

Biography

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The Journal of Inorganic and Organometallic Polymers and Materials is honoured to dedicate Supplement issue 1 of volume 27 to Professor Pierre D. Harvey, a distinguished professor, researcher and pioneer in the field of photonic coordination and organometallic polymers. I feel proud and honoured to write this biography since Professor Harvey's research has been a continuous source of inspiration for my own research, as well as for many other scientists.

Pierre Harvey was born on April 6th 1960 in Montréal, Québec, Canada. He completed his Ph. D. degree with Professors Ian S. Butler and Denis Gilson at McGill University in 1986 working on phase transitions and molecular motions in the solid state of organic and organometallic compounds.

With an NSERC postdoctoral fellowship, he then moved to the California Institute of Technology to pursue research in the field of inorganic and organometallic photochemistry under the supervision of Professor Harry B. Gray from 1986 to 1988 where he got acquainted with pulsed laser spectroscopy. He then investigated various binuclear palladium(0) and platinum(0) complexes to probe the M...M interactions in the excited states (*J. Am. Chem. Soc.*, 1988, *110*, 2145–2147, *J. Am. Chem. Soc.*, 1989, *111*, 1312–1315). He then perfected his training in 1988 in physical organometallic chemistry at the Massachusetts Institute of Technology under the supervision of Professor Mark S. Wrighton, performing research on individually addressable surface-modified micro-electrodes (*J. Am. Chem. Soc.*, 1989, *111*, 7271–7272.)

He was then appointed at the Université de Sherbrooke in 1989 as an assistant professor to develop a research program in the field of coordination and organometallic clusters and polymers (*J. Am. Chem. Soc.* 1997, *119*, 531–543, *J. Am. Chem. Soc.* 1998, *120*, 5351–5352). He developed with his collaborator Prof. Yves Mugnier (Dijon, France) the chemistry and electrochemistry of the first confidently identified paramagnetic palladium compound, a highly reactive cluster of formula $\text{Pd}_3(\text{dppm})_3(\text{CO})^{\bullet+}$ (*J. Am. Chem. Soc.* 2001, *123*, 4340–4341, *J. Am. Chem. Soc.* 2003, *125*, 5511–5522), which led to a unique electro-catalytic system for the synthesis of dissymmetric esters.

He was promoted to respectively associate and full professor in 1994 and 1999, a period in which he broadened his research program to the field of homogeneous regio- and stereo-selective catalysis (*Chem. Commun.* 2000, 1073–1074) and electrocatalysis (*Chem. Eur. J.* 2006, *12*, 8386–8395.).

His research interest then broadened even further to metalloporphyrin chemistry (*J. Am. Chem. Soc.* 2004, *126*, 1253–1261; *Chem. Eur. J.* 2005, *11*, 3469–3481; *Chem.*

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Eur. J. 2009, 15, 524–535) and related compounds (*Chem. Commun.* 2011, 47, 5503–5505; *Chem. Commun.* 2017, 53, 7612–7615). He heavily collaborated with Professor Roger Guilard from the Université de Bourgogne. His new field of interest led, in 2008, to an award of a two year Research Chair of Excellence by the Agence nationale de la recherche (France) to start a research program on porphyrin dye-based photonic devices on photo-induced electron, energy transfers and excitation energy migration (*Chem. Eur. J.* 2011, 17, 14,643–14,662; *Chem. Eur. J.* 2013, 19, 4352–4368; *Chem. Eur. J.* 2017, 23, 5010–5022; *Chem. Commun.* 2012, 48, 2671–2673; *Chem. Commun.* 2011, 47, 6072–6074), and related bio-mimicry (*Chem. Commun.* 2013, 49, 2228–2230; *Chem. Commun.* 2010, 46, 9176–9178) at the Université de Bourgogne (Dijon). This award was worth more than 1×10^6 \$ (Can.).

During the past 10 years, Professor Harvey also became interested in platinum-containing polymers, namely of the *trans*-Pt(PR₃)₂(C≡C)₂ unit, through an initial collaboration with me (see the review article in this issue). His contribution to this field during this period is particularly innovative. Indeed, he (1) introduced P-chirogenic centers, thus forming the first chiral luminescent organometallic polymers (*Inorg. Chem.* 2013, 52, 2361–2371), (2) extended this *trans*-Pt(PR₃)₂(C≡C)₂ chemistry to star molecules (*Organometallics* 2017, 36, 572–581), and (3) conceived strongly luminescent organometallic ligands for the fabrication

of 1D coordination polymers and 2D networks *en route* towards the design of new MOF (*Inorg. Chem.* 2016, 55, 11,096–11,109).

His current research interests are on photonic materials exhibiting ultrafast photophysical events (*i.e.* < 100 ps; *Chem. Commun.* 2014, 50, 14,609–14,612) for the design of ultra-performant organic polymer-based solar cells and for new applications in metal-organic-framework (MOF; *Chem. Commun.* 2013, 49, 8848–8850). Indeed seminal achievements were obtained in the designs of inorganic/organometallic hybrid materials exhibiting the fastest photo-induced electron (< 85 fs; *Chem. Comm.* 2015, 51, 17,305–17,308) and energy transfer (< 49–105 fs; *Chem. Eur. J.* 2016, 22, 10,484–10,493; *Inorg. Chem.* 2016, 55, 10,329–10,336) processes ever recorded.

During his career, he supervised and co-supervised over 50 MSc and PhD students and 17 postdoctoral fellows. About 25 of them are now serving in the academic world. He also published nearly 300 peer-referred research articles and 9 book chapters. He also received numerous awards, including the 2013 Rio Tinto Alcan Award from the Canadian Society for Chemistry, Fellow of the Chemical Institute of Canada in 2009, the Gerhard Herzberg Prize from the Canadian Society of Analytical Sciences and Spectroscopy in 2008, and the Adrian Pouliot Prize from ACFAS (Association Canadienne Française pour l'Avancement du Savoir) also in 2008.