

BORDEAUX (note, many other Bordeaux mentors in chemistry/materials may also be feasible – we will work with mentors and/or experienced LSAMP students to identify optimal mentors for this location) tips on how to find additional mentors click here

Olivier Sandre ^{1,2}	Bordeaux	Magnetic nanoparticles	5+
Dario ^{3,4} Bassani	Bordeaux	Supramole-ular materials	5+
Cyril ^{5,6} Aymonier	Bordeaux	Chem in super-critical fluids	0
Reiko Oda ^{7,8}	Bordeaux	Interfacial chemistry	2
Rodolphe Clerac ^{9,10}	Bordeaux	Magnetic Materials	3
Henri ^{11,12} Cramail	Bordeaux	Polymer synthesis	5+
Nathan ^{13,14} McClenaghan	Bordeaux	Optical probe synthesis	4
Sébastien ^{15,16} Lecommandoux	Bordeaux	Micellar poly-mer materials	5+
Mona ^{17,18} Tréguer	Bordeaux	Plasmonic nanoparticles	5
JeanBaptiste Salmon ^{19,20}	Bordeaux	Microfluidics	4
Etienne Grau ^{21,22}	Bordeaux	Green chemistry	5
Mireille Blanchard-Desce ^{23,24}	Bordeaux	Non-linear optics probes	5+

¹ "Nano-thermometers with thermo-sensitive polymer grafted USPIOs behaving as positive contrast agents in low-field MRI" A. Hannecart, D. Stanicki, L. Vander Elst, R. N. Muller, S. Lecommandoux, J. Thévenot, C. Bonduelle, A. Trotier, P. Massot, S. Miraux, O. Sandre, and S. Laurent, *Nanoscale* **7** 3754-3767 (2015)

² "Magnetic Responsive Polymer Composite Materials" J. Thévenot, H. Oliveira, O. Sandre, and S. Lecommandoux, *Chemical Society Reviews* **42** 7099-7116 (2013)

³ "Supramolecular control of photoreactions in solution" Bibal, B; Mongin, C; Bassani, DM *Chem. Soc. Rev.* **43**, 4179 – 4198 (2014).

⁴ "Probing Lateral Charge Transport in Single Molecule Layers. How Charge is Transported Over Long Distances in Fullerene Self-Assembled Monolayers" Dubacheva, GV; Devynck, M; Raffy, G; Hirsch, L; Del Guerzo, A; Bassani, DM *Small* **10** 454 (2014).

⁵ "Microfluidic Supercritical AntiSolvent continuous processing and direct spray-coating of Poly(3-HexylThiophene) nanoparticles for OFET devices" Couto, R; Chambon, S; Aymonier, C; Mignard, E; Pavageau, B; Erriguible, A; Marre, S *Chem. Commun* **51** 965-1158 (2015).

⁶ "A microfluidic approach for investigating multicomponent systems thermodynamics at high pressures and temperatures", B. Pinho, S. Girardon, F. Bazer-Bachi, G. Bergeot, S. Marre, C. Aymonier, *Lab Chip* **14** 3843 – 3849 (2014)

⁷ "In situ helicity inversion of self-assembled nano helices" Tamoto, R; Daugey, N; Buffeteau, T; Kauffmann, B; Takafuji, M; Iharad, H; Oda, R *Chem commun* **51** 3518-3521 (2015)

- ⁸ "Creation of a polymer backbone in lipid bilayer membrane-based nanotubes for morphological and microenvironmental stabilization" Okazaki, Y; Jintoku, H; Oda, R; Takafujia, M; Ihara, H *RSC Adv* **4** 33194-33197 (2014)
- ⁹ "[ReF₆]²⁻: A Robust Module for the Design of Molecule-Based Magnetic Materials" Pedersen, K; Sigrist; Sørensen, M; Barra, A; Weyhermüller, T; Piligkos, S; Thuesen, CA; Vinum, M; Mutka, H; Weihe, H; Clérac, R; Bendix, J *Angew. Chem. Int. Ed.* **53** 1351 (2014).
- ¹⁰ "Photoinduced Single-Molecule Magnet Properties in a Four-Coordinate Fell Spin Crossover Complex" Mathonière, C; Lin, HJ; Siretanu, D; Clérac, R; Smith, JM *J. Am. Chem. Soc.* **135** 19083 (2013).
- ¹¹ "Synthesis of fatty acid-based polyesters and their blends with poly(L-lactide) as a way to tailor PLLA toughness" Lebarbe, T; Grau, E; Gadenne, B; Alfos, C; Cramail, H *ACS Sustainable Chem. & Eng.* **3** 283-292 (2015)
- ¹² "Synthesis of polyurethane particles in supercritical carbon dioxide using organocatalysts or organocatalytic surfactants" Smith, CA; Cloutet, E; Tassaing, T; Cramail, H *Green Chem.* **15** 2769-2776 (2013)
- ¹³ "Photodriven [2]Rotaxane-[2]Catenane Interconversion" Tron, A; Jacquot de Rouville, HP; Ducrot, A; Tucker, JHR; Baroncini, M; Credi, A; McClenaghan, ND *Chem. Commun* **51** 2810-2813 (2015). (Special issue)
- ¹⁴ Reversible Photocapture of a [2]Rotaxane Harnessing a Barbiturate Template" Tron, A; Thornton, PJ; Lincheneau, C; Desvergne, JP; Spencer, N; Tucker, JHR; McClenaghan, ND *J. Org. Chem* **80** 988-996 (2015)
- ¹⁵ "Synthesis, characterization and biological interaction of glyconanoparticles with controlled branching" Liao, W ; Bonduelle, C ; Brochet, M ; Lecommandoux, S ; Kasko A *Biomacromolecules* **16** 284-294 (2015)
- ¹⁶ "Cascade Reactions in Multicompartmentalized Polymersomes" Peters, RJRW; Marguet, M; Marais, S; Fraaije, MW; Van Hest, JCM; Lecommandoux S *Angew. Chem. Int. Ed* **53** 146-150 (2014) (highlighted in Nature Chemistry)
- ¹⁶ "Topological darkness in self-assembled plasmonic metamaterials", L.Malassis, P.Massé, M.Tréguer-Delapierre, S.Mornet, P.Weisbecker, P.Barois, C.Simovski, V.Kravets, A.Grigorenko, *Adv. Materials*, **26**, 2, 324-330 (2014)
- ¹⁷ "Impact of gold nanoparticles on zebrafish exposed to a spiked sediment", A. Dedeh*, M.Tréguer-Delapierre, JP.Bourdineaud, *Nanotoxicology* **9**, 1, 71-80 (2015)
- ¹⁸ "Microfluidic-induced growth and shape-up of three-dimensional extended arrays of densely-packed nanoparticles", J. Angly, A. Iazzolino, J.B. Salmon, J. Leng, S. Chandran, V. Ponsinet, A. Désert, A. Le Beulze, M. Tréguer, and M. Correa-Duarte, *ACS Nano* **7**, 6465 (2013)
- ¹⁹ "Drying with no Concentration Gradient in Large Microfluidic Droplets", N. Ziane, M. Guirardel, J. Leng, J.B. Salmon, *Soft Matter* **11**, 3637 (2015)
- ²⁰ "Hydrophobe-free miniemulsion polymerization: towards high solid content of fatty acid-based poly (urethane-urea) latexes", E Rix, G Ceglia, J Bajt, G Chollet, V Heroguez, E Grau, H Cramail, *Polymer Chemistry* **6**(2), 213 (2015)
- ²¹ "Selective isomerization-carbonylation of a terpene trisubstituted double bond", H Busch, F Stempfle, S Heß, E Grau, S Mecking, *Green Chemistry* **16**(10), 4541-4545 (2014)
- ²² "Interfacial Organization in Dipolar Dyes-based Organic Nanoparticles probed by Second-Harmonic Scattering", J. Daniel , F. Bondu , F. Adamietz , M. Blanchard-Desce , V. Rodriguez, *ACS Photonics* DOI:10.1021/acsp Photonics.5b00301 (2015)
- ²³ "Hyper-bright' Near-Infrared Emitting Fluorescent Organic Nanoparticles for Single Particle Tracking", E. Genin, Z. Gao, J. A. Varela, J. Daniel, T. Bsaibess, I. Gosse, L. Groc, L. Cognet, M. Blanchard-Desce, *Adv. Mater.* **26**, 2258-2261 (2014)