

Biographical Sketch

Marc GINGRAS
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Name: GINGRAS **First name:** Marc
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Bibliometry h-index : 29; 4685 citations (Web Sc.); 75 publications, 50 cit/article.



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Researcher ID (Publons, Web of Science) : AAO-7493-2021 <https://publons.com/researcher/AAO-7493-2021/>

BIOGRAPHY:

Marc Gingras obtained his undergraduate degree in chemistry (Bachelor of Sciences) at the **University of Sherbrooke**, Québec, Canada in 1984, after some research trainings with **Pr. Pierre Deslongchamps** and at **Merck Frosst Canada**. From 1985-89, he completed a PhD degree in organic chemistry at **McGill Univ.** in Montréal (guidance of Pr. **T. H. Chan** and Pr. **D. N. Harpp** co-advisors). In 1989, he joined the team of Pr. **Edwin Vedejs** as an NSERC Canada postdoctoral Fellow at the **Univ. of Wisconsin-Madison**, USA for about 3 years (synthetic methods) and a postdoctoral stay at **Cornell University**, USA for 4 months (Pr. **J.M.J. Fréchet**). In 1992, he continued for a postdoctoral year in chemical biology at the Univ. of Wisconsin-Madison with Pr. **Laura L. Kiessling** (glycochemistry, now at MIT). Recipient of a French scholarship (SSHN – high level scientific visiting guest), he joined the Laboratory of Supramolecular Chemistry of Pr. **Jean-Marie Lehn** at the **Univ. of Strasbourg** (1993-95). A faculty position was held at the **Université Libre de Bruxelles** from 1995-99. In 1999, he came back to France as a professor (PR2) at the **Univ. of Nice-Sophia Antipolis** until 2007. He then moved to the CNRS Laboratory CINAM at Marseille and as professor at **Aix-Marseille II university**. He was promoted professor PR1 in 2010. He was **Chairman of the Chemistry Department**, a member of the Sciences Faculty Council. He was promoted full professor (CIEx1) in 2017. He has supervised more than 90 research trainees (PhD, Master and mostly undergraduate students). He produced 74 publications (h index: 29 ; > 4685 citations, 50 cit./article), reviews, book chapters, patent, about 140 invited conferences, 39 oral communications and 5 public lectures. He has been a coordinator and a partner of several national French (4 ANR) and regional grants, and industrial contracts. He has been involved in grant reviews in France, Canada, Poland and in Switzerland.

Editorial board of scientific journals: **Journal of Sulfur Chemistry** (IF: 2.7, 2012-16); **ISRN Organic Chemistry** (International Scholarly Research Network – 2010-13); **Austin Journal of Biosensors & Bioelectronics** (IF: 2.2 2014-), **General Chemistry** (IF: 2018-); **Journal of Biofunctional Materials** (IF: 4.5, 2021-); **Frontiers in Chemistry** (IF: 5.5, 2023-); **SOJ Biosensors, Biomarkers & Diagnostics** (2015-).

Research Interests: Synthetic organic chemistry – polyaromatic and sulfur chemistry – chirality(helicenes) – materials science and polyfunctional molecular architectures (polymers, dendrimers – drug delivery) – supramolecular chemistry – chemical biology (glycochemistry) – biosensors – (bio) nanoscience (self-assembly, nanoparticles) – nanomedicine.

Selected publications :

1. “Chiral Nanographene Propeller Embedding Six Enantiomerically Stable [5]Helicene Units”, V. Berezhnaia, M. Roy, N. Vanthuyne, M. Villa, J.-V. Naubron, J. Rodriguez, Y. Coquerel*, M. Gingras*
J. Am. Chem. Soc. **2017**, *139*, 18508-18511 (IF: **13.8**) – **front cover** (open access)
<https://doi.org/10.1021/jacs.7b07622>
a) Highlight of this molecule in Chemistry World, Royal Society of Chemistry.
<https://www.chemistryworld.com/news/helicene-twists-aromaticity-to-its-limit/3008142.article>
b) ChemViews: Chiral Propeller-Shaped Nanographene
http://www.chemistryviews.org/details/news/10672217/Chiral_PropellerShaped_Nanographenes.html



- c) Mis en valeur par diffusion au CNRS national: "Une hélice en nanographène": <http://archives.cnrs.fr/inc/article/282>
- d) Mis en valeur par diffusion dans "La lettre Aix-Marseille Université": "Des nanographènes 3D chiraux en hélice", Janvier 2018, no 57, page 25.
- e) Actualités WEB du site de l'Université Franco-Italienne le 27 février 2018 : <https://www.universite-franco-italienne.org/menu-principal/actualites/resultats-de-recherche/des-nanographenes-chiraux-en-helice-320563.kjsp?RH=1479467416308>
2. "Delaying Anticancer Drug Delivery by Self-Assembly and Branching Effects of Minimalist Dendron-Drug Conjugates"; F. Correard, M. Roy, V. Terrasson, D. Braguer, M.-A. Estève, * M. Gingras*
Chem. Eur. J. **2019**, 25, 9586-9591 (communication) – **front cover**
<https://doi.org/10.1002/chem.201801092>
Highlighted by Wiley in 2018-19 as a Hot Topic: Drug Delivery. Selected among 42 papers.
[https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1860-7187.hottopic-drugdelivery](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1860-7187.hottopic-drugdelivery)

 3. "A Turn-on Phosphorescent Sensor of Pb²⁺ in Water by the Formation of a Coordination Polymer"
M. Villa, M. Roy, G. Bergamini, M. Gingras*, P. Ceroni*; **Dalton Trans.** **2019**, 48, 3815-3818 (communication) – **front cover**; <https://doi.org/10.1039/C9DT00251K>
 4. "Bright Phosphorescence of All-Organic Chromophores Confined within Water-Soluble Silica Nanoparticles"
M. Villa; B. Del Secco; L. Ravotto; M. Roy; E. Rampazzo; N. Zaccheroni; L. Prodi; M. Gingras*; S. Vinogradov*; P. Ceroni*
J. Phys. Chem. C **2019**, 123, 49, 29884-29890 (IF: 4.3)
<https://doi.org/10.1021/acs.jpcc.9b09206>
 5. "Stereoselective Syntheses, Structures and Properties of Extremely Distorted Chiral Nanographenes Embedding Hextuple Helicenes"
M. Roy, V. Bereznaia, M. Villa, N. Vanthuyne M. Giorgi, J.-V. Naubron, S. Poyer, V. Monnier, L. Charles, Y. Carissan, D. Hagebaum-Reignier, J. Rodriguez, M. Gingras,* Y. Coquerel*
Angew. Chem. Int. Ed. **2020**, (8) 59, 3264-3271 (IF: 12.3) DOI 10.1002/ange.201913200
<https://doi.org/10.1002/anie.201913200>
a) Mis en valeur par diffusion sur le site Institut National de Chimie du CNRS – Actualités – résultats scientifiques: "L'extrême torsion d'un hydrocarbure polycyclique aromatique"
<https://www.inc.cnrs.fr/fr/cnrsinfo/lextreme-torsion-dun-hydrocarbure-polycyclique-aromatique>
 6. "Pentasulfurated Benzene-Cored Asterisks: Relationship Between Crystal Structure and Luminescence Properties"; M. Villa, S. D'Agostino, P. Sabatino, R. Noel, J. Busto, M. Roy, M. Gingras,* P. Ceroni*
New J. Chem. **2020**, 44, 3249-3254 (IF: 3.1).
<https://doi.org/10.1039/C9NJ05905A>
 7. "Highly Emissive Water-Soluble polysulfurated Pyrenes as Metal ion Sensors in a Dual Mode"
M. Villa,* M. Roy,* G. Bergamini, P. Ceroni, M. Gingras
Chem Plus Chem, **2020**, 85, 1481-1486 (IF: 3.4).
<https://doi.org/10.1002/cplu.202000344>
 8. "Unbalanced 2D Chiral Crystallization of Pentahelicene Propellers and Their Planarization Into Nanographenes", J. Voigt, M. Roy, M. Baljosovic, C. Wäckerlin, Y. Coquerel, M. Gingras, K.-H. Ernst*
Chem. Eur. J. **2021**, 27, 10251-10254 (IF: 5.2; open access)
<https://doi.org/10.1002/chem.202101223>
 9. "The Sulfur Dance Around Arenes and Heteroarenes" - Dynamic Covalent Nucleophilic Aromatic Substitutions" S. Gahlot, J.-L. Schmitt,* M. Roy, M. Villa, P. Ceroni, J.-M. Lehn,* M. Gingras*(submitted)
 10. "Persulfurated Benzene-Cored Asterisks with π -Extended ThioNaphthyl Arms: Synthesis, Structural, Photophysical and Covalent Dynamic Properties"; S. Gahlot, A. Gradone, M. Roy, M. Giorgi, S. Conti, P. Ceroni, M. Villa,* M. Gingras*; **Chem. Eur. J.** **2022**, e202200797; <https://doi.org/10.1002/chem.202200797> (IF: 5.2; open access)
 11. M. Roy, M. Gingras in "Helicenes, Synthesis, Properties and Applications"; (J. Crassous, I.G. Stará, I Starý Edrs), chapter 8, "Multihelicenic Platforms From Halogenated Helicenes and Their Precursors", Wiley-VCH, **2022**, pp 263-282. ISBN 978-3-527-34810-7