Denis FRATH

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• CURRENT POSITION

10/18 – present CNRS Associate Researcher (CRCN), French National Centre for Scientific Research, Chemistry Laboratory (UMR 5182), ENS de Lyon, France

• PREVIOUS POSITIONS

02/18 – 09/18 Postdoctoral research associate, CNRS, IRCELYON (UMR 5256), France
"Binuclear complexes for challenging catalytic reactions"

01/16 – 12/17 Postdoctoral research associate, Université Paris Diderot, ITODYS (UMR 7086), France
"Redox-active molecular layers for electronic devices"

09/13 – 12/15 Postdoctoral research fellow, Physical Organic Chemistry Laboratory, Kyoto Univ. Japan
"Photoresponsive supramolecular self-assembly studied by STM"

• EDUCATION

2024 HDR in chemistry, ENS de Lyon, CNRS (UMR5182), France
"Photoredox control of molecular metamorphism for the development of responsive supramolecular materials"

2013 PhD in chemistry, Université de Strasbourg, CNRS (UMR7515), France, G. Ulrich and R. Ziessel
"New fluorescent borate complexes: syntheses, properties, applications"

2009 MSc in organic chemistry, Université de Rouen - INSA Rouen, France

2009 Engineer's degree in fine chemistry, INSA Rouen, France

• FELLOWSHIPS AND AWARDS

2024 Young researcher prize, photochemistry subdivision of the Société Chimique de France

2023 Laureate of the *EMERGENCE@International* Program of the CNRS Chemistry Institute

2018 Admission as CNRS researcher, section 12, ranked n°1, 5 positions/ca. 80 applicants

2015 CSJ presentation award, 95th Annual Meeting of the Chemical Society of Japan

2014 Japan Society for the Promotion of Science post-doctoral fellowship, 120 awardees/1285 applicants

2013 Attendee at the 63rd Lindau Nobel Laureate Meeting (Chemistry), 625 attendees/22000 applicants

2009 MENRT PhD fellowship (French government)

• SUPERVISION OF RESEARCH

2018 – 2024 2 Postdocs, 10 PhD, 13 MSc2, 2 MSc1 and 4 BSc Students, ENS de Lyon

2016 – 2017 1 PhD, 1 MSc2 and 1 MSc1 Students, Université Paris Diderot

2011 – 2012 1 MSc2 Student, Université de Strasbourg

• TEACHING ACTIVITIES

2021– 2023 General Chemistry Practical Classes, BSc 3 (24 h), ENS de Lyon

2016 Organic Chemistry Lessons, BSc 1 (30 h), Université Paris Diderot, France

- **INSTITUTIONAL RESPONSIBILITIES**

2024 – present	Head of the Supramolecular Chemistry and Chemical Biology Group
2024 – present	Member of the Board of Direction, Chemistry Laboratory, ENS de Lyon, France
2022 – present	Member of the Board of the GDR *New Molecular Electronics* (NEMO)
2021 – 2024	Self-assembly theme animator, Chemistry Laboratory, ENS de Lyon, France
2021 – 2024	Safety assistant, Chemistry Laboratory, ENS de Lyon, France
2020 – 2024	Member of the Premises Board, Chemistry Laboratory, ENS de Lyon, France
2019 – 2024	Member of the Laboratory Council, Chemistry Laboratory, ENS de Lyon, France

- **COMMISSIONS OF TRUST**

Peer review	Reviewer for *JACS Au, ACS Appl. Mater. Surf., J. Mater. Chem. C, Chem. Eur. J.* etc.
Grant evaluation	ANR AAP 2023 to 2026, Labex CHARM$_3$AT AAP 2022, LUMOMAT 2026
Recruitment	Member of assistant professor recruitment commission, Université Paris Cité, 2024
	Member of ATER recruitment commission, ENS de Lyon, 2019

- **ORGANISATION OF SCIENTIFIC MEETINGS**

2027	SCF Photochemistry Subdivision Annual Meeting, ENS Lyon, France (120 p. expected), **chair**
2026	10th Inter. Conf. on Molecular Electronics, Paris, France (120 p.), organizing committee
2026	4th Inter. Symp. Photonic & Electronic Molecular Machines, ENS de Lyon, France (110 p.), **chair**
2025	4th NEMO Annual Meeting, C2N Palaiseau, France (58 p.), organizing committee
2024	3rd NEMO Annual Meeting, INIST-CNRS Nancy, France (50 p.), organizing committee
2023	2nd NEMO Annual Meeting, IEMN Lille, France (59 p.), organizing committee
2022	1st NEMO Annual Meeting, Université Paris Cité, France (64 p.), organizing committee
2021	10th Inter. Conf. on Molecular Electronics, ENS Lyon, France, (200 p.), organizing committee
2019	3rd MAPYRO Symp. "porphyrins and beyond", ENS Lyon, France (60 p.), organizing committee

- **SCIENTIFIC ACTIVITIES**

My research activities at the Chemistry Laboratory of ENS Lyon focus on the synthesis and study of π-conjugated molecules with optical and electrochemical properties. I am also interested in their property of supramolecular self-assembly and their use for the development of functional materials with switchable properties. My skills and areas of expertise cover organic synthesis, supramolecular chemistry, physical chemistry techniques (spectroscopy, photochemistry, electrochemistry), soft materials (gels, liquid crystals) and surface science (scanning tunneling microscopy, self-assembly in monolayers, electrochemical grafting).

While in Japan, I have coordinated a JSPS grant dealing with supramolecular self-assemblies at the liquid/solid interfaces (ca. 20 k€ in 2014-15). Since I started my independent career, my work has enabled me to gain national recognition and international visibility in the field of electro/photo-switchable molecular and supramolecular systems (member of the board of GDR NEMO, close collaborations with Japan, Laureate of the EMERGENCE@International 2023 Program of CNRS Chemistry, 2024 Young Researcher Prize from the Photochemistry, Photophysics, and Photosciences Subdivision of the SCF).

Building on these initial results, I am also initiating ambitious new research projects. I was PI of an ANR JCJC grant under the 2022 AAPG (228 k€) and FR ENSL funding (60 k€) to launch new research lines on the development of molecular architectures and switchable fluorescent supramolecular materials for the modulation of circularly polarized luminescence (CPL). This funding has also enabled the installation of new scanning tunnelling microscope coupled to electrochemical techniques (EC-STM).

I have also initiated several international collaborations with Japan on these topics. These exchanges are part of an "Ambition International" grant from the Auvergne-Rhône-Alpes region that I coordinate (40 k€, in collaboration with Kyoto Univ., Nara IST, and ILM Lyon) and the POEMES International Research Project (CNRS Physics, Coord. G. Rapenne, Collab. Kyoto Univ., NAIST Nara, NIMS Tsukuba, CEMES Toulouse, IPCM Paris). I also initiated the establishment of a joint PhD program between the ENS de Lyon and the Nara Institute of Science and Technology (NAIST), which was signed in October 2025 for a period of five years.

- **BIBLIOMETRIC INDICATORS**

- **h-index**: 20, **i10-index**: 26
- **1 book chapter** and **39 articles** in peer-reviewed journals including *J. Am. Chem. Soc. (4), Angew. Chem. Int. Ed, J. Photochem. Photobiol. C, Nano Lett., Chem. Sci, Electrochim. Acta, J. Mater. Chem. C (3), Nanoscale, ACS Omega, Org. Lett. (3), Chem. Commun. (2), Chem. Eur. J. (4);*
- Most papers are **High Profile** (**4 covers** or front pages; average **IF = 6.1** and **49.4 citations**)
- Total number of **citations**: **2065** (OpenAlex, October 2026)
- **44 talks** as speaker including 19 invited seminars at research institutes, 5 invited lectures, 16 communications and 8 posters at conferences and **56 presentations** as contributor

- **MAJOR COLLABORATIONS**

France
- **T. Gibaud, S. Maneville, T. Divoux,** Laboratoire de Physique de l'ENS de Lyon
Electron-Responsive Supramolecular Soft-materials
- **S. Guy, B. Baguenard, A. Bensalah-Ledoux,** ILM, Université Lyon 1
Boron-based Fluorophores with Circularly Polarized Luminescence Properties
- **I. Hnid, S. Lenfant,** IEMN, Université de Lille; **X. Sun, P. Martin, F. Lafolet, J.-C. Lacroix,** ITODYS, Université Paris Cité;
Stimuli-responsive Molecules for Surface Functionalization and Molecular Electronics

Brazil
- **E. Triboni, A.P. Ramos, J.-F. G. Demets,** Universidade de São Paulo
Photophysical and electrochemical study of organic semiconductor gels

Belgium
- **S. De Feyter, K. Mali,** KU Leuven
Scanning Tunneling Microscopy Analysis of Photoresponsive Viologen On-surface Assemblies

Japan
- **K. Matsuda, D. Shimizu,** Kyoto University, Graduate School of Engineering
Self-Assembled Monolayers on Surface Based on Chiroptical Building Blocks
- **H. Yamada, Y. Mitsuaki,** Kyoto University, Institute for Chemical Research
Electrochemical Properties of Pentacene Photosynthesized on Electrodes
- **T. Hirose,** Kyoto University, Institute for Chemical Research
Helicene based CPL Emitters for On-surface Applications
- **K Yasuhara, T. Kawai,** Nara Institute of Science and Technology; **M. Louis,** Tokyo University of Agriculture and Technology;
Supramolecular Soft Materials with Chiroptical Properties
- **F. Mathevet, C. Adachi,** Kyushu University,
Incorporation of Ionic Liquid Crystals in OLED devices

- **RESEARCH ARTICLES**

40. Chiral Amplification in Electron-Responsive Supramolecular Hydrogels. G. Groslambert, A. Wang, T. Gibaud, R. Duwat, R. Tran, L. Khrouz, J.-C. Mulatier, T. Le Bahers, D. Frath, C. Bucher, F. Chevallier, *manuscript in preparation*

39. Photoinduced Modulation of Rectification and Charge Transport in Diarylethene-Viologen Molecular Junction. S. Tahri, S. Decorps, S. Lenfant, D. Frath, I. Hnid, ***2026***, arxiv.org/abs/2610.18251

38. Tuning attenuation factors by photo-irradiation in multistate diarylethene-based single-molecule. L. Guan, X. Yao, D. Pitrat, D. Frath, J.-C. Lacroix, X. Sun, *Nanoscale*, **2026**, *Submitted*

37. Synthesis, Photophysical and Chiroptical Properties of Optically Active BINOL-Boranil Enantiomers. S. Decorps, R. Hachem, J. Bainvel-Sato, R. Devienne, B. Baguenard, S. Guy, E. Janneau, F. Chevallier, C. Bucher, L. Guy, D. Frath, *ACS Omega* **2026**, *11*, 21816–21823 (10.1021/acsomega.5c11819) {hal-05578530}

36. Unveiling mechanical, optical and conductivity properties of naphthalenediimide bridged polysilsesquioxane gels. T. B. F. de Moraes, E. R. Triboni, F. Chevallier, D. Frath, T. Gibaud, M. J. Politi, G. J.-F. Demets, C. Bucher *J. Mater. Chem C.* **2026**, *14*, 7334–7341 (10.1039/d5tc03783b) {hal-05650911}

35. Reversible Self-assembly of a Viologen-based Supramolecular Gel Network Under Electrochemical Control. V. Andrieux, R. Savin, J. Bauland, F. Chevallier, T. Gibaud, D. Frath, C. Bucher, *Chem. Eur. J.* **2025**, *31*, e02489 (10.1002/chem.202502489) {hal-05394693}

34. Synthesis, Photophysical properties and Ab Initio Calculations of Dual Solution-Solid-State Emitting Ethynyl-Extended Boranil Complexes. T. Stoerkler, D. Frath, G. Ulrich, P. Retailleau, D. Jacquemin, J. Massue *J. Org. Chem.* **2025**, *90*, 6980–6991, (10.1021/acs.joc.5c00403) {hal-05394674}

33. π-Expansion as Gateway to Viologen-Based Pimers. G. Groslambert, V. Andrieux, M. Duquesnoy, R. Rullan, L. Khrouz, S. Denis-Quanquin, S. N. Steinmann, T. Le Bahers, F. Chevallier, D. Frath, C. Bucher *Chem. Sci.* **2025**, *16*, 9320−9325, (10.1039/D5SC01361E) {hal-05208123}

32. Viologen-Based Supramolecular Crystal Gels: Gelation Kinetics and Sensitivity to Temperature. J. Bauland, V. Andrieux, F. Pignon, D. Frath, C. Bucher, T. Gibaud, *Soft Matter* **2024**, *20*, 8278-8290, (10.1039/D4SM00826J) {hal-04729815}

31. Control of the Molecular Function through a Decoupling Unit. Q. V. Nguyen, D. Frath, F. Lafolet, J.-C. Lacroix, P. Martin, *J. Phys. Chem C.* **2024**, *128*, 13264−13270, (10.1021/acs.jpcc.4c02324) {hal-04662911}

30. *Unprecedented light induced aggregation of cationic 1,4,5,8-Naphthalenediimide amphiphiles.* R. G. Antonelia, T. B. F. de Moraes, H. C. Junqueira, L. M. Sihn, H. E. Tomad, B. Pedras, L. F. V. Ferreira, D. Frath, C. Bucher, J. W. Steed, G. J.-F. Demets, E. R. Triboni, *J. Mater. Chem C.* **2024**, *12*, 3888-3896, (10.1039/D3TC04178F) {hal-04548411}

29. *Chiral and Conductive Viologen-based Supramolecular Gels Exhibiting Tunable Charge-Transfer Properties.* V. Andrieux, T. Gibaud, J. Bauland, T. Divoux, S. Manneville, S. Guy, A. Bensalah-Ledoux, L. Guy, F. Chevallier, D. Frath, C. Bucher, *J. Mater. Chem C.* **2023**, *11*, 12764-12775 (10.1039/D3TC02076B) {hal-04235297}

28. *Redox-responsive 1D-assembly built from cucurbit[8]uril and a water-soluble metalloporphyrin-based tecton.* S. Chowdhury, P. Hennequin, O. Calabi, S. Denis-Quanquin, E. Saint-Aman, D. Frath, F. Chevallier, C. Bucher, *J. Porphyrins Phthalocyanines* **2023**, 27, 1475–1488 (10.1142/S1088424623501146) {hal-04251977}

27. *Ni-centered Coordination-Induced Spin-State Switching Triggered by Electrical Stimulations*. S. Al Shehimy, O. Baydoun, S. Denis-Quanquin, J.-C. Mulatier, L. Khrouz, D. Frath, E. Dumont, M. Murugesu, F. Chevallier and C. Bucher, *J. Am. Chem. Soc.* **2022**, *144*, 17955–17965 (10.1021/jacs.2c07196) {hal-03855661}

26. *Tuning ON/OFF Ratios in Diarylethene-based Single- and Bilayer Molecular Junctions*. I. Hnid, M. Liu, D. Frath, S. Bellynck, F. Lafolet, X. Sun, J.-C. Lacroix, *ECS J. Solid State Sci. Technol.* **2022**, *11*, 055010 (10.1149/2162-8777/ac6f22) {hal-03798309}

25. *Photoredox Processes in the Aggregation and Gelation of Electron-responsive Supramolecular Polymers Based on Viologens*. C. Roizard, V. Andrieux, S. Al Shehimy, S. Chowdhury, Q. Reynard-Feytis, F. Chevallier, C. Bucher, T. Gibaud, D. Frath, *ECS Adv.* **2022**, *1*, 020502 (10.1149/2754-2734/ac6ad4) {hal-03722425}

24. *Synthesis and Electrochemistry of Free-Base Porphyrins Bearing Trifluoromethyl meso-Substituents*. S. Al Shehimy, D. Frath, E. Dumont, F. Chevallier, C. Bucher, *ChemElectroChem*, **2022**, *9*, e202101604 (10.1002/celc.202101604)

23. *Light-controlled aggregation and gelation of viologen-based coordination polymers.* S. Chowdhury, Q. Reynard-Feytis, C. Roizard, D. Frath, F. Chevallier, C. Bucher, T. Gibaud, *J. Phys. Chem. B.* **2021**, *125*, 12063–12071 (10.1021/acs.jpcb.1c06090) {hal-03374166}

22. *Unprecedented ON/OFF ratios in photoactive diarylethene-bisthienylbenzene molecular junctions.* I. Hnid, M. Liu, D. Frath, S. Bellynck, F. Lafolet, X. Sun, J.-C. Lacroix, *Nano Lett.* **2021,** *21*, 7555-7560 (10.1021/acs.nanolett.1c01983) {hal-03420993}

21. *Dual-State Emissive π-Extended Salicylaldehyde Fluorophores: Synthesis, Photophysical Properties and First-Principle Calculations.* T. Stoerkler, D. Frath, D. Jacquemin, J. Massue, G. Ulrich, *Eur. J. Org. Chem.* **2021**, *26*, 3726–3736 (10.1002/ejoc.202100650) {hal-03357855}

20. *Electrochemical and Plasmon-induced Grafting of n-dopable Conjugated Oligomers.* M. Bastide, D. Frath, S. Gam-Derouich, J.-C. Lacroix, *ChemElectroChem* **2021**, *8*, 2512–2518 (10.1002/celc.202100563) {hal-03420968}

19. *Electron-Triggered Metamorphism in Palladium-Driven Self-Assembled Architectures*. C. Kahlfuss, S. Chowdhury, A. Fins-Carreira, R. Grüber, E. Dumont, D. Frath, F. Chevallier, E. Saint-Aman, C. Bucher, *Inorg. Chem.* **2021**, *60*, 3543–3555 (10.1021/acs.inorgchem.0c02365) {hal-03206835}

18. *Highly Efficient Photoswitch in Diarylethene-Based Molecular Junctions.* I. Hnid, D. Frath, F. Lafolet, X. Sun, J.-C. Lacroix, *J. Am. Chem. Soc.* **2020**, *142*, 7732–7736 (10.1021/jacs.0c01213) {hal-03206807}

17. *Multi-functional Switches of Ditopic Ligands with Azobenzene Central Bridge at a Molecular Scale*. I. Hnid, X. Sun, D. Frath, F. Lafolet, J.-C. Lacroix, *Nanoscale*, **2019**, *11*, 23042–23048 (10.1039/C9NR06350A) {hal-03206793}

16. *Photo/Redox-Responsive 2D-Supramolecular Assembly Involving Cucurbit[8]uril and a Star-Shaped Porphyrin Tecton*. S. Chowdhury, Y. Nassar, L. Guy, D. Frath, F. Chevallier, E. Dumont, A. P. Ramos, G. J.-F. S; Guy, C. Bucher, *Electrochim. Acta*, **2019**, *316*, 79–92 (10.1016/j.electacta.2019.05.077) {hal-02146626}

15. *Supramolecular Networks and Wires Based on Intermolecular BiEDOT Interactions*. X. Sun, D. Frath, F. Lafolet, J.-C. Lacroix, *J. Phys. Chem. C*, **2018**, *122*, 22760–22766 (10.1021/acs.jpcc.8b07325) {hal-02001862}

14. *Highly Efficient Long-Range Electron Transport in Viologen-based Molecular Junction*. V. Q. Nguyen, P. Martin, D. Frath, M. L. Della Rocca, F. Lafolet, S. Bellinck, P. Lafarge, J.-C. Lacroix, *J. Am. Chem. Soc.* **2018**, *140*, 10131–10134 (10.1021/jacs.8b05589) {hal-01946033}

13. *Electrografted Monolayer Based on a Naphtalenediimide-Ruthenium Terpyridine Complex Dyad: Efficient Creation of Large-area Molecular Junctions with High Current Densities*. D. Frath, V. Q. Nguyen, F. Lafolet, P. Martin, J.-C. Lacroix, *Chem. Commun.* **2017**, *53*, 10997–11000 (10.1039/C7CC04972B) {hal-01916367}, **selected as Inside Front Cover**

12. *Control of Rectification in Molecular Junctions: Contact Effect and Molecular Signature*. V. Q. Nguyen, P. Martin, D. Frath, M. L. Della Rocca, F. Lafolet, C. Barraud, P. Lafarge, V. Mukundan, D. James, R. L. McCreery, J.-C. Lacroix, *J. Am. Chem. Soc.* **2017**, *139*, 11913–11922 (10.1021/jacs.7b05732) {hal-01821771}

11. *Vectorization and Intracellular Distribution of a Two Photon- Absorbing, Near Infra-Red (NIR) Emitting π-Extended Boranil Dye*. D. Frath, P. Didier, Y. Mély, J. Massue, G. Ulrich, *ChemPhotoChem* **2017,** *1*, 109–112 (10.1002/cptc.201700012) {hal-02001853}, **selected as Cover Picture**

10. *Polyanils and polyboranils: Synthesis, Optical Properties and Aggregation-Induced Emission*. D. Frath, K. Benelhadj, M. Munch, J. Massue, G. Ulrich, *J. Org. Chem.* **2016**, *81*, 9658–9668 (10.1021/acs.joc.6b01756) {hal-02001847}

9. *Diarylethene Self-Assembled Monolayers: Cocrystallization and Mixing-Induced Cooperativity Highlighted by Scanning Tunneling Microscopy at the Liquid/Solid Interface*. D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda, *Chem. Eur. J.* **2015**, *21*, 11350–11358 (10.1002/chem.201500804) {hal-01916046}, **selected as Full Papers Frontispiece**, **highlighted in** *atlas of science*, January 4th

8. *Substituent and Solvent Effect on the Excited State Deactivation Channels in Anils and Boranils*. J. Dobkowski, P. Wnuk, J. Buczyńska, M. Pszona, D. Orzanowska, D. Frath, G. Ulrich, J. Massue, S. Mosquera-Vazquez, E. Vauthey, C. Radzewicz, R. Ziessel, J. Waluk, *Chem. Eur. J.* **2015**, *21*, 1312–1327 (10.1002/chem.201404669) {hal-02001835}

7. *Ultrafast Photoinduced Electron Transfer in Viologen-linked BODIPY Dyes*. D. Frath, J. E. Yarnell, G. Ulrich, F. N. Castellano, R. Ziessel, *ChemPhysChem* **2013**, *14*, 3348–3354 (10.1002/cphc.201300547) {hal-01994838}

6. *Fluorescent Boron(III) Iminocoumarins (Boricos)*. D. Frath, A. Poirel, G. Ulrich, A. De Nicola, R. Ziessel, *Chem. Commun*. **2013**, *49*, 4908–4910 (10.1039/C3CC41555D) {hal-01994832}

5. *Synthesis of Luminescent Ethynyl-Extended Regioisomers of Borate Complexes Based on 2-(2'-Hydroxyphenyl)Benzoxazole (HBO)*. J. Massue, D. Frath, P. Retailleau, G. Ulrich, R. Ziessel, *Chem. Eur. J.* **2013**, *19*, 5375–5386 (10.1002/chem.201203625) {hal-00826777}

4. *Chemistry on Boranils: an Entry to Functionalized Fluorescent Dyes*. D. Frath, S. Azizi, G. Ulrich, R. Ziessel, *Org. Lett.* **2012**, *14*, 4774–4777 (10.1021/ol3020573) {hal-01994825}

3. *Synthesis of Luminescent 2-(2'-Hydroxyphenyl)benzoxazole (HBO) Borate Complexes*. J. Massue, D. Frath, G. Ulrich, P. Retailleau, R. Ziessel, *Org. Lett.* **2012**, *14*, 230–233 (10.1021/ol203014e) {hal-00678527}

2. *Facile Synthesis of Highly Fluorescent* Boranil *Complexes*. D. Frath, S. Azizi, G. Ulrich, P. Retailleau, R. Ziessel, *Org. Lett.* **2011**, *13*, 3414–3417 (10.1021/ol2011665) {hal-00606477}

1. *TBD-organocatalysed synthesis of pyrazolines*. O. Mahé, D. Frath, I. Dez, F. Marsais, V. Levacher, J.-F. Brière, *Org. Biomol. Chem.* **2009**, *7*, 3648–3651 (10.1039/B911577C) {hal-01915860}, **highlighted in** *Cheminform* **2010**, *41 (5)*

- **REVIEWS AND BOOK CHAPTERS**

6. *Electron-Triggered Metamorphism in Coordination Complexes and Polymers.* F. Akhssas, D. Frath, F. Chevallier, G. Royal, C. Bucher, *manuscript in preparation*

5. *Surface Functionalization with Redox-active Molecular Layers based on Viologens: Towards Applications in Molecular Electronics.* S. Decorps, F. Chevallier, L. Guy, C. Bucher, D. Frath, *Surf. Sci. Rep.* **2026**, *submitted*}, **Invited Review**

4. *Photoredox Control of Molecular Metamorphism: Towards Stimuli-responsive Supramolecular Materials.* D. Frath, F. Chevallier, C. Bucher, *Act. Chim.* **2025**, *n°506*, 29−26, (10.63133/scf.act-chim.2025.506.03) {hal-05343886}

3. *Photoresponsive supramolecular self-assemblies at the liquid/solid interface*. D. Frath, S. Yokoyama, T. Hirose, K. Matsuda, *J. Photochem. Photobiol. C*, **2018**, *34*, 29**–**40 (10.1016/j.jphotochemrev.2017.12.005) {hal-01916096}

2. *Cooperative Self-Assembly of Photochromic Diarylethenes at Liquid/Solid Interface and Highly Sensitive Photoinduced Transformation of the Ordering*. K. Matsuda, T. Hirose, S. Yokoyama, D. Frath, *Photon-Working Switches*, Springer, **2017**, pp. 409**–**419 (10.1007/978-4-431-56544-4_20) {hal-01916218}

1. *Luminescent materials: Locking π-conjugated and heterocyclic ligands with boron (III)*. D. Frath, J. Massue, G. Ulrich, R. Ziessel, *Angew. Chem., Int. Ed.* **2014**, *53*, 2290**–**2310 (10.1002/anie.201305554) {hal-02001845}

- **INVITED LECTURES**

5. *Boranils: from the origins to the development of responsive chiroptical supramolecular materials.* D. Frath
Science and Technology of π-conjugated Systems (SPIC), Strasbourg, France, Oct. 2026

4. *Chiral Luminescent Boranils for the Development of Molecular and Supramolecular Chiroptical Switches.* S. Decorps, R. Duwat, V. Andrieux, K. Higashiguchi, K. Matsuda, A. Bensalah-Ledoux, B. Baguenard, S. Guy, F. Chevallier, C. Bucher, L. Guy, D. Frath
France-Japan Workshop on Optoelectronics & Photonics, Paris, France, May 2026

3. *Boranils: from the origins to the metamorphic control of chiroptical properties.* D. Frath
3rd International Symposium on Photonic and Electronic Molecular Machines, Nara, Japon, Oct. 2024

2. *Synthetic versatility of Boranils: from the origins to the chiroptical properties.* D. Frath
Journée de Chimie Organique Victor Grignard, Lyon, France, Sept. 2024

1. *Photoinduced Electron Transfer as a Trigger for Molecular and Supramolecular Metamorphism.* S. Chowdhury, C. Kahlfuss, V. Andrieux, C. Roizard, S. Al Shehimy, A. F. Carreira, R. Grüber, Y. Nassar, L. Guy, F. Chevallier, E. Dumont, A. P. Ramos, G. J.-F. Demets, E. Saint-Aman, C. Bucher, T. Gibaud, D. Frath
6th International Workshop on Nano and Bio-Photonics, Evian, France, Sept. 2022

- **INVITED SEMINARS**

19. *Luminescent Boranils for the development of responsive chiroptical soft-materials.* D. Frath
Institute for Solid State Physics, The University of Tokyo, Japan, Sept. 2026

18. *Boranil-based molecular switches for the development of responsive supramolecular materials with enhanced chiroptical properties.* D. Frath
Department of Applied Chemistry, Tokyo University of Agriculture and Technology, Japan, Sept. 2026

17. *Boranils: from the origins to the development of responsive chiroptical supramolecular materials.* D. Frath
Division of Materials Science, Nara Institute of Science and Technology, Japan, Sept. 2026

16. *Boranils: from the origins to the development of responsive chiroptical supramolecular materials.* D. Frath
OPHELIA Laboratory, Kyushu University, Japan, Sept. 2026

15. *Metamorphic Supramolecular Materials: Towards Switches for Chiroptical Properties.* D. Frath

Institute for Chemical Research, Kyoto University, Japan, Oct. 2024

14. *Electron-responsive and Conductive Supramolecular Materials: Towards Chiroptical Switches for the Control of CPL Emission.* D. Frath
Center OPERA, Kyushu University, Japan, Nov. 2023

13. *Electron-responsive and Conductive Supramolecular Materials Based on Viologens.* D. Frath
Division of Material Science, Nara Institute of Science and Technology, Japan, Nov. 2023

12. *Photoredox Control of Electron-responsive and Conductive Supramolecular Materials Based on Viologens.* D. Frath
Institute for Chemical Research, Kyoto University, Japan, Nov. 2023

11. *Photoredox Control of Metamorphic Architectures for Electron-responsive and Conductive Supramolecular Materials.* D. Frath
Graduate School of Engineering, Kyoto University, Japan, Nov. 2023

10. *Electron-responsive and Conductive Supramolecular Materials Based on Metamorphic Architectures.* D. Frath
LIMMS, Institute of Industrial Science, The University of Tokyo, Japan, Nov. 2023

9. *Introduction to molecular Fluorescence.* D. Frath
COLUMN project School Day, Université Claude Bernard Lyon 1, France, May 2019

8. *π-conjugated molecules with optical and electrochemical properties.* D. Frath
IRCELYON, Université Claude Bernard Lyon 1, France, Feb. 2018

7. *Photoresponsive Supramolecular Self-assemblies at the Liquid/Solid Interface.* D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda
ITODYS, Université Paris Cité, France, Jan. 2016

6. *Photoresponsive Supramolecular Self-assemblies at the Liquid/Solid Interface.* D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda
LCH, ENS Lyon, France, Oct. 2015

5. *From France to Japan: a journey through chemistry.* D. Frath
JSPS Science Dialogue, Wakayama, Japan, Jan. 2015

4. *Diarylethene Self-Assembled Monolayers: Cocrystallization and Mixing-Induced Cooperativity Highlighted by Scanning Tunneling Microscopy at the Liquid/Solid Interface.* D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda
CiNaM, Aix-Marseille Université, France Dec. 2014

3. *Diarylethene Self-assembled Monolayers: Cooperativity and Photochromism at the Liquid/Solid Interface Analyzed by STM.* D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda
Young Researcher Seminar, Université de Strasbourg, France, Dec. 2014

2. *New Fluorescent Borate Complexes: syntheses, properties, applications.* D. Frath, S. Azizi, J. Massue, G. Ulrich, R. Ziessel
Physical Organic Chemistry Laboratory, Kyoto University, Japan, Sept. 2013

1. *Boranil: a new easily accessible, versatile and highly fluorescent dye.* D. Frath, S. Azizi, J. Massue, G. Ulrich, R. Ziessel
Young Researcher Seminar, Université de Strasbourg, France, Nov. 2012

- **ORAL COMMUNICATIONS**

16. *Application of Molecular Metamorphism to the Control of the Chiroptical Properties of Supramolecular Materials.* D. Frath
Associate researchers' days, INC CNRS, Paris, France, Nov. 2026

15. *Boranil-based molecular switches for the development of responsive supramolecular materials with enhanced chiroptical properties.* S. Decorps, R. Duwat, V. Andrieux, K. Higashiguchi, K. Matsuda, A. Bensalah-Ledoux, B. Baguenard, S. Guy, F. Chevallier, C. Bucher, L. Guy, D. Frath
18th International Meeting on Boron Chemistry, Tokyo, Japan Sept. 2026

14. *Boranil-based Molecular Switches for the Development of Chiroptical Materials.* S. Decorps, R. Duwat, V.

Andrieux, K. Higashiguchi, K. Matsuda, A. Bensalah-Ledoux, B. Baguenard, S. Guy, F. Chevallier, C. Bucher, L. Guy, D. Frath
10th International Symposium on Optical Materials, Lyon, France, Oct. 2026

13. *All visible light photochromes for the design of chiroptical switches.* S. Decorps, R. Duwat, V. Andrieux, K. Higashiguchi, K. Matsuda, A. Bensalah-Ledoux, B. Baguenard, S. Guy, F. Chevallier, C. Bucher, L. Guy, D. Frath
PhotoNano'26, Annual meeting of the SP2P-SCF, Paris, France, Mai 2026

12. *Molecular switches based on boron complexes for the modulation of chiroptical properties.* S. Decorps, R. Hachem, J. Bainvel-Sato, F. Chevallier, L. Guy, C. Bucher, D. Frath
4th Annual Meeting GDR NEMO, Paris-Saclay, France, Dec. 2025

11. *Towards the metamorphic control of chiroptical properties using Boranils.* S. Decorps, R. Hachem, V. Andrieux, F. Chevallier, L. Guy, C. Bucher, D. Frath
Science and Technology of π-conjugated Systems (SPIC), Paris, Janv. 2025

10. *Photoredox-responsive and Conductive Supramolecular Materials.* D. Frath, V. Andrieux, F. Chevallier, C. Bucher
Joint meeting of the GDR Solar Fuels - PES, Grenoble, France, June 2024

9. *Photoredox Control of Electron-responsive and Conductive Supramolecular Materials Based on Viologens.* D. Frath, V. Andrieux, F. Chevallier, C. Bucher
Annual meeting of the SP2P-SCF, Grenoble, France, Mai 2024

8. *Photo/Redox-responsive Supramolecular Materials Based on Viologens.* D. Frath, V. Andrieux, F. Chevallier, C. Bucher
10th International Symposium On Photochromism (ISOP), Nara, Japan, Nov. 2023

7. *Photo/redox Control of Molecular and Supramolecular Materials Based on Viologens.* C. Bucher, F. Chevallier, D. Frath
Associate researchers' days, INC CNRS, Paris, France, Oct. 2023

6. *Electron-responsive Molecular and Supramolecular Materials Based on Porphyrins and Boranils.* C. Bucher, F. Chevallier, D. Frath
Scientific Days of the GDR MAPYRO, Saclay, France, June 2023

5. *Viologen π-Dimerization as a Trigger for Metamorphism in Supramolecular Stimuli-Responsive Materials.* D. Frath, T. Gibaud, S. Chowdhury, C. Kahlfuss, C. Roizard, A. F. Carreira, R. Grüber, Y. Nassar, L. Guy, F. Chevallier, E. Dumont, A. P. Ramos, G. J.-F. Demets, E. Saint-Aman, C. Bucher
6th Ed. Smart Materials and Surfaces, Milan, Italy, Oct. 2021

4. *Photo/Redox Control of π-Dimerization as a Trigger for Molecular and Supramolecular Metamorphism.* D. Frath, T. Gibaud, C. Roizard, S. Chowdhury, Y. Nassar, L. Guy, F. Chevallier, E. Dumont, A. P. Ramos, G. J.-F. Demets, C. Bucher
9th International Symposium On Photochromism (ISOP), *Nanosynergetics Workshop*, Paris, France, Sept. 2019

3. *Diarylethene Self-Assembled Monolayers: Cocrystallization and Mixing-Induced Cooperativity Highlighted by Scanning Tunneling Microscopy at the Liquid/Solid Interface.* D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda
Mediterranean Young Researchers Days, Montpellier, France, Oct. 2015

2. *Diarylethene Self-Assembled Monolayers: Cocrystallization and Mixing-Induced Cooperativity Highlighted by Scanning Tunneling Microscopy at the Liquid/Solid Interface.* D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda
95th Annual Meeting of the Chemical Society of Japan, Tokyo, Japan, March 2015

1. *Boranil: a chemically versatile fluorescent dye.* D. Frath, S. Azizi, J. Massue, G. Ulrich, R. Ziessel
SECO 49, Annecy, France, May 2012

- **POSTERS**

8. *Boranil-based molecular emitters for the development of responsive supramolecular materials with enhanced chiroptical properties.* R. Duwat, S. Decorps, R. Hachem, J. Bainvel-Sato, C. Bucher, L. Guy, D. Frath
11th International Conference on Molecular Electronics, Paris, France, Dec. 2026

7. *Boranil-based molecular emitters for the development of responsive supramolecular materials with enhanced chiroptical properties.* R. Duwat, S. Decorps, R. Hachem, J. Bainvel-Sato, C. Bucher, L. Guy, D. Frath
6th French-Chinese Conference on Green Chemistry, Lyon, France, Oct. 2026

6. *Towards Electron-Responsive Supramolecular Hydrogels.* G. Groslambert, V. Andrieux, L. Khrouz, J. Bauland, T. Gibaud, F. Chevallier, D. Frath, C. Bucher
Journée de Chimie Supramoléculaire, Marseille, France, Mai 2026

5. *Towards Electron-Responsive Supramolecular Hydrogels.* G. Groslambert, V. Andrieux, L. Khrouz, J. Bauland, T. Gibaud, F. Chevallier, D. Frath, C. Bucher
4th Annual Meeting GDR NEMO, Paris-Saclay, France, Dec. 2025

4. *Ni-centered Coordination-Induced Spin-State Switching Triggered by Electrical Stimulations.* S. Al Shehimy, O. Baydoun, L. Khrouz, S. Denis-Quanquin, E. Dumont, D. Frath, F. Chevallier, C. Bucher
2nd Annual Meeting GDR NEMO, Lille, France, Oct. 2023

3. *Photo/Redox-Responsive 2D-Supramolecular Assembly Involving Cucurbit[8]uril and a Star-Shaped Porphyrin Tecton.* S. Chowdhury, Y. Nassar, L. Guy, D. Frath, F. Chevallier, E. Dumont, A. P. Ramos, G. J.-F. Demets, C. Bucher
9th International Symposium On Photochromism (ISOP), Paris, France, Sept. 2019

2. *Photo/Redox-Responsive 2D-Supramolecular Assembly Involving Cucurbit[8]uril and a Star-Shaped Porphyrin Tecton.* S. Chowdhury, Y. Nassar, L. Guy, D. Frath, F. Chevallier, E. Dumont, A. P. Ramos, G. J.-F. Demets, C. Bucher
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1. *Cooperativity Analysis of the Open-, Closed- and Annulated-Isomers of Diarylethene that Form 2-D Ordering at the Solid/Liquid Interface and their Photochemical Interchanges.* D. Frath, T. Sakano, Y. Imaizumi, S. Yokoyama, T. Hirose, K. Matsuda
Annual Meeting on Photochemistry, Sapporo, Japan, Oct. 2014

- **PRODUCTION AS CO-AUTHOR**

Oral communications

28. *Photoresponsive viologen monolayer assemblies.* S. Decorps, D. Nguyen, K. Mali, S. De Feyter, D. Frath, K.
Annual Days PEPR LUMA, Strasbourg, Oct. 2026

27. *All visible light photochromes for the design of chiroptical switches.* S. Decorps, R. Duwat, V. Andrieux, K. Higashiguchi, K. Matsuda, A. Bensalah-Ledoux, B. Baguenard, S. Guy, F. Chevallier, C. Bucher, L. Guy, D. Frath
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

26. *A versatile chiral bis-viologen building block for chiral hydrogels and π-dimers.* G. Groslambert, A. Wang, T. Gibaud, L. Khrouz, J.-C. Mulatier, T. Le Bahers, F. Chevallier, D. Frath, C. Bucher
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

25. *Electrically-triggered Coordination-Induced Spin-State-Switching.* M. Munsch, S. Al Shehimy, D. Frath, F. Chevallier, C. Bucher
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

24. *Boranil-based molecular switches for chiroptical modulation* S. Decorps, K. Higashiguchi, K. Matsuda, C. Bucher, L. Guy, D. Frath
7th Annual Meeting GDR PES, Paris, France, Nov. 2025

23. *Towards Electron-Responsive Supramolecular Hydrogels.* G. Groslambert, V. Andrieux, L. Khrouz, J. Bauland, T. Gibaud, F. Chevallier, D. Frath, C. Bucher
Advances in supramolecular gels Faraday Discussion, Glasgow, Scotland, Mai 2025

22. *Reversible Electrochemical control of a Viologen Gelator Self-assembly.* V. Andrieux, R. Savin, C. Bucher, F. Chevallier, D. Frath, T. Gibaud, J. Bauland, T. Divoux, S. Manneville
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21. *Metamorphic Approaches for On-Surface Switching of Chiroptical Propertie*s. S. Decorps, R. Hachem, L. Guy, C. Bucher, D. Frath
PERMolMat, Paris-Saclay, France, Mars 2025

20. *Electroresponsive hydrogels from supramolecular polymers.* G. Groslambert, V. Andrieux, L. Khrouz, J. Bauland, T. Gibaud, F. Chevallier, D. Frath, C. Bucher
6th Annual Meeting GDR PES, Strasbourg, France, Janv. 2025

19. *Metamorphic Approaches for On-surface Switching of Chiroptical Properties.* S. Decorps, R. Hachem, L. Guy, C. Bucher, D. Frath
3rd Annual Meeting GDR NEMO, Nancy, France, Oct. 2024

18. *Metamorphic Approaches for On-surface Switching of Chiroptical Properties.* S. Decorps, R. Hachem, L. Guy, C. Bucher, D. Frath
Annual Meeting GDR Chirafun, Paris-Saclay, France, Sept. 2024

17. *In search of elusive species: the paramagnetic pimers of viologens.* G. Groslambert, V. Andrieux, T. Le Bahers, L. Khrous, F. Chevallier, D. Frath, C. Bucher
Supr@Paris, Paris, France, May 2024

16. *Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, D. Frath, F. Chevallier, T. Gibaud, J. Bauland, T. Divoux, S. Manneville
2nd Annual Meeting GDR NEMO, Lille, France, Oct. 2023

15. *Towards Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, D. Frath, F. Chevallier, T. Gibaud, J. Bauland, T. Divoux, S. Manneville
Supramolecular Chemistry Days for Young Researchers, Cagliari, Italy, May 2023

14. *Electron-Triggered Metamorphism in Metal-Organic Architectures: From Responsive Self-Assembled Materials to Spin-State Switching.* S. Al Shehimy, O. Baydoun, E. Dumont, D. Frath, F. Chevallier, C. Bucher
Scientific Days of the French Association of Molecular Magnetism (JAM2) 2022, Dourdan, France, Nov. 2022

13. *Towards Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, F. Chevallier, D. Frath, T. Gibaud, J. Bauland, T. Divoux, S. Manneville
4th Annual Meeting GDR PES, Bordeaux, France, Oct. 2022

12. *Manipulating Molecules with Electrons: From Machines to Responsive Soft Materials.* F. Chevallier, D. Frath, C. Bucher
1st Annual Meeting GDR NEMO, Paris, France, Sept. 2022, France

11. *Electron-Triggered Metamorphism Applied to Spin-State Switching.* C. Bucher, S. Al Shehimy, O. Baydoun, E. Dumont, D. Frath, F. Chevallier
73rd Annual Meeting of the International Society of Electrochemistry, Online Meeting, China, Sept. 2022

10. *Electron-Triggered Spin State Switching in a Viologen-Substituted Nickel Porphyrin* S. Al Shehimy, O. Baydoun, E. Dumont, D. Frath, F. Chevallier, C. Bucher
International Conference on Porphyrins and Phthalocyanines (ICPP), Madrid, Spain, July 2022

9. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, L. Khrouz, E. Dumont, D. Frath, F. Chevallier, C. Bucher
3rd Annual Meeting GDR PES, Paris-Saclay, France, Oct. 2021

8. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, L. Khrouz, E. Dumont, D. Frath, F. Chevallier, C. Bucher
GECOM-CONCOORD, Webinaire, France, July 2021

7. *Electron-Triggered Metamorphism in Adaptative Supramolecular Polymers.* C. Kahlfuss, E. Dumont, E. Saint-Aman, Y. Nassar, S. Al-Shehimy, S. Chowdhury, T. Gibaud, D. Frath, G. J.-F. Demets, F. Chevallier, C. Bucher
Current Trends in Electrochemistry - First French-Spanish Worshop on Electrochemistry, Paris, France, June 2021

6. *Electron-Triggered Metamorphism in Porphyrin-Based Self-Assembled Supramolecular Polymers.* C. Bucher, S. Chowdhury, C. Kahlfuss, Y. Nassar, S. Al-Shehimy, E. Dumont, G. J.-F. Demets, E. Saint-Aman, D. Frath, F. Chevallier
239th ECS Meeting, Chicago, USA, May 2021

5. *Coordination-induced Spin State Switching in Redox-responsive Viologen-based Metalloporphyrins.* S. Al-Shehimy, E. Dumont, D. Frath, F. Chevallier, C. Bucher
Scientific Days of the GDR MAPYRO, Online Meeting, France, May 2021

4. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, E. Dumont, D. Frath, F. Chevallier, C. Bucher

SCF Rhône-Alpes Section Day, Online Meeting, France, Jan. 2021

3. *Redox-responsive (Supra)molecular Systems Featuring Switchable Magnetic Properties.* S. Al Shehimy, F. Chevallier, D. Frath, C. Bucher.
SECO 57, Dax, France Sept. 2020

2. *Stimuli-Responsive Supramolecular Assembly Involving Cucurbit[8]uril and Porphyrin-based Tectons.* S. Chowdhury, L. Guy, D. Frath, F. Chevallier, E. Dumont, A. P. Ramos, G. J.-F. Demets, C. Bucher
2nd Annual Meeting GDR PES, Angers, France Jan. 2020

1. *Dynamic Molecular Metamorphism Involving Palladium-Assisted Dimerization of π-Cation Radicals.* S. Chowdhury, C. Kahlfuss, D. Frath, F. Chevallier, E. Dumont, G. Royal, E. Saint-Aman, C. Bucher
GECOM-CONCOORD, Erquy, France, May 2019

Posters

28. *Photo-induced electron transfer and molecular motion in cucurbit[n]uril-based host-guest complexes.* R. Tran, S. Decorps, F. Chevallier, C. Bucher, J. Toldo, D. Frath
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

27. *Boranil-based molecular emitters for the development of responsive supramolecular materials with enhanced chiroptical properties.* R. Duwat, S. Decorps, V. Andrieux, K. Higashiguchi, K. Matsuda, A. Bensalah-Ledoux, B. Baguenard, S. Guy, F. Chevallier, C. Bucher, L. Guy, D. Frath
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

26. *Synthesis of e^--deficient conjugated nanorings by host-guest templates.* V. Boshevski, D. Bardelang, A. Kermagoret, H. Lingua, D. Frath, F. Chevallier, C. Bucher
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

25. *Spin-State Switching in Nickel(II) Porphyrins through Viologen Oxidation State Modulation.* E. Pidoux, D. Frath, C. Bucher, F. Chevallier
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

24. *Towards Electron-Responsive Supramolecular Hydrogels.* G. Groslambert, V. Andrieux, L. Khrouz, J. Bauland, T. Gibaud, F. Chevallier, D. Frath, C. Bucher
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

23. *Electrically-triggered Coordination-Induced Spin-State-Switching.* M. Munsch, S. Al Shehimy, D. Frath, F. Chevallier, C. Bucher
4th International Symposium on Photonic and Electronic Molecular Machines, Lyon, France, Juil. 2026

22. *Electrically-triggered Coordination-Induced Spin-State-Switching.* M. Munsch, S. Al Shehimy, D. Frath, F. Chevallier, C. Bucher
3rd International Supramolecular Chemistry Summer School, Santa Margherita di Pula, Italy, May 2026

21. *Viologen-based films electrodeposited on ITO: a stable and conductive platform for immobilizing molecular catalysts.* T. B. F. de Moraes, E. R. Triboni, D. Frath, G. J.-F. Demets, C. Bucher
XLVI CBrAVIC, São Carlos, Brazil, Nov. 2025

20. *Viologen-based polysilsesquioxane modified electrodes hosting anionic porphyrin complex*. B. F. de Moraes, E. R. Triboni, D. Frath, G. J.-F. Demets, C. Bucher
XXIII B-MRS Meeting, Bahia, Brazil, Sept. 2025

19. *Towards Electron-Responsive Supramolecular Hydrogels.* G. Groslambert, V. Andrieux, L. Khrouz, J. Bauland, T. Gibaud, F. Chevallier, D. Frath, C. Bucher
Advances in supramolecular gels Faraday Discussion, Glasgow, Scotland, Mai 2025

18. *Reversible Electrochemical Control of a Viologen Gelator Self-assembly.* V. Andrieux, R. Savin, C. Bucher, F. Chevallier, D. Frath, T. Gibaud, J. Bauland, T. Divoux, S. Manneville
Advances in supramolecular gels Faraday Discussion, Glasgow, Scotland, Mai 2025

17. *Metamorphic Approaches for On-surface Switching of Chiroptical Properties.* S. Decorps, R. Hachem, L. Guy, C. Bucher, D. Frath
Journée de Chimie Organique Victor Grignard, Lyon, France, Sept. 2024

16. *Electroresponsive hydrogels from supramolecular polymers.* G. Groslambert, J. Baulan, T. Gibaud, F. Chevallier, D. Frath, C. Bucher

2nd International Supramolecular Chemistry Summer School, Santa Margherita di Pula, Italy, May 2024

15. *In search of elusive species: the paramagnetic pimers of viologens.* G. Groslambert, V. Andrieux, T. Le Bahers, L. Khrous, F. Chevallier, D. Frath, C. Bucher
Supr@Paris, Paris, France, May 2024

14. *Sol-Gel Process of Viologen-based Polysesquioxane.* T. B. F. de Moraes, E. R. Triboni, D. Frath, C. Bucher, G. J.-F. Demets
4th ICAIC & 4th IMMSEM and 1st North and Northeast International Meeting on Materials Science and Engineering, São Luís, Brazil, Nov. 2023

13. *Synthetic Pathways Naphthalene Diimide (NDI)-bearing Polysilsesquioxane Gels and Their Impact on Photochromism.* T. B. F. de Moraes, C. Bucher, E. R. Triboni, D. Frath, F. Chevallier, G. J.-F. Demets
XXI B-MRS, Maceió, Brazil, Oct. 2023

12. *Towards Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, D. Frath, F. Chevallier, T. Gibaud, J. Bauland, T. Divoux, S. Manneville
74th Annual Meeting of the International Society of Electrochemistry, Lyon, France, Sept. 2023

11. *Towards Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, D. Frath, F. Chevallier, T. Gibaud, J. Bauland, T. Divoux, S. Manneville
Supramolecular Chemistry Days for Young Researchers, Cagliari, Italy, May 2023

10. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, O. Baydoun, L. Khrouz, S. Denis-Quanquin, E. Dumont, D. Frath, F. Chevallier, C. Bucher
8th EuChemS Chemistry Congress, Lisbon, Portugal, Aug. 2022

9. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, O. Baydoun, L. Khrouz, S. Denis-Quanquin, E. Dumont, D. Frath, F. Chevallier, C. Bucher
8th European Conference on Molecular Magnetism, Rennes, France, July 2022

8. *Charge Transfer Complexes in Polysilsesquioxane Gels: a Supramolecular Approach.* T. B. F. de Moraes, G. J.-F. Demets, D. Frath, T. Gibaud, E. R. Triboni, F. Chevalier, C. Bucher
SOLGEL, Lyon, France, July 2022

7. *Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, F. Chevallier, D. Frath, T. Gibaud, S. Manneville
SOLGEL, Lyon, France, July 2022

6. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, O. Baydoun, L. Khrouz, E. Dumont, D. Frath, F. Chevallier, C. Bucher
Journées de Chimie Supramoleculaire, Lyon, France, May 2022

5. *Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, F. Chevallier, D. Frath, T. Gibaud, S. Manneville
Journées de Chimie Supramoleculaire, Lyon, France, May 2022

4. *Towards Electron Responsive Viologen-Based Supramolecular Gels.* V. Andrieux, C. Bucher, D. Frath, F. Chevallier, T. Gibaud, J. Bauland, S. Manneville
10th International Conference on Molecular Electronics, Lyon, France, Nov. 2021

3. *Self-assembly of naphthalene diimide (NDI) within polysilsesquioxane gel.* T. B. F. de Moraes, C. Bucher, E. R. Triboni, D. Frath, F. Chevalier, G. J.-F. Demets
10th International Conference on Molecular Electronics, Lyon, France, Nov. 2021

2. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, L. Khrouz, E. Dumont, D. Frath, F. Chevallier, C. Bucher
10th International Conference on Molecular Electronics, Lyon, France, Nov. 2021

1. *Towards Electron-triggered Coordination-induced Spin State Switching in Viologen-based Metal Complexes.* S. Al-Shehimy, L. Khrouz, E. Dumont, D. Frath, F. Chevallier, C. Bucher
Supr@Stras – EurJOC 2021 webinar, Online Meeting, France, July 2021