (MWFN), European Network,
20.04.2004 : Eindhoven (The Netherlands).

23.04.2004 : Institut de Chimie de la Matière Condensée,
Bordeaux (France).

02.05 to "Septième Colloque Anglo-Normand de Chimie Organique",
04.05.2004 : Université de Caen-Basse Normandie (France).

12.05 to "International Symposium on Molecular Materials and Organometallics",
14.05.2004 : Université de Rennes, Rennes (France).

26.05.2004 : University of Heidelberg, Heidelberg (Germany)

27.05.2004 : 3E-MRS Spring Meeting 2004 - Symposium F",
Institut de Science et d'Ingénierie Supramoléculaires (ISIS),
Strasbourg, (France).

06.06 to "GECOM CONCOORD 2004",
11.06.2004 : Bayonne-Anglet-Biarritz (France).

04.07 to "29th International Symposium on Macrocyclic Chemistry",
09.07.2004 : Cairns, Queensland (Australia) and lecture at James Cook University,
Townsville (Australia).

29.07.2004 : "2nd meeting of BIOMACH steering committee",
University of Stuttgart (Germany)



- 31.07 to "Moldynlogic", European network,
01.08.2004 : Munich (Germany).
- 10.10 to "Organic Structures and Properties GRC",
15.10.2004 : Les Diablerets (Switzerland).
- 25.10 to "Sino-French Symposium for Advanced Chemistry and its Applications",
28.10.2004 : Xiamen (China).
- 04.11 to "COST D-31" meeting,
07.11.2004 : Institute of Organic Chemistry and Biochemistry, Prague (Czech Republic).

2005

- 04.02.2005 : One day Symposium, Prizes and Awards, SFC-RSC,
Maison de la Chimie, Paris (France).
- 07.02.2005 : European Network "MOLDYNLOGIC",
Liège (Belgium).
- 17.02 to "ERA-Chemistry Workshops",
19.02.2005 : Mainz (Germany).
- 02.03.2005 : University of Montpellier (France).
- 29.03.2005 : Memorial Symposium in honour of Bernard Dietrich,
ISIS, Strasbourg (France).
- 31.03 to VI Conference on Inorganic Chemistry of Portugal,
02.04.2005 : Funchal, Madeira (Portugal).
- 11.04 to 2 lectures,
15.04.2005 : "Spring School 2005 on Supramolecular Functional Materials",
Loewenberg (Switzerland).
- 20.04.2005 : University of Stockholm (Sweden).
- 26.04. to "Finnish Chemical Congress",
28.04.2005 : Helsinki (Finland).
- 02.05 to "Young Chemists Workshop 2005",
04.05.2005 : Baden-Baden (Germany).
- 11.05.2005 : Department of Chemistry,



Ecole Polytechnique, Palaiseau (France).

19.05.2005 : 2 lectures at the University of Trieste (Italy)

20.05 to
22.05.2005 : COST Chemistry Action D31, 1st Meeting of Working,
Group D31/003/04, Grado (Italy).

10.06.2005 : Technische Universität Berlin (Germany).

23.06 to
24.06.2005 : 2 lectures,
Bioorganic Chemistry Meeting, Chemical Research Centre,
Budapest (Hungary).

28.08 to
01.09.2005 : SFC – Eurochem Nancy (France).

12.09 to
13.09.2005 : Symposium, France-Europe-Weizmann Institute of Sciences,
ISIS, Strasbourg (France)

11.09 to
14.09.2005 : "The 18th French-Japanese Symposium on Medicinal and Fine
Chemistry", Chamonix (France).

19.09 to
23.09.2005 : "Mid-Term Review Meeting of the European BIOMACH project",
Ascona (Switzerland).

14.10 to
19.10. 2005 : Research Conferences, "Molecular Architectures and Systems",
(Supramolecular Chemistry), Obernai (France).

24.10.2005 : University of Dortmund (Germany).

27.10.2005 : CNR Institute on Organic Synthesis and Photoreactivity,
Bologne (Italy)

28.10.2005 : University of Ferrara (Italy).

03.11 to
04.11.2005 : Joint Meeting between the groups of D. Reinhoudt (Enschede, The
Netherlands), J.-M. Lehn (ISIS) and J.-P. Sauvage, ISIS, Strasbourg
(France).

07.11.2005 : University "Pierre et Marie Curie", Paris (France).

30.11.2005 : "Baptême de la Promotion 2005" de l'Ecole Européenne de Chimie,
Polymère et Matériaux (ECPM), Strasbourg (France).

07.12.2005 : Université "Joseph Fourier", Grenoble (France).



- 12.12.2005 : Inauguration of the "Instituto de Ciencia Molecular" (ICMOL), one-day symposium, Valencia (Spain).
- 13.12.2005 : ICIQ (Institute of Chemical Research of Catalonia), Tarragona (Spain).
- 16.12.2005 : Faculty of Pharmacy, University of Barcelona (Spain).

2006

- 26.01.2006 : University of Edinburgh (Scotland, UK).
- 13.02.2006 : University of Saarland, Saarbrücken (Germany).
- 12.03. to
13.03.2006 : MOLDYNLOGIC European Network, Brussels (Belgium).
- 10.04.2006 : Centre de Recherche sur les Matériaux Autoassemblés, University of Sherbrooke (Canada).
- 11.04.2006 : McGill University, Montreal (Canada).
- 12.04.2006 : Université de Montréal (Canada).
- 20.04.2006 : University of Tokyo (Japan).
- 21.04.2006 : Utsunomiya University (Japan).
- 23.04. to
26.04.2006 : The 8th International Symposium on Organic Reactions, Awaji Island (Japan).
- 27.04.2006 : Osaka City University (Japan).
- 28.04.2006 : Tokyo University of Science (Japan).
- 28.04.2006 : Fujita's Group Meeting, Tokyo University (Japan).
- 04.05.2006 : Journée SFC Alsace, "Ecole de Chimie, Polymères et Matériaux" Strasbourg (France).
- 29.05.2006 : MINATEC Crossroads 2006, CEA, Grenoble (France).
- 31.05. to
01.06.2006 : SFC – Groupe Electrochimie "Electrochimie dans les Nanosciences" Conservatoire National des Arts et Métiers, Paris (France).



- 02.06. to International School of Molecular and Structural Archeology,
06.06.2006 : Erice (Sicily, Italy).
- 08.06. to Laboratoire d'Ingénierie des Polymères pour les Hautes Technologies
09.06.2006 : ECPM, Wangenbourg (France).
- 15.06.2006 : Institut de Chimie des Substances Naturelles, CNRS,
Gif-sur-Yvette (France).
- 20.06.2006 : Cycle de conférences sur "La Chimie et la Vie"
Université de tous les savoirs (UTLS), Université René Descartes, Paris
(France).
- 25.09. to
29.09.2006 : International Summer School on "Supramolecular Systems in Chemistry
and Biology", Tuapse (Russia).
- 06.10.2006 : Institute of Organic Chemistry and Biochemistry,
Prague (Czech Republic).
- 10.11.2006 : Séance inaugurale de l'Ecole Doctorale Thématique "Chimie
moléculaire, supramoléculaire et fonctionnelle", Louvain-la-Neuve
(Belgique).
- 24.11.2006 : Fifth JSPS Forum in France (Green Sustainable Chemistry),
ISIS, Strasbourg (France).
- 07.12.2006 : Ecole Doctorale "Mathématiques, Sciences de l'Information et de
l'Ingénieur", Ecole Nationale Supérieure de Physique de Strasbourg,
Illkirch (France).
- 08.12.2006 : Cycle de conférences "Top Science" pour le campus virtuel e-LEUR,
Strasbourg (France).
- 12.12.2006 : Organic Chemistry Institute,
University of Zürich (Switzerland).

2007

- 10.01.2007 : University of Geneva (Switzerland).
- 09.02.2007 : Steinhof Celebration,
Technical University Kaiserslautern (Germany).



- 27.02.2007 : Colloque Solvay
Université Libre de Bruxelles (Belgique).
- 21.03.to Colloque Européen : MOLDYNLOGIC
24.03.2007 : Liège (Belgique)
- 24.04.2007 : Final Meeting of BioMach STREP
Baden-Baden (Germany).
- 11.05.2007 : Université de Grenoble, journée en l'honneur de Marc Fontecave.
- 30.05.2007 : Mini-symposium "Molécules de Fonction", ECPM, Strasbourg
- 14.06.2007 : Chemical Society of Karlsruhe (Germany).
- 24.06 to 2nd International Symposium on Macrocyclic and Supramolecular
30.06.2007 : Chemistry , Salice Terme – Pavia (Italy).
- 24.09. to
28.09.2007 : XVIII Mendeleev Congress, Moscow (Russia)
- 25.10.2007 : Centre de Recherche Paul Pascal, Bordeaux.
- 06.11. to 4th Word Congress on Biomimetics, Artificial Muscles & Nano-Bio 2007
08.11.2007 : Torre Pacheco (Spain).
- 09.11.2007 : Université de Bordeaux
- 28.11. to Chairman of the 21th Solvay Conference in Chemistry
01.12.2007 : Hôtel Métropole (Belgique)
- 13.12.2007 : Département de Physique, Ecole Normale Supérieure, Paris.
- 2008**
- 03.03.2008 : School of Chemistry, University of Southampton (G.-B.).
- 04.03.2008 : Inorganic Chemistry Laboratory, University of Oxford (G.-B.).
- 05.03.2008 : School of Chemistry, University of Leeds (G.-B.).
- 17 &
18.04.2008 : Lilly symposium on Chemistry : Science at the Frontier, Madrid (Spain).
- 23.05.2008 : Institut Carnot, Université de Bourgogne, Dijon.



29 &

30.06.2008 : Final meeting, European network MOLDYNLOGIC, Liège (Belgique).

06 to

11.07.2008 : 5th International Conference on Porphyrins and Phthalocyanines, Moscow, Award Lecture : "Robert B. Woodward Award in Porphyrin Chemistry".

31.08 to

04.09.2008 : Yamada Conference on " Topological Molecules ", Awaji Westin Hotel, Awaji Island (Japan).

05.09.2008 : Global Centre of Excellence Conference, University of Osaka (Japan).

08.09.2008 : One-day Symposium, Centre of Excellence, Tokyo University (Japan).

09.09.2008 : National Institute for Materials Science (NIMS), Tsukuba (Japan).

10.09.2008 : University of Nagoya (Japan).

11.09.2008 : University of Kyoto (Japan).

23 &

24.10.2008 : Symposium of the Nanoscience Center, University of Jyväskylä (Finland).

13.11.2008 : University of Utrecht (Netherlands).

2009

26.03.2009 : University of Uppsala (Sweden).

14.04.2009 : Ecole Polytechnique, Palaiseau (France).

23.04.2009 : University of Bern (Switzerland).

24.04.2009 : University of Lausanne (Switzerland).

27.04.2009 : University of Basel (Switzerland).

28.04.2009 : University of Fribourg (Switzerland).

29.04.2009 : University of Geneva (Switzerland).



- 19.05.2009 : 2 lectures, Northwestern University, Evanston (USA).
- 21.05.2009 : University of Chicago, Chicago (USA)
- 22.05.2009 : Northwestern University, Evanston (USA).
- 23.05.2009 : Seminar for Stoddart Group, Evanston (USA).
- 27.05.2009 : GECOM-CONCOORD 2009, Albé (France).
- 21.06 to
25.06.2009 : International Symposium on Macrocyclic and Supramolecular
Chemistry, Maastricht (The Netherlands).
- 12.07 to
16.07.2009 : 16th European Symposium on Organic Chemistry, ESOC 2009, Prague
(The Czech Republic).
- 10.09.2009 : Ecole Nationale Supérieure de Chimie de Montpellier, Montpellier
(France).
- 25.09 to
27.09.2009 : Award Lecture, Japan Society of Coordination Chemistry meeting,
Nagasaki (Japan).
- 30.09 to
03.10.2009 : Evaluation of Life and Coordination Chemistry at IMS (Institute for
Molecular Science) and lecture, Okazaki (Japan).
- 18.10 to
22.10. 2009 : Journées André Collet de la Chiralité, Dinard (France).
- 23.10.2009 : One-day Symposium in honour of Prof. Michel Geoffroy, University of
Geneva (Switzerland).
- 04.11.2009 : University of Nantes (France).
- 17.11.2009 : Academia Sinica, Taipei (Taiwan).
- 18.11.2009 : National Dong Hwa University, Dong Hwa (Taiwan).
- 20.11.2009 : National Taiwan University, Taipei (Taiwan).
- 07.12. to
10.12.2009 : Lecture and 4 hours of teaching/seminars, University of Zurich
(Switzerland).



14.12. to
17.12.2009 : 6 hours of teaching/seminars, University of Zurich (Switzerland).

2010

25.01.2010 : University of Zurich (Switzerland).

10.01 to
06.02.2010 : 6 hours of seminars, Northwestern University, Evanston (USA).

06.06 to
11.06.2010 : International Symposium on Macrocyclic and Supramolecular
Chemistry, Nara (Japan)

11 &
12.06.2010 : Joint Symposium of Post 5th International Symposium on Macrocyclic
and Supramolecular Chemistry and The 6th Symposium on Host-Guest
Chemistry, Osaka (Japan)

13 &
14.06.2010 : The 2010 Global COE International Symposium on Future Molecular
Systems - Beyond Supramolecular Chemistry, Kyushu University,
Fukuoka (Japan)

14.06 to
17.06.2010 : International Symposium on Nano-Bio Molecular Assembly 2010,
Yonsei University, Seoul, Korea

29.06.2010 : University of Reims Champagne Ardenne, Reims (France)

11.07 to
16.07.2010 : XXIII IUPAC Symposium on Photochemistry, Ferrara (Italy)

06.09 to
10.09.2010 : International Summer School "Supramolecular Systems in Chemistry
and Biology", Lviv (Ukraine)

20.09 to
02.10.2010 : Series of 6 lectures as visiting professor, Hokkaido University, Sapporo
(Japan)

14.10 to



17.10.2010 : The 2nd International Symposium on Organic Synthesis and Drug Development (ISOSDD'2010), Nanjing (China)

18.10 to

20.10.2010 : Changzhou University, Changzhou (China)

20.10 to

23.10.2010 : Zhejiang University, Hangzhou (China)

23.10 to

26.10.2010 : (i) Fudan University and (ii) East China Normal University, Shanghai (China)

22.11.2010 : "Conférence ISIS", ISIS, Strasbourg (France)

2011

08.01 &

09.01.2011 : "Current Status and Future Prospective of Coordination Chemistry", Institute for Molecular Science, Okazaki (Japan)

15.02.2011 : General Lecture at the "Fundación Ramón Areces", in the frame of the Year of Chemistry, Madrid (Spain)

16.02.2011 : Real Academia de Ciencias, Madrid (Spain)

28.03 to

02.04.2011 : 9 research and teaching lectures ("Molecular Nanotechnology") at the "Dipartimento di Chimica G. Ciamician", University of Bologna, Bologna (Italy)
Department Seminar on March 30, 2011.

29.03.2011 : Istituto ISOF-CNR, Bologna (Italy)

01.04.2011 : Dipartimento di Chimica, University of Ferrara, Ferrara (Italy)

25.04 to

29.04.2011 : 3 lectures at the "Molecular Design Institute", New York University, New York (USA)

26.05 to

28.04.2011 : " German – Austrian – French – Hungarian - Italian Conference in Organic and Biomolecular Chemistry 2011", Goslar (Germany)

28.06 to



02.07.2011 : France-Japan Coordination Chemistry Symposium, University of Rennes, Rennes (France)

03.07 to

07.07.2011 : 19th International Symposium on the Photophysics and Photochemistry of Coordination Compounds, University of Strasbourg, Strasbourg (France)

19.09.2011 : One-day Meeting with the CNRS Officials, Institut de Science et d'Ingénierie Supramoléculaires (ISIS), Strasbourg (France)

19.09 to

21.09.2011 : Marie-Curie-ITN "SMALL" Workshop: "Ethics in Science Supramolecular Chemistry", Hotel Magnetberg, Baden-Baden (Germany)

10.10.2011 to

14.10.2011 : University of Madeira, Funchal (Portugal) : 8 research and teaching seminars on the following topic :
"From chemical topology to cages and molecular machines : the transition metal approach"
and a general lecture : "Multicomponent Transition Metal Complexes : From Charge Separation to Light-Driven Molecular Machines"

14.11.2011 : Occidental College, Los Angeles (USA)

15.11.2011 : Los Angeles City College, Los Angeles (USA)

23.11.2011 : Non-equilibrium Energy Research Center Lecture Series, Northwestern University, Evanston (USA)

1-2.12.2011 : International Symposium on Coordination Chemistry and Molecular Materials In honour of Prof. Didier Astruc, Université Bordeaux 1, Bordeaux (France)

15.12.2011 to

17.12.2011 : ESF-COST International Conference "Supramolecular Approaches in Systems Chemistry", Institut de Science et d'Ingénierie Supramoléculaires (ISIS), Strasbourg

2012

26.04.2012 : University of Basel (Switzerland)

29.05.2012 : University of Lisbon (Portugal)



30.05.2012 : University of Coimbra (Portugal)

31.05.2012 : University of Aveiro (Portugal)

1.06.2012 : University of Porto (Portugal)

17.06.2012 to

20.06.2012 : Bowling Green State University (USA), W. Henlein Hall Lecturer : Three lectures (June 18, 19 and 20, 2012)

5.09.2012 to

8.09.2012 : 6th International Symposium "Supramolecular Systems in Chemistry and Biology", "College Doctoral Européen", Strasbourg (France)

09.09.2012 to

13.09.2012 : 40th International Conference on Coordination Chemistry (ICCC), Valencia (Spain)

3-4.10.2012 : Mini-colloque en l'honneur du Dr Alain Deronzier, Université Joseph Fourier, Grenoble (France)

26.10.2012 : Award Lecture of the 2012 Blaise Pascal Medal, European Academy of Sciences (EURASC), Liege (Belgium)

12.11.2012 to

16.11.2012 : University of Geneva (Switzerland), visiting professor : two 45-minute seminars

29-30.11.2012 : Evaluation Committee and Lecture, Institute of Chemical Research of Catalonia (ICIQ), Tarragona (Spain)

3.12.2012 to

6.12.2012 : University of Geneva (Switzerland), visiting professor : six 45-minute seminars

14.12.2012 : Mini-symposium, Institut Charles Sadron, Strasbourg (France)

2013

08.01.2013 : Symposium on "Challenges in Chirality", "Institut de Sciences et d'Ingénierie Supramoléculaires" (ISIS), University of Strasbourg, Strasbourg (France)

15.02.2013 : University of Brest (France)



- 13.03.2013 : University of Strasbourg
- 17.04.2013 : "The R.J.P. Williams Lecture 2013", Inorganic Chemistry Laboratory, University of Oxford (UK)
- 21.05.2013 : University of Picardie, Amiens
- 14.10.2013 : Institute of Chemistry, Chinese Academy of Sciences, Beijing (China)
- 15.10.2013 : Peking University, Beijing (China)
- 16.10.2013 : Wuhan University, Wuhan (China)
- 18.10.2013 : Two lectures at Central South University, Changsha (China)
- 21.10.2013 : Wuhan University of Science And Technology, Wuhan (China)
- 22.10.2013 : Huazhong Normal University, Wuhan (China)
- 21.11.2013 : Journée scientifique en l'honneur de Jean-Pierre Launay, CEMES CNRS, Toulouse (France)
- 24.11 to
28.11.2013 : The 2nd Japan-France Coordination Chemistry Symposium, Todaiji Culture Center, Nara (Japan)
- 29.11.2013 : University of Tokyo, School of Engineering, Tokyo (Japan)
- 29.11.2013 : Tokyo University of Science, Tokyo (Japan)
- 30.11.2013 : University of Tokyo, Tokyo (Japan)
- 02.12.2013 : University of Tokyo, School of Engineering, Tokyo (Japan)
- 03.12.2013 : Mini-symposium on Supramolecular Coordination Chemistry Chemical Topology and Molecular Machines, School of Science, The University of Tokyo (Japan)
- 04.12.2013 : Tokyo University of Science, Tokyo (Japan)
- 05.12.2013 : Tokyo University of Science, Tokyo (Japan)
- 17.12.2013 : Leiden University, Leiden (The Netherlands)

2014



10.01.2014 : University of California, Berkeley (USA)

20.03.2014 : Journée des Jeunes Chercheurs, Département de Chimie, Ecole Normale Supérieure, Paris

31.03.2014 : Laboratoire ITODYS, UMR - CNRS 7086, Université Paris Diderot, Paris

24.06.2014 : "Groupe d'étude en chimie des polyamines cycliques et linéaires" (GPOL), Klingenthal (France)

24.10.2014 : University of Montpellier

12.12.2014 : Mini-Symposium Javier de Mendoza, Institute of Chemical Research of Catalonia (ICIQ), Tarragona (Spain)

17.12.2014 : University of Bordeaux

2015

06.02.2015 : "Village de la Chimie", Parc Floral de Paris, Bois de Vincennes, Paris

11. 02. 2015 : Conférence du Grand Prix de la Fondation de la Chimie, Paris

13.03. 2015 : Université Paris Descartes, journée « forum des métiers », Paris

06-07.10.2015 : International Symposium "Photonic and Electronic Molecular Machines", CEMES, Toulouse (France)

2016

01.03.2016 : Université Paris Diderot (Paris)



List of PhD theses

1) Pascal MARNOT

"Complexes du Cu(I) à coordinats encastrés : Synthèse et étude photochimique"
Doctorat ès Sciences soutenu le 22 Septembre 1984. (industrie)

2) Romain RUPPERT

"Réaction de déplacement du gaz à l'eau et réduction électrocatalytique du dioxyde de carbone"
Doctorat de l'Université Louis Pasteur soutenu le 22 Juin 1985. (CR CNRS)

3) Jean WEISS

"Synthèse de [2] et [3]-caténands, coordinats à anneaux entrelacés"
Doctorat de l'Université Louis Pasteur soutenu le 11 Janvier 1986. (DR CNRS)

4) Jean-Claude CHAMBRON

"Synthèse et étude de complexes du Cuivre(I) et du Ruthénium(II) en vue de la séparation intramoléculaire des charges photoinduites"
Doctorat de l'Université Louis Pasteur soutenu le 26 Septembre 1986. (DR CNRS)

5) André EDEL

"Photochimie d'un complexe du Cuivre(I). Etude dynamique et structurale par RMN de caténands et caténates"
Doctorat de l'Université Louis Pasteur soutenu le 20 Février 1987.

6) Abdelaziz JOUAITI

"Activation électrochimique de petites molécules par des composés bi-métalliques et élaboration de films polymères conducteurs"
Doctorat de l'Université Louis Pasteur soutenu le 12 Mai 1989. (Ingénieur CNRS)

7) Sylvie CHARDON-NOBLAT

"Synthèse de bis-porphyrines obliques, Transfert d'énergie intramoléculaire photoinduit"
Doctorat de l'Université Louis Pasteur soutenu le 10 Octobre 1989. (DR CNRS)

8) Catherine HEMMERT

"Synthèse, étude électrochimique et photochimique de [3]-caténates homo- et hétéro-dimétalliques"
Doctorat de l'Université Louis Pasteur soutenu le 26 Juin 1990. (CR CNRS)

9) Stéphane GUILLEREZ

"Séparation photoinduite des charges dans des complexes bis-terpyridine de l'Osmium(II) et du Ruthénium(II) : Diades et Triades moléculaires"
Doctorat de l'Université Louis Pasteur soutenu le 12 Septembre 1990. (Ingénieur)



CEA)

10) Christophe COUDRET

"Utilisation du groupe ferrocényle, donneur d'électron potentiel dans des systèmes multi-constituants construits autour de complexes bis-terpyridine de l'Osmium(II) et du Ruthénium(II)"

Doctorat de l'Université Louis Pasteur soutenu le 22 Novembre 1991. (CR CNRS)

11) Valérie HEITZ

"Elaboration et étude de systèmes multiporphyriniques à géométrie contrôlée ; séparation photoinduite intramoléculaire des charges"

Doctorat de l'Université Louis Pasteur soutenu le 27 Mai 1992. (Prof. Université)

12) Abdelhakim BAILAL

"Etudes photochimiques et photocatalytiques de caténates métalliques"

Doctorat de l'Université Louis Pasteur soutenu le 4 Juillet 1992.

13) Angélique SOUR

"Transfert d'électron et transfert d'énergie dans des composés dinucléaires à ligands pontants rigides"

Doctorat de l'Université Louis Pasteur soutenu le 3 Juin 1994. (CR CNRS)

14) Jean-François NIERENGARTEN

"Synthèse template de noeuds et d'entrelacs moléculaires"

Doctorat de l'Université Louis Pasteur soutenu le 10 Juin 1994. (DR CNRS)

15) Fabrice ODOBEL

"Transferts d'électron photoinduits dans des assemblages modulaires de porphyrines"

Doctorat de l'Université Louis Pasteur soutenu le 24 Juin 1994. (DR CNRS)

16) Sandrine CHODOROWSKI

"Complexes binucléaires du ruthénium et de l'osmium à ligands pontants cyclométallants assurant un fort couplage électronique"

Doctorat de l'Université Louis Pasteur soutenu le 22 Juin 1995. (Industrie)

17) Aude LIVOREIL

"Synthèse et étude de caténanes à géométrie modulable, vers une hystérésis moléculaire"

Doctorat de l'Université Louis Pasteur soutenu le 10 Juin 1996. (Industrie)

18) Nathalie SOLLADIE

"Synthèse de multi-rotaxanes à groupements bloquants porphyriniques, modèles d'un fragment du centre réactionnel photosynthétique"

Doctorat de l'Université Louis Pasteur soutenu le 21 Juin 1996. (CR CNRS)



19) Jean-Luc WEIDMANN

"Vers des polymères à anneaux entrelacés"

Doctorat de l'Université Louis Pasteur soutenu le 17 Septembre 1996.

20) Gwénaëli RAPENNE

"Synthèse et dédoublement de noeuds moléculaires"

Doctorat de l'Université Louis Pasteur soutenu le 1er Juillet 1998. (Professeur Université)

21) Myriam LINKE

"Catenanes et rotaxanes multiporphyriniques : transferts d'électron photoinduits entre chromophores liés de manière mécanique"

Doctorat de l'Université Louis Pasteur soutenu le 2 Juin 1999. (Industrie)

22) Laurence RAEHM

"Contrôle électrochimique du mouvement d'une roue autour de son axe : de la molécule en solution à l'espèce adsorbée"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 14 Juin 1999. (MC Université)

23) Isabelle DIXON

"Systèmes photosynthétiques artificiels construits autour de ruthénium(II) et d'iridium(III) bis-terpyridine"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 02 Juin 2000. (CR CNRS)

24) Anne Chantal LAEMMEL (GOUGET)

"Vers des mouvements moléculaires photoinduits dans des complexes de ruthénium(II) de type rotaxane"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 04 Juillet 2000. (CR CNRS)

25) Didier POMERANC

"Contrôle photochimique de machines moléculaires : rotaxanes construits sur un complexe octaédrique à trois chélates"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 05 Juillet 2002. (Industrie)

26) Christine HAMANN

"Mouvements moléculaires dans des catenanes et rotaxanes : composés en solution et systèmes immobilisés"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 11 Juillet 2002.

27) Etienne BARANOFF



"Transfert d'électron photoinduit dans des triades construites autour d'un complexe d'iridium(III) bisterpyridine"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 16 Juin 2003.
(Lecturer, UK)

28) Pierre MOBIAN

"Catenanes construits sur un métal octaédrique : mise en mouvement sous l'action de la lumière"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 24 Juin 2003. (MC Université)

29) Benoît COLASSON

"Anneaux des Borromée et Caténanes à plusieurs métaux : diverses approches synthétiques"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 5 Juillet 2003. (MC Université)

30) Damien JOUVENOT

"Rotaxanes fondés sur des complexes de ruthenium(II) : vers des machines moléculaires photoactives".

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 18 juin 2004. (MC Université)

31) Sylvestre BONNET

"Les complexes Ru(terpy)(phen)(L)₂⁺ : un nouvel outil pour la construction de machines moléculaires activées par la lumière. Photosubstitution de ligands, photoisomérisation, inclusion dans un anneau"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 27 septembre 2005.
(Assitant Professor, Netherlands)

32) Benoît CHAMPIN

"Multi-Rotaxanes Bidimensionnels. Entrelacs d'anneaux et de fils moléculaires autour de métaux pentacoordinés"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 17 novembre 2006.
(PRAG)

33) Christian TOCK

"Towards dynamic multirotaxanes : A nanopress ot mimic the activity of molecular chaperones"

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 5 octobre 2007.
(Ministère Luxembourg)

34) Julien FREY

"Towards molecular presses. Synthesis of copper(I) multcatenanes and multirotaxanes"



Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 12 octobre 2007.
(Chercheur post-doc)

35) Fabien DUROLA

"Autour de nouveaux chélates : les 8,8'-diphényle-3,3'-biisoquinolines. Machines moléculaires rapides et nouvelles topologies".

Doctorat de l'Université Louis Pasteur de Strasbourg soutenu le 23 novembre 2007.
(CR CNRS)

36) Jacques LUX

"Nouvelles navettes moléculaires : vers des mouvements rapides et de grande amplitude"

Doctorat de l'Université de Strasbourg soutenu le 30 octobre 2009.
(Chercheur post-doc)

37) Julie VOIGNIER

"Entrelacs bidimensionnels autour de métaux de transition : études physico-chimiques et synthèses"

Doctorat de l'Université de Strasbourg soutenu le 31 mars 2010.

38) Yann TROLEZ

"Multi-rotaxanes cycliques et linéaires assemblés au cuivre(I)"

Doctorat de l'Université de Strasbourg soutenu le 16 septembre 2010.

39) Maryline BEYLER

"Caténanes porphyriniques assemblés par liaisons de coordination"

Doctorat de l'Université de Strasbourg soutenu le 17 septembre 2010.

40) Cécile ROCHE

"Porphyrin-based [3]- and [4]Rotaxanes - Towards an Adaptable Molecular Receptor"

Doctorat de l'Université de Strasbourg soutenu le 20 avril 2012.