

**Janine COSSY**  
*Professor of Organic Chemistry*  
*Director of the Organic Chemistry Laboratory*  
*ESPCI Paris, 75231 – Paris, France*

email: [janine.cossy@espci.fr](mailto:janine.cossy@espci.fr)  
<http://www.lco.espci.fr>

### Professional Career

- 1974-1976: PhD (Thèse de 3ème Cycle) at the University Champagne-Ardenne, Reims, France (supervisor: Prof. J. P. Pète)
- 1976-1979: PhD (Thèse d'Etat) at the University Champagne-Ardenne, Reims, France (supervisor: Prof. J. P. Pète)
- 1980-1982: Postdoctoral Fellow (Natural product synthesis and ring-opening of cyclopropanes) University of Wisconsin, Madison, USA (Prof. B. M. Trost)
- 1976-1990: CNRS Research Assistant in Reims, France
- 10/1/1990 : CNRS Director of Research in Reims, France
- Oct 1990- : Full Professor at ESPCI ParisTech (Ecole Supérieure de Physique et Chimie Industrielles de la Ville de Paris), Paris, France
- 1992-2013: Director of a CNRS Research Unity (UMR 7084)
- 2008- : Vice-President of Acanthe-Biotech

### Awards, Scholarships and Honours

- 1987: CNRS Bronze Medal (France)
- 1991: Kipling Lecturership – Nottingham (UK)
- 1991: Langlois Award (France)
- 1996: Jungfleish Award from Académie des Sciences (France)
- 1996: CNRS Silver Medal (France)
- 1997: Chevalier de l'Ordre du Mérite (France)
- 2000: Novartis Lecturer, Charlosteville (USA)
- 2000: Focus Grant Eli-Lilly (USA)
- 2001: Boehringer Lecturership, (USA)
- 2003: Focus Grant Johnson and Johnson (USA)
- 2005: UK Royal Society Rosalyn Francklin International Lecturership awarded to internationally recognized women scientists (UK)
- 2006: Gambrinus Fellowship, Dortmund (Germany)
- 2006: Langlois Award for research (France)
- 2008: Abbott Lecturership, Notre-Dame (USA)
- 2008: Eli-Lilly Lecturership Pittsburg (USA)
- 2008: Novartis Lecturership, ETH Zurich (Switzerland).
- 2009: Le Bel Award from the French Chemical Society (France)
- 2009: JSPS fellow, Tokyo University of Sciences, Tokyo (Japan)
- 2009: «Zasshikai Seminar» Lectureship, University of Tokyo (Japan)
- 2010: 2010 RSC/SFC Joint Lecturership in the Chemical Sciences (UK), Royal Society Chemistry - European Lecturership in the Chemical Sciences
- 2010: Astra-Zeneca Lectureship, Stockholm (Sweden)
- 2010: BMS Lecturership, UPenn (USA)
- 2011: ParisTech Award (France)
- 2011: Boehringer-Ingelheim Lecturership, Université de Laval, Laval (Canada)
- 2011: Boehringer-Ingelheim Lecturership, Université du Québec, Montréal (Canada)
- 2012: H. C. Brown Lecturership, Purdue University (USA)
- 2013: Chevalier de la Légion d'Honneur (France)
- 2014: Felix Serratosa Lecturership, Barcelona (Spain)
- 2014: GDCh-Bayer Pharma AG Lectureship, Wuppertal (Germany)

- 2015: Eli Lilly Lecturership, Sevilla (Spain)  
 2015: E. C. Taylor Senior Award (USA)  
 2015: UR Ghatak Endowment Award (India)  
 2016: The Susan P. & Barry M. Trost Lecture in Organic Synthesis (USA)  
 2016: Tarrant Professorship, University of Florida (USA)  
 2017: Lu Jiayi Lecturership, College of Chemistry and Chemical Engineering, Xiamen (China)  
 2017: Elected at the the Academy of Sciences (France)  
 2017: «Professor PC Ray» Award from the Indian National Science Academy (India)
- 2003: Visiting Professor, Tokyo University of Sciences, Tokyo (Japan)  
 2013: Visting Professor, University of Mexico, Mexico City (Mexico)  
 2015: Visting Professor, ITT Mumbai (India)

## Membership

- 2012: Nominated Member of Academia Europae

## Advisory Panels, Consultancies and Professional Services

- 1986 : Secretary of the 12<sup>th</sup> International Symposium of Heterocyclic Chemistry in Reims, France  
 1987-1989: Secretary of the Société Française de Chimie, Division Chimie Organique (SFC-DCO)  
 1996-2002: Elected at the ESPCI Administration Council  
 2000-2002: Member of the CNRS commission N°16  
 1998-2002: Vice-President of the Société Française de Chimie, Division Chimie Organique (SFC-DCO)  
 2003-2005: Member of the Administration Council of Archemis  
 2003-2007: President of the Société Française de Chimie-Division Chimie Organique (SFC-DCO)  
 2006-2009: Elected Titular Member of the IUPAC (Titular Member of the Organic and Biomolecular Chemistry Division III and Member of the COCI)  
 2010-2015: Fellow of the IUPAC  
 2007-2014: Member of the COPIL of the RTRA Pierre-Gilles de Gennes, Paris (France)  
 2009-2012: Representative Member of the Professors of the City of Paris, Paris (France)  
 2009-2013: Member of the Direction Committee at ESPCI ParisTech, Paris (France)  
 2012- 2013: Member of the Nominating Committee for Division Members and Officers of the IUPAC  
 2010-2014: Nominated Member of the Scientific Committee of CNRS  
 2011-2015: Nominated Member of the Scientific Committee of ENSCP ParisTech  
 2012-2014: Nominated Member of the Scientific Committee of PSL\*  
 2012- : Nominated Member of the Scientific Committee of CP2 UP (University of Poitiers, France)  
 2012- : Nominated Member of the Scientific Committee of the Max-Planck Institute in Mulheim (Germany)  
 2013-2015 : Member of the Program Committee 47<sup>th</sup> IUPAC WCC & 50<sup>th</sup> GA Paris 2019  
 2013- : Member of the Committee for the award of the Société Chimique de France  
 2014- : Member of the Chem 21 (Manchester, UK)  
 2014- : Member of the Scientific Committee of the Chemistry Department of the Institut Pasteur in Paris (France)  
 2014- : Member of the Scientific Committee of PCAS (France)  
 Since 2015: European Advisory Board Member of ECHONET  
 2016 : Chair of the BOSS XV, Antwerp (Belgium)  
 2016- : Member of the Scientific Committee of Novacap (France)  
 2017 : Nominated Member of the Scientific Committee, University of Groningen (The Netherland)  
 2017- 2023: Member of the Janssen Pharmaceutica Prize for Creativity in Organic Synthesis

## Consulting Activity

- 1995-2001: Rhône-Poulenc and then Rhodia (France)  
 2003-2005: Archemis (France)  
 1996-2003: L'Oréal (France)  
 2009-2013: Merck-Serono (Switzerland)  
 2011-2015: Servier

## Legal expertise

2017: Expertise for Roche (Stockholm court)

## Editorial Activities and Advisory Boards

### - Associate Editor

1990-1997: Bulletin de la Société Chimique de France

2005- : Organic Letters

2009- : Arkivoc

### - Member of the Advisory Board of:

*Journal of Organic Chemistry* (2001-2004); *New Journal of Chemistry* (2001-2004); *Current Topics in Medicinal Chemistry* (2006-2009); *European Journal of Organic Chemistry* (2000-2010); *Tetrahedron and Tetrahedron Letters* (since 2003); *Letter of Organic Chemistry* (since 2006); *Trends in Organic Chemistry* (since 2006); *The open Organic Chemistry Journal* (since 2007); *Synthesis, Synlett and Synfact* (since 2009); *Arkivoc* (since 2009); *Heterocycles* (since 2009); *Mediterranean Journal of Chemistry (MedJChem)* (since 2011); *ISRN Organic Chemistry* (since 2010); *Topics in Heterocyclic Chemistry* (since 2011); *Reports in Organic Chemistry* (since 2011)

### - Editor of books

2004: SOS, Vol 26, Thieme

2004: COFGT II, Vol 1, Elsevier

2007: CHEC III, Vol 11, Elsevier

2009: «Metathesis reactions: a milestone in natural product synthesis », Wiley

2012: «Modern tools for the synthesis of complex bioactive molecules» Wiley

2012: Chirality, Volume title: Biological significance - Pharmacology, Pharmaceutical, Agrochemical Section: Drug Discovery(/MedChem), Elsevier

2014: «Oxygenated heterocyclic compounds», Vol 1, Springer

2014 : «Oxygenated heterocyclic compounds», Vol 2, Springer

2016: Grignard reagents and transition metal catalysts. Formation of C-C bonds by cross-coupling, De Gruyter

### - Editor of special issues

2005: Special issue of *Current Topics in Medicinal Chemistry*

2008: Special issue of *CRAS* « antitumoral natural products »

## Scientific interests:

### Development of selective synthetic methods and synthesis of natural and/or biologically active complex molecules.

In the development of synthetic methods, we are focusing on radical cyclizations, ring-openings, thermal and enantioselective rearrangements, organometallic reactions using platinum, gold, rhodium, palladium, ruthenium catalysts (for rearrangements and metathesis), enantioselective allylations (access to polypropionates), coupling reactions using iron and cobalt catalysts.

Among the natural products and/or biologically active compounds, we are interested in the synthesis of alkaloids, terpenes, polypropionates, macrolides, glycosides with anti-inflammatory, or antitumoral properties, or active on the CNS). One of our recent interest is the vectorization of active compounds toward tumors.

## Scientific activity

- Publications : more than 490

- Patents : 15

- Book chapters : 24

- Books : 9

- Edition of special issues: 2

- Invited conferences : more than 500

## Setting-up of two companies

2003: CDP-Innovation (with Dr J. R. Desmurs and Dr J. M. Paris)

2008: Acanthe-Biotech (with Dr Léna Edelman)