Dr. Chantal Andraud
DR Exc CNRS Emérite
Ecole Normale Supérieure, 69364 LYON Cedex 07, France

Education

- June 1982 PhD, Blaise Pascal University, Clermont-Fd, France *Luminescence et transferts d'énergie dans la matrice KY_3F_{10} dopée à l'europium et au terbium trivalents*
- July 1987 PhD, Paris VI University, Paris, France *Défauts d'empilement dans le matériau unidimensionnel $CsCdBr_3$-Etude spectroscopique*

Positions

- 1983-1991 CNRS associate researcher, Physical Chemistry of Materials Laboratory, Meudon, France)
- 1991-2001 CNRS Associate Researcher, Stereochemistry and Molecular Interactions Laboratory, ENS-Lyon, France; Leader of the team « Molecular Materials »
- 2001- present CNRS Research Director, Chemistry Laboratory, ENS-Lyon, France; Leader of the team « Chemistry for Optics »
- 2010- 2020 Head of the Chemistry Laboratory, ENS-Lyon, France (120 persons)

Awards

SPIE Fellow 2010; Légion d'honneur 2013; Doctor Honoris Causa of University Politehnica of Bucharest 2014; Elected to the Academy of Sciences, Letters and Arts of Lyon in 2025**.**

Research activities

Organic and coordination chemistry for optical spectroscopy; molecular and materials engineering for different applications in linear and nonlinear optics: second harmonic generation, electro-optic effect, two-photon absorption for 3D microfabrication, optical limiting, photo dynamic therapy, bio-imaging.

Publications

- More than 260 publications in refereed journals; 7 books chapters; 9 patents; 26 proceedings
- 200 invited, keynote or pleanary lectures in international conferences and seminars in French or International Universities

Scientific expertise and management

- Member of more than 100 committees of PhD thesis or Habilitation (France, Sweden, Romania, Poland, Italy)
- Appointed member of the national council of CNRS (section 12) :2007-2016
- Member of the International Advisory Committee of more than 10 international annual conferences
- Chair or co-Chair of 15 international conferences
- International Chair of the *International Conference on Frontiers of Polymers and Advanced Materials* since 2026
- Guest co-editor of the joint feature issue *Biophotonic Materials and Applications* of Optical Materials Express and Biomedical Optics Express

Scientific supervision

Supervisor or co-supervisor for 60 PhD thesis and numerous post-docs

Recent publications

1) N*ear-infrared dyes for two-photon absorption in the short-wavelength infrared: strategies towards optical power limiting* S. Pascal, S. David, C. Andraud, O. Maury *Chemical Society Reviews* **2021**,*5*0,6613-6658
2) *Assembly of Aggregation-Induced Emission Active Bola-Amphiphilic Macromolecules into Luminescent Nanoparticles Optimized for Two-Photon Microscopy In Vivo* Jean Rouillon, L. M. A. Ali, K. Hadj-Kaddou, R. Marie-Luce, G. Simon, M. Onofre, S. Denis-Quanquin, M. Jean, M. Albalat, N. Vanthuyne, G. Micouin, A. Banyasz, M. Gary-Bobo, C. Monnereau**,** C. Andraud, *Biomacromolecules* **2022**, 23, 2485–2495
3) *Tuning the Photophysical Properties of Aza-BODIPYs in the Near-Infrared Region by Introducing Electron- Donating Thiophene Sub stituents* T. Baron, V. Maffeis, C Bucher, B. Le Guennic, A. Banyasz, D. Jacquemin, G. Berginc, O. Maury, C. Andraud *Chem. Eur. J.* **2023**, *29*, e202301357 (1 of 10)
4) *Imidazo[1,2-a]pyridine and Imidazo[1,5-a]pyridine: Electron Donor Groups in the Design of D–π–A Dyes* L. Valla, D. Pitrat, J.C. Mulatier, T. Le Bahers, E. Jeanneau, L.M.A. Ali, C. Nguyen, M. Gary-Bobo, C. Andraud, Y. Bretonnière *JOC* **2024**, *89*, 8407-8419
5) *Efficient optical photoswitching of benzyloxy-substituted TCF-based D–π–A molecules* K. Lupinska, K. E. Szkaradek, K. Parafiniuk, R. Góra, P. Fita, Y. Bretonnière, C. Andraud, L. Sznitko *J. Mater. Chem. C*, **2025**,13, 20519-20530
6) *Stereoselective synthesis of heterocyclic tetraphenylethylene analogues with configuration-dependent solid-state luminescence* M. Seinfeld*.* J. Rouillon, R. Rullan; E. Jeanneau, S. N. Steinmann, C. Andraud, T. Le Bahers*,* C. Monnereau *Chem. Sci.* **2025**, 16 (23): 10523–10531.
7) M. Seinfeld*,* L. M. A. Ali, X. Fu; E. Jeanneau; G. Micouin; A. Banyasz, J. Rouillon, T. Le Bahers*,* C. Andraud, S. Haacke, M. Gary-Bobo, C. Monnereau *J. Mater. Chem. B* **2026**, 14 (29): 9025–9034.