

Grégory Nocton, Ph.D

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French, 36 years old, married, two children

Present Position

- 2011 - **CNRS Researcher (CRCN) – Institut of Chemistry**
Laboratoire de Chimie Moléculaire (UMR 9168) - Ecole polytechnique, France
- 2017 - **Associate Professor of Inorganic Chemistry - Ecole polytechnique, IP Paris**
Chemistry and magnetism (M1), group theory (M1), supramolecular chemistry (M2) ; head of the molecular chemistry Master I program (2018), elected member of the department of chemistry executive office (2018)

Education

- 2016 **Habilitation (HDR)**, Université Paris-Sud, Université Paris-Saclay, France
- 2009-2011 **Postdoctoral fellowship at UC Berkeley / Lawrence Berkeley National Laboratory**
Prof. Richard A. Andersen (UC Berkeley)
- 2006-2009 **Ph.D. in Inorganic Chemistry**, University of Grenoble, France.
CEA Grenoble / Laboratoire de Chimie Inorganique et Biologique
Prof. Marinella Mazzanti
- 2004-2006 **Master of Science (Inorganic Chemistry)**
University of Grenoble, France (Prof. Marinella Mazzanti)
Technische Universität München, Germany (Prof. Dr. F. H. Köhler)
University of Reims-Champagne, France (Prof. Françoise Chuburu)
- 2001-2004 **Bachelor of Science**, University of Reims-Champagne, France.

Teaching Experience

- 2017- **Ecole polytechnique – Paris Saclay:** Associate Professor of Inorganic Chemistry (77 h/year)
- 2012-2017 **Ecole polytechnique – Paris Saclay:** Lecturer, Organometallic/Inorganic Chemistry Lab training (80 h/year)
- 2006-2009 **University of Grenoble:** Teaching Assistant (Solution Chemistry, 76h/year)

Distinctions and Grants

- ANR RelaxMax (2020-2024): 140 k€, coordination of the consortium (405 k€)
- PEDR 2017-2020: Management and Research bonus from the CNRS
- ERC Starting Grant (2017-2022): 1.5 M€, Principal Investigator
- Bronze medal of the CNRS (Young Investigator Award, CNRS) - 2016
- ANR ReDivaLan (2015-2018): 220 k€, coordination of the consortium (450 k€)
- ANR PsalenOx (2013-2017): member of the consortium (190 k€)
- Best Talk Award (French Chemical Society, Coordination Chemistry Division, Lyon, February-2013)
- Best Talk Award (French Chemical Society, Coordination Chemistry Division, Reims, January-2009)
- Best Poster Award from the Graduate School in chemistry (June-2008)
- Master studies Scholarship from the French Office for the Higher Education and Research (2005-2006)
- Student Research Scholarship from the German-French Youth Office (May 2005- August 2005)

Academic Summary

- 45 publications in peers reviewed international journals (6 *J. Am. Chem. Soc.*, 5 *Angew. Chem. Int. Ed.*, 1 *Chem. Sci.*)
- 43 Oral presentations (7 invited and 7 oral talks in international conferences, 23 invited seminars and workshops)
- 12 Poster presentations (7 international conferences, 5 Gordon Research Conferences)
- Science popularization actions (8), and conferences organization (3, two as leader)
- Supervision of 6 PhD students, 3 post-docs, 12 master students and 7 undergraduate students
- Web of science Researcher ID: D-T-8107-2019, H-index: 19, average of 23.8 citations / article

Peered reviewed articles

45. Halbach, R., **Nocton, G.,*** Amaro-Estrada, J., Maron L., Booth C. and Andersen, R.* *Inorg. Chem.*, **2019**, 58, 12083-12098
Understanding the Multiconfigurational Ground – and Excited States in Lanthanide Tetrakis Bipyridine Complexes from Experimental and CASSCF Computational Studies
44. Jaoul, A., Tricoire, M., Moutet, J., Cordier M., Clavaguéra, C.* and **Nocton G.***, *Chem. Squ.*, **2019**, 3, 1
Reversible Electrons Transfers in Organolanthanide Chemistry (Open)
43. Wang, D., Moutet, J., Tricoire, M., Cordier, M. and **Nocton G.,*** *Inorganics*, **2019**, 7, 58
Reactive Heterobimetallic Complex Combining Divalent Ytterbium and Dimethyl Nickel Fragments (Open)
42. Xémard, M., Cordier, M., Molton, F., Duboc, C., Le Guennic, B., Maury, O., Cador, O., and **Nocton G.****Inorg. Chem.*, **2019**, 58, 2872-2880.
Divalent Thulium Crown-ether Complexes with Field-Induced Slow Magnetic Relaxation
41. Xémard, M., Zimmer, S., Cordier, M., Goudy, V., Ricard, L., Clavaguéra, C., and **Nocton G.*** *J. Am. Chem. Soc.*, **2018**, 140, 14443-14449.
Lanthanidocenes: Synthesis, Structure and Bonding of Linear Sandwich Complexes of Lanthanides
40. El Moll, H., Cordier, M., **Nocton G.**, Massuyeau, F., Latouche, C., Martineau-Corcós, C., Perruchas, S* *Inorg. Chem.*, **2018**, 57, 11761-11769.
A Copper Iodide Nanocluster
39. Goudy, V., Xémard, M., Karleskind, S., Codier, M., Alvarez Lamsfus, C., Maron L, **Nocton, G.,*** *Inorganics*, **2018**, 6, 82.
Phenylacetylene and Carbon Dioxide Activation by an Organometallic Samarium Complex (Open)
38. Cheisson, T., Ricard, L., Heinemann, F. W., Meyer, K.,* Auffrant, A.,* **Nocton, G.,*** *Inorg. Chem.*, **2018**, 57, 9230-9240.
Synthesis and Reactivity of Low-Valent f-Element Iodide Complexes with Neutral Iminophosphorane Ligands.
37. Xémard, M, Cordier, M., , Louyriac, E., Maron, L., Clavaguéra,* C., **Nocton, G.*** *Dalton Trans.*, **2018**, 47, 9226-9229.
Small molecules activation with divalent samarium triflate: a synergistic effort to cleave O₂.
36. Halbach, R. L., **Nocton, G.,*** Booth, C. H., Maron L. and Andersen, R. A.* *Inorg. Chem.*, **2018**, 57, 7290-7298
Cerium Tetra(tropolonate) and Cerium Tetra(acetylacetonate) are Not Diamagnetic but Temperature-Independent Paramagnets
35. Xemard, M.; Goudy, V., Braun, A., Tricoire, M., Cordier, M., Ricard, L., Castro, L., Louyriac, E., Kefalidis, C. E.; Clavaguera, C., Maron, L., **Nocton, G.*** *Organometallics*, **2017**, 36, 4660-4669
“Reductive Disproportionation of CO₂ with Bulky Divalent Samarium Complexes”
34. Mustieles Marin, I., Cheisson, T., Chauhan, R. S., Herrero, C., Cordier, M., Clavaguéra, C.,* **Nocton G.***, Auffrant A.* *Chem. Eur. J.*, **2017**, 23, 17240-17255
“Electronic structure of mono-oxidized copper and nickel phosphasalen complexes”
33. Goudy, V., Jaoul A., Cordier M., Clavaguéra, C., **Nocton G.***, *J. Am. Chem. Soc.*, **2017**, 139, 10633-10636
“Tuning the stability of Pd(IV) intermediates using a redox non-innocent ligand combined with an organolanthanide fragment” (Open)
32. Jaoul A., **Nocton G.***, Clavaguéra C.* *Chem. Phys. Chem.*, **2017**, 18, 2688-2696
“Assessment of density functionals for computing thermodynamic properties of lanthanide complexes”

31. Salomon, W., Paille, G., Gomez-Mingot, M., Mialane, P., Marrot, J., **Nocton, G.**, Mellot-Draznieks, C., Fontecave, M., Dolbecq A., *Cryst. Growth Des.*, **2017**, 17, 1600-1609
“Effect of Cations on the Structure and Electrochemical Response of Polyoxometalate-Based Coordination Polymers”
30. Xémard, M., Jaoul, A., Cordier, M., Molton, F., Cador, O., Le Guennic, B., Duboc, C., Maury, O., Clavaguéra, C., Nocton, G.*, *Angew. Chem. Int. Ed.*, **2017**, 56, 4266-4271 (back cover)
“Divalent thulium triflate: a structural and spectroscopic study”
29. Kriegel, B. M., Naested, L. C. E., **Nocton, G.**, Lakshmi, K. V., Lohrey, T. D., Bergman R. G., Arnold J., *Inorg. Chem.*, **2017**, 56, 1626-1627
“Redox Initiated Reactivity of Dinuclear Niobium Imido Complexes”
28. Jaroschik, F., Momin, A., Martinez, A., Harakat, D., Ricard, L., Le Goff, X.-F., **Nocton, G.***, *Organometallics*, **2016**, 35, 2032-2038.
“Synthesis and Characterization of 1,1'-diphosphaplumbocenes: oxidative ligand transfer with divalent thulium complexes,
27. Jaoul, A., Clavaguéra C., **Nocton G.***, *New J. Chem.*, **2016**, 8, 6643-6649.
“Tetramethylbiphosphinine Complexes of Cp*₂Yb and Cp*₂Sm: Solid-State Structure, Solution NMR Spectroscopy and Theoretical Calculations”
26. Cheisson, T., Auffrant, A., **Nocton G.***, *Organometallics*, **2015**, 34, 5470-5478.
“ $\eta^5 - \eta^1$ Iminophosphoranyl Pincer Ligands: Solid State Structures and Solution NMR ¹J_{Yb-P} Coupling Constants”
25. Andrez J., Bozoklu, G., **Nocton, G.**, Pécaut, J., Scopelliti R., Dubois, L., Mazzanti, M., *Chem. Eur. J.*, **2015**, 21, 15188-15200.
“Lanthanide(II) Complexes Supported by N,O-Donor Tripodal Ligands: Synthesis, Structure and Ligand-Dependent Redox Behavior”,
24. Benito, Q., Le Goff, X., **Nocton, G.**, Fargues, A., Garcia, A., Berhault, A., Kahlal, S., Saillard, J. Y., Martineau, C., Gacoin, T., Boilot, J.-P., Perruchas, S., *Inorg. Chem.*, **2015**, 54, 4483-4494.
“Geometry Flexibility of Copper Iodide Clusters: Variability in Luminescence Thermochromism”
23. Benito Q., Maurin I., Cheisson T., **Nocton G.**, Fargues A., Garcia A., Martineau C., Gacoin T., Boilot, J.-P., Perruchas S., *Chem. A Eur. J.*, **2015**, 21, 5892-5897.
“Mechanochromic luminescence of Copper Iodide Clusters”
22. **Nocton G.***, Ricard L., *Chem. Commun.*, **2015**, 51, 3578-3581.
“Reversible C-C coupling in phenanthroline complexes of divalent samarium and thulium”
21. Gianetti, T.L, **Nocton G.***, Minasian S.G., Kaltsoyannis N., Kilcoyne A.L.D., Kozimor, S.A., Shuh, D.K., Tyliczszak, T., Bergman R.G., Arnold, J., *Chem. Sci.*, **2015**, 6, 993-1003.
“Electron Localization in a Mixed-valent Diniobium Benzene Complex”
20. **Nocton G.***, Booth C. H., Maron L., Ricard A., Andersen R. A., *Organometallics*, **2014**, 33, 6819-6829.
“Carbon-Hydrogen Bond Breaking and Making in the Open-Shell Singlet Molecule, Cp*₂Yb(4,7-Me₂phen)”,
19. Jacquot L., Xémard M., Clavaguéra C., **Nocton G.***, *Organometallics*, **2014**, 33, 4100-4016.
“Multiple One-electron Transfers in Bipyridine Complexes of Bisphosphohyl Thulium”
18. **Nocton G.***, Lukens W. W., Booth C. H., Rozenel S. S., Medling S. A., Maron L. and Andersen R. A., *J. Am. Chem. Soc.*, **2014**, 136, 8626-8641.
“Reversible Sigma C-C Bond Formation Between Phenanthroline Ligands Activated by (C₅Me₅)₂Yb”
17. Cao T-P-A., **Nocton G.**, Ricard L., Le Goff X. F., Auffrant A., *Angew. Chem. Int. Ed.*, **2014**, 53, 1368-1372.
“A Phosphasalen Nickel(III) Complex”

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16. **Nocton G.**,* Ricard L., *Dalton Trans.*, **2014**, 43 (11), 4380-4387.
“N-Aromatic heterocycles adducts of bulky [1,2,4-(Me₃C)C₅H₂]₂Sm: synthesis, structure and solution analysis”
15. **Nocton G.**,* Booth C. H., Maron L., Andersen R. A., **2013**, *Organometallics*, 32, 5305-5312.
“The influence of the Torsion Angle in 3,3'-Dimethyl,2,2'-bipyridine on the Intermediate Valence in (C₅Me₅)₂Yb(3,3'-Me₂-bipy)”,
14. Nicolas E., **Nocton G.***, Mézailles N., *Eur. J. Inorg. Chem.*, **2013**, 22-23, 4000-4007.
“CO Activation by Diphosphine-Pt(0): Carbonate and Acetone Formation. Experimental and Mechanistic Study”
13. Gianetti, T.L, **Nocton G.**, Minasian S.G., Tomson, N.C., Kilcoyne A.L.D., Kozimor, S.A., Shuh, D.K., Tyliczszak, T., Bergman R.G., Arnold, J., *J. Am. Chem. Soc.* **2013**, 135, 3224-3236.
“Diniobium Inverted Sandwich Complexes with μ - η^6 : η^6 -arene Ligands: Synthesis, Kinetic of Formation, and Electronic Structure”
12. **Nocton G.**, Booth C. H., Maron L., Andersen R. A., *Organometallics*, **2013**, 32, 1150-1158.
“Thermal Dihydrogen Elimination from Cp*₂Yb(4,5-Diazafluorene)”
11. Halbach, R. L, **Nocton G.**, Andersen R. A., *Dalton Trans.* **2012**, 41, 8809-8812.
“Synthesis and X-Ray Structure of Ruthenium bis(acetylacetonate)(N,N,N',N'-tetramethylethylenediamine)”
10. Vitova T., Kvashnina K., **Nocton G.**, Sukharina G., Denecke M. A., Butorin S. M., Mazzanti M., Cacciuffo R., Soldatov A., Behrends T., and Geckeis H., *Phys. Rev. B*, **2010**, 82.
“High energy resolution X-ray absorption spectroscopy study of uranium in varying valence states”
9. Mougél V., Horeglad P., **Nocton G.**, Pécaut J., Mazzanti M., *Chem. Eur. J.*, **2010**, 16, 48, 14365-14377.
“Cation-cation Complexes of Pentavalent Uranyl: From Disproportionation Intermediates to Stable Clusters”
8. **Nocton G.**, Pécaut J., Filinchuk Y., Mazzanti M., *Chem. Commun.* **2010**, 46, 2757-2759.
“Ligand Assisted Cleavage of Uranium Oxo-Clusters”
7. **Nocton G.**, Horeglad P., Vetere V., Pécaut J., Dubois L., Maldivi P., Edelstein N.M., Mazzanti M., *J. Am. Chem. Soc.* **2010**, 132, 495-508.
“Synthesis, Structure and Bonding of Stable Complexes of Pentavalent Uranyl”
6. Mougél V., Horeglad P., **Nocton G.**, Pécaut J., Mazzanti M., *Angew. Chem. Int. Ed.* **2009**, 48, 8477-8480. (Inside Cover).
“Stable Pentavalent Uranyl Species and Selective Assembly of a Polymetallic Mixed-Valent Uranyl Complex by Cation-Cation Interactions”
5. **Nocton G.**, Nonat A., Gateau C. and Mazzanti M., *Helvetica Chimica Acta* **2009**, 92, 2257 (invited issue).
“Water Stability and Luminescence of Lanthanide Complexes of Tripodal Ligands Derived from 1,4,7-triazacyclononane: pyridine carboxamide *versus* picolinate donors”
4. Horeglad P., **Nocton G.**, Filinchuk Y., Pécaut J., Mazzanti M., *Chem. Commun.* **2009**, 1843-1845.
“Pentavalent Uranyl Stabilized by a Dianionic Bulky Tetradentate Ligand”
3. **Nocton G.**, Horeglad P., Pécaut J., Mazzanti M., *J. Am. Chem. Soc.* **2008**, 130, 16633-16645.
“Polynuclear Cation-Cation Complexes of Pentavalent Uranyl: Relating Stability and Magnetic Properties to Structure”
2. **Nocton G.**, Pécaut J., Mazzanti M., *Angew. Chem. Int. Ed.* **2008**, 47, 3040-3042 (Inside cover).
“A New Nitrido-Centred Uranium Azido Cluster obtained from a Uranium Azide.”
1. **Nocton G.**, Burdet F., Pécaut J., Mazzanti M., *Angew. Chem. Int. Ed.* **2007**, 43, 7584.
“Self-Assembly of Polyoxo Clusters and Extended Frameworks by Controlled Hydrolysis of Low Valent Uranium”

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Book Chapters

2. Organometallic rare earth chemistry, M. Walter and **G. Nocton**; *in production*.
1. Coordination chemistry of actinides, **G. Nocton** and M. Mazzanti; in *The Lanthanides and Actinides: Synthesis, Reactivity, Properties and Applications*, Imperial College Press, London, *in production*.

Oral presentations (conferences)

20. "Organometallic chemistry of lanthanides: oxidation states in trompe l'oeil and magnetic sandwiches" Mendeleev Congress, *Invited Speaker*, Saint Petersburg, Russia, September **2019**)
19. "Organometallic chemistry of lanthanides: oxidation states in trompe l'oeil and magnetic sandwiches" ACS National meeting, San Diego, USA, August **2019**)
18. "Organometallic chemistry of lanthanides: oxidation states in trompe l'oeil and magnetic sandwiches" (Gecom-Concord, *Invited Speaker*, Erquy, France, Mai **2019**)
17. "Fine tuning of the electronic structure of organolanthanides: What influence on their reactivity and physical properties?" (International Conference of f-elements, *Invited Speaker*, Lausanne, Switzerland, September **2018**)
16. "Fine tuning of the electronic structure of organolanthanides: What influence on their reactivity and physical properties?" (International Conference of Coordination Chemistry, *Invited Speaker*, Sendai, Japan, August **2018**)
15. "Lanthanidocenes" (Organometallics Gordon Research Conference, Newport, RI, USA, July **2018**)
14. "The influence of multi-configurational electronic states on the properties and reactivity of organometallics" (Rare Earth Research Conference, *Invited Speaker*, Ames, Iowa, USA, June **2017**)
13. Reactivity of Organolanthanides complexes with redox non-innocent ligands." (International Conference of Coordination Chemistry, *Invited Speaker*, Brest, France, July **2016**)
12. Electron Transfers in Organolanthanides: new heterometallic complexes" (Coordination Chemistry days, Toulouse, France, January **2016**)
11. "Redox Non-Innocent Ligands in Organolanthanides" (International Conference of f-elements, Oxford, UK, September **2015**)
10. "Single Electron Transfer(s) in Organolanthanides" (European f-Element Network Meeting, Lisbon, Portugal, April-**2015**)
9. "Redox Reactions and Single Electron Transfer in Organolanthanides" (GeCom Concord, Vers, France, Mai-**2014**)
8. "Electron Transfer in Lanthanides Complexes: From Electronic Structure to Reactivity" (European f-Element Network Meeting, Dublin, Ireland, April-**2013**)
7. "Electron Transfer in Lanthanides Complexes: From Electronic Structure to Reactivity" (French Chemical Society "Coordination chemistry days": Lyon, France, February-**2013**, best talk award)
6. "N-heterocyclic Amine Complexes of Decamethyltetrabocene: Subtle Perturbations Cause Large Changes in Properties and Reactivity" (Rare Earth Research Conference, Santa Fe, USA, June-**2011**)
5. "Coordination Chemistry of Pentavalent Uranyl: Structure and Magnetism" (International Conference on f-Elements, Cologne, Germany, August-**2009**)
4. "Synthesis, Structure and Bonding of Stable Complexes of Pentavalent Uranyl" ("Coordination chemistry in Rhône-Alpes": Lyon, France, April-**2009**)
- 3 "Synthesis and characterization of polymetallic assemblies of uranium" (French Chemical Society "Coordination chemistry days": Reims, France, January-**2009**, best talk award)
2. "Actinides polynuclear clusters with cation-cation interactions." (ANKA facilities Users Meeting: Karlsruhe, Germany, October-**2008**, *invited speaker*)
1. "Redox and Hydrolysis Reactivity of Low-valent Uranium: Synthesis of Polymetallic Complexes of Uranium" (Rhône-Alpes French Chemical Society's "Spring Days": Grenoble, June-**2008**).

Oral presentations (invited seminars and workshops)

23. "Organolanthanides: unraveling unusual oxidation states and singular electronic structure" (Workshop, Les complexes métalliques sous la loupe des méthodes de chimie physique, France, January **2020**)

22. "Organolanthanides: Redox Reactivity and Magnetic Sandwiches" (Technische Universität München, Germany, January **2020**)
21. "Organometallic chemistry of lanthanides: oxidation states in trompe l'oeil and magnetic sandwiches" (University of Lille, France, November **2019**)
20. "Organometallic chemistry of lanthanides: oxidation states in trompe l'oeil and magnetic sandwiches" (University of Angers, France, April **2019**)
19. "Organolanthanides: molecules with unusual geometries and electronic structures" (University of Sussex, Brighton, UK, December **2018**)
18. "Chimie organométallique des lanthanides et degrés d'oxydation en trompe l'oeil" (*Organolanthanide chemistry and unusual oxidation states*). (Prospectives en chimie, National académie of Science, Paris, January **2018**)
17. "Luminescence of divalent and trivalent organometallic complexes of lanthanides" (Lanthanides luminescence workshop, Lyon, May **2017**)
16. "The influence of multi-configurational electronic states on the properties and reactivity of organometallics" (ETH Zurich, April 25, **2017**)
15. "The influence of multi-configurational electronic states on the properties and reactivity of organometallics" (Georgia Institute of Technology, March 13, **2017**)
14. "The influence of multi-configurational electronic states on the properties and reactivity of organometallics" (University of Pennsylvania, March 3, **2017**)
13. "NMR at the Ecole polytechnique" (Ecole polytechnique, Palaiseau, February **2017**)
12. "Coordination chemistry of divalent lanthanides: electronic structure and guilty ligands!" (ICMMO, Orsay, January **2017**)
11. "Coordination chemistry of divalent lanthanides: electronic structure and guilty ligands!" (CPE, Lyon, November **2016**)
10. "Coordination chemistry of divalent lanthanides: electronic structure and guilty ligands!" (Laboratoire de Chimie de Coordination, Toulouse, November **2016**)
9. "Charges Transfers in Coordination Complexes of d- and f- metals" (Charge Transfer Workshop, Orsay, May **2016**)
8. "Magnetic Anisotropy in Organolanthanides" (Magnetic Anisotropy Workshop, Rennes, April **2016**)
7. "Redox Non-Innocent Ligands in Organolanthanides" (French Chemical Society Seminar, Reims, April **2016**)
6. "Redox Non-Innocent Ligands in Organolanthanides" (Institute of separation chemistry, Marcoule, April **2016**)
5. "Le diffractomètre à rayons X sur monocristal : l'X-compagnon incontournable du chimiste" (Journée de la cristallographie à l'X, Ecole polytechnique, October, 21st **2014**)
4. "Redox Reactions and Single Electron Transfer in Organolanthanides" (University of Manchester, Manchester, UK, July 22nd **2014**)
3. "Electron Transfer in Low Valent Complexes of f- and d- block: From Electronic Structure to Reactivity" (CEA Saclay, IRAMIS, July 2nd **2013**)
2. "Redox Chemistry of Lanthanides Complexes: From Electronic Structure to Reactivity" (NTU-X Workshop, Singapore, February-**2012**)
1. "Redox Reactivity and Coordination Chemistry of Uranium" (Arnold Lab seminar, UC Berkeley, USA, April-**2010**)

Posters presentations

12. " Organometallic chemistry of lanthanides: oxidation states in trompe l'oeil and magnetic sandwiches" Gordon Research Conference "Organometallics": **2019**, Newport, RI, USA.
11. "Divalent Organolanthanides and Their Coordination Compounds: Linear Sandwich Complexes, Single Molecules Magnets, and Pd^{IV} Stabilization" Gordon Research Conference "Organometallics": **2018**, Newport, RI, USA.

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10. "Organolanthanides: synthesis, electronic structure, spectroscopy and reactivity" Journées de Chimie de Coordination, 8-9 February, **2018**
9. "Unusual electronic structures and reactivity in organolanthanides" Gordon Research Conference "Inorganic Reaction Mechanism": **2017**, Galveston, TX, USA.
8. "Unusual electronic structures and reactivity in organolanthanides" French Chemical Society "Coordination chemistry days": **2017**, Grenoble, France.
7. " Bipyridine Complexes of Thulium Bisphospholyl: A Step Forward in the Sterically Induced Reduction" European f-Element Network Meeting, EufEN-3, Nüremberg, Germany, April-**2014**.
6. " Sterically Induced Reduction in Organolanthanides. Is there any electronic contribution?" French Chemical Society "Coordination chemistry days": **2014**, Rennes, France.
5. "Electron Transfer Reactions in Organolanthanides Complexes." Gordon Research Conference "Inorganic Chemistry", **2013**, Newport, RI, USA
4. "Polymetallic complexes of uranium obtained from controlled oxidation and hydrolysis of low-valent uranium." Gordon Research Conference "Inorganic Chemistry", **2008**, Newport, RI, USA
3. Graduate School Annual presentation, **2008**, Grenoble, France (Best poster award)
2. "Structural studies of uranium complexes in relation to actinide separation chemistry" Plenary Meeting of ACTINET Network, **2008**, Avignon, France.
1. "Redox chemistry of uranium: a route unusual oxidation state, clusters and extended frameworks." International Karlsruhe Nanoscience Workshop, "Metal Rich Compounds", **2007**, Karlsruhe, Germany.

Science Popularization

8. Les éléments chimiques et la classification de Mendeleïev 150 ans de science et d'histoire, dossier chimie *La Jaune et la Rouge*, November **2019**.
7. La chimie, un allié pour le développement durable. Science popularization conference - fête de la science, Ecole polytechnique, October 12th **2019**.
6. Degrés d'oxydation métalliques et ligands redox non-innocents: de Charybde en Scylla (Metallic oxidation states and redox non-innocent ligands: between Scylla and Charybdis)
Nocton G.* *L'Act. Chim.*, **2017**, 484-490
5. "La catalyse à la loupe ! Un défi durable pour les chimistes." Tribune, *Le journal des grandes écoles et universités* dossier innovation, levier de développement durable pour la chimie verte (December **2015**).
4. "Maîtriser la chimie, une opportunité contre le réchauffement climatique et la pénurie des énergies fossiles" (Ecole polytechnique, General audience presentation, June, 6th **2015**)
3. "Maîtriser la chimie, une opportunité contre le réchauffement climatique" (Jeudis de l'X, Maison des polytechniciens, Paris, Presentation for scientific journalists, April, 2nd **2015**)
2. "Cristaux de Sucre ou de sel, comment savoir sans les goûter?" (Fête de la Science, november **2014**)
1. "Transformer les gaz atmosphériques polluants, un défi pour les chimistes " (Fête de la Science, scientific debate amination, november **2014**)

Conferences organization

3. Workshop: Les complexes métalliques sous la loupe des méthodes de chimie physique, January, 17th **2020** (co-organizer, scientific and logistic, 35 people)
2. Journée scientifique sur la chimie des terres rares, June, 11th **2015** (member of scientific comity and leader of the organization comity, 80 people)
1. Journée de la cristallographie à l'X, Ecole polytechnique, October, 21st **2014** (member of scientific comity and organization comity)

Teaching

- 2018-** Elected member of the department of chemistry executive office
- 2018-** Responsible for the Master 1 (voie Frédéric Joliot-Curie, Ecole polytechnique @Paris-Saclay)
- 2017-** Ecole polytechnique – Paris Saclay: Associate Professor of Inorganic Chemistry (64 h/year)
Teaching: NMR, Magnetism, EPR, Group theory, IR/Raman, Optical transitions, supramolecular chemistry, Graduate Level (M1 and M2)
- 2012-2017** Ecole polytechnique – Paris Saclay: Lecturer (44h/year).
- 2012-2016** Ecole polytechnique: Organometallic/Inorganic Chemistry Lab training (36 h/year)
- 2006-2009** University of Grenoble: Teaching Assistant (Solution Chemistry, 76h/year)