

Michel CLOITRE

Soft Matter and Chemistry

Ecole Supérieure de Physique et Chimie Industrielles de la Ville de Paris

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Education

Doctoral thesis (Doctorat ès-sciences), Pierre et Marie Curie University, Paris (1989)

Doctoral thesis (Doctorat 3^{ème} cycle), Pierre et Marie Curie University, Paris (1982)

Master of Science in Theoretical Physics of Liquids, Pierre et Marie Curie University, Paris (1980)

Engineer Diploma, Ecole Supérieure de Physique et Chimie Industrielles de la Ville de Paris (1980)

Research interests

Soft matter physics

Rheology of colloidal and polymeric systems

Rheo-optical techniques

Current and previous academic positions

Lecturer at ESPCI Paris; 01/2006-...

Research Director at CNRS - Centre National de la Recherche Scientifique

Soft Matter and Chemistry laboratory; CNRS and ESPCI, Paris; 06/2001-present

Research Associate at CNRS - Centre National de la Recherche Scientifique

Heterogeneous Macromolecular Systems laboratory; CNRS and ATOFINA Levallois-Perret; 01/1996-06/2001

Research Associate at CNRS - Centre National de la Recherche Scientifique

Fluid, Automatic and Thermal Systems laboratory; CNRS and Paris-Sud University; 01/1990-12/1995

Research Assistant at CNRS - Centre National de la Recherche Scientifique

Hydrodynamics and Physical Mechanics laboratory; CNRS and ESPCI Paris; 01/1984-06/1989

Awards

Journal of Rheology Publication Award, American Society of Rheology (2004)

Maurice Couette Award, French Society of Rheology (2010)

Prize of Excellence, CNRS (2012)

Journal of Rheology Publication Award, American Society of Rheology (2014)

Administrative positions and professional service (selection)

Director, Soft Matter and Chemistry laboratory (2017-...)

Adjunct Director, Soft Matter and Chemistry laboratory (2016-2017)

Secretary, Executive Committee of the European Society of Rheology (2016-...)

Member at Large, Executive Committee of the Society of Rheology (2017-...)
International Delegate, Executive Committee of the French Society of Rheology (2010-2015)
Chair, Steering Committee of the Michelin Chair at ESPCI ParisTech (2008-...)
Chair, 10th Annual European Rheology Conference (2015)
Chair, International Workshop ESPCI Paris-Michelin (2013): “Flow, Fracture, and Interfacial Properties of Dispersed Materials”
Chair, International Workshop ESPCI Paris-Michelin (2010): “Multi-scale Dynamics of Structured Polymeric Materials”

International collaborations (present)

Prof. Roger Bonnecaze, Department of Chemical Engineering, University of Texas at Austin: “*Non linear rheology of pasty materials*” (PICS-CNRS)
Prof. Dimitris Vlassopoulos, FORTH, Heraklion, Crète: “*Slow dynamics and aging in colloidal glasses with complex architecture*” (European Network of Excellence Softcomp)
Prof. Paul Clegg, School of Physics & Astronomy, Edinburgh, UK: “*Emulsification in complex fluids*” (ETN Colldense)

Industrial collaborations and consulting (present)

Michelin: “Cold processing of natural rubber-carbon black nanocomposites” (2017-...)
Coatex (Arkema Group):
“New concepts of microgel additives for cosmetic and galenic applications” (2016-...)
“Bottle-brush polymers for coating applications” (2012-...)
“Encapsulation technologies using stimuli-responsive amphiphilic polymers” (2008-...)
Total : “Associative polymers based on reversible covalent chemistry” (2013-...)
Consultant

Teaching (present)

Molecular rheology of polymeric materials, Master course at Pierre et Marie Curie University, Paris (2010-present)
Soft Matter and Development, ESPCI Paris (2006-present)

Editorial activities

Member of the Editorial Board of the Journal of Rheology (2012-present)
Guest editor of the special volume “*High Solid Dispersions*” (Advances in Polymer Science, Springer-Verlag, 2010)
Guest editor of the special issue *Bridging the gap between hard and soft colloids* (Soft Matter, Royal Society of Chemistry, 2011)

Peer-reviewed publications

1. C. Locatelli-Champagne, J.-M. Suau, O. Guerret, C. Pellet, M. Cloitre, Versatile encapsulation technology based on tailored pH-responsive amphiphilic polymers: emulsion gels and capsules. *Langmuir* **10.1021/acs.langmuir.7b02689** (2017).
2. F. Khabaz, T. Liu, M. Cloitre, R.T. Bonnecaze, Shear-induced ordering and crystallization of jammed suspensions of soft particles glasses. *Phys. Rev. Fluids* **2**, 093301 (2017).
3. P. Panaseti, A.-L. Vayssade, G. C. Georgiou, M. Cloitre, "Confined viscoplastic flows with heterogeneous wall slip", *Rheol. Acta* (2017).
4. M. Cloitre, R. T. Bonnecaze, "A review on wall slip in high solid dispersions", *Rheol. Acta* **56**, 283-305 (2017).
5. H. M. Shewan, J. R. Stokes, M. Cloitre, "Particle-wall tribology of slippery hydrogel particle suspensions", *Soft Matter*, **13**, 2099-2106 (2017).
6. C. Pellet and M. Cloitre, "The glass and jamming transitions of soft polyelectrolyte microgel suspensions", *Soft Matter* **12**, 3710-3720 (2016).
7. L. Mohan, M. Cloitre, R. T. Bonnecaze, "Build-up and two-step relaxation of internal stress in jammed suspensions", *J. Rheol.* **59**, 63-84 (2015).
8. Z. Li, L. D'eraimo, F. Monti, A.-L. Vayssade, B. Chollet, B. Bresson, Y. Tran, M. Cloitre, and P. Tabeling, "Slip Length Measurements Using μ PIV and TIRF-Based Velocimetry", *Israel Journal of Chemistry* **54**, 1589-1601 (2014).
9. D. Vlassopoulos, M. Cloitre, "Tunable rheology of dense soft deformable colloids", *Curr. Opin. Colloid Interface Sci.* **19**, 561-574 (2014).
10. L. Mohan, M. Cloitre, and R. T. Bonnecaze, "Active microrheology of soft particle glasses", *J. Rheol.* **58**, 1465-1482 (2014).
11. C. Rotella, S. Tencé-Girault, M. Cloitre, and L. Leibler, "Shear-Induced orientation of cocontinuous nanostructured polymer blends ", *Macromolecules* **47**, 4805-4812 (2014).
12. A.-L. Vayssade, C., E. Terriac, F. Monti, M. Cloitre, and P. Tabeling, "Dynamical role of slip heterogeneities in confined flows", *Phys. Rev. E* **89**, 052309 (2014).
13. D. Izzo, M. Cloitre, and L. Leibler, "The viscosity of short polyelectrolyte solutions", *Soft Matter* **10**, 1714 (2014).
14. L. Mohan, R. T. Bonnecaze, and M. Cloitre, "Microscopic origin of internal stresses in jammed soft particle suspensions", *Phys. Rev. Lett.* **111**, 268301(2013).
15. C. Locatelli-Champagne and M. Cloitre, "Monitoring mesoglobules formation in PNIPAm solutions using Nile Red solvatochromism", *Colloid Polym. Sci.* **291**, 2911 (2013).
16. L. Mohan, C. Pellet, M. Cloitre, and R. T. Bonnecaze, "Local mobility and microstructure in periodically sheared soft particle glasses and their connection to macroscopic rheology", *J. Rheol.* **57**, 1023 (2013).

17. D. Vlassopoulos and M. Cloitre, "Bridging the gap between soft and hard colloids", *Soft Matter* **8**, 4010 (2012).
18. J. Seth, C. Locatelli, F. Monti, R. T. Bonnecaze and M. Cloitre, "How do Soft Glassy Materials Yield and Flow Near Solid Surfaces?", *Soft Matter* **8**, 140 (2012).
19. J. Cortese, C. Soulié-Ziakovic, M. Cloitre, S. Tencé-Girault, and L. Leibler, "Order–Disorder Transition in Supramolecular Polymers", *J. Am. Chem. Soc.* **133**, 19672 (2011).
20. J. R. Seth, L. Mohan, C. Locatelli-Champagne, M. Cloitre, and R. T. Bonnecaze, "A micromechanical model to predict the flow of soft particle glasses", *Nature Materials* **10**, 838 (2011)
21. B. M. Erwin, D. Vlassopoulos, M. Gauthier, and M. Cloitre, "Unique slow dynamics and aging phenomena in soft glassy suspensions of multiarm star polymers", *Phys. Rev. E* **83**, 061402 (2011)
22. E. Stiakakis, B. M. Erwin, D. Vlassopoulos, M. Cloitre, A. Munam, M. Gauthier, H. Iatrou, and N. Hadjichristidis, "Probing glassy states in binary mixtures of soft interpenetrable colloids", *J. Phys.: Condens. Matter* **23**, 234116 (2011)
23. S. Rogers, B. Erwin, D. Vlassopoulos, and M. Cloitre, "Oscillatory yielding of a colloidal star glass", *J. Rheol.* **55**, 733 (2011)
24. P. Nghe, E. Terriac, M. Schneider, Z. Z. Li, M. Cloitre, B. Abecassis, and P. Tabeling, "Microfluidics and complex fluids", *Lab Chip* **11**, 788 (2011)
25. S. Rogers, B. Erwin, D. Vlassopoulos, and M. Cloitre, " A sequence of physical processes determined and quantified in LAOS: application to a yield stress fluid", *J. Rheol.* **55**, 435 (2011)
26. B. M. Erwin, D. Vlassopoulos, and M. Cloitre, "Rheological fingerprinting of an aging soft colloidal glass", *J. Rheol.* **54**, 915 (2010)
27. B. M. Erwin, M. Cloitre, M. Gauthier, and D. Vlassopoulos, "Dynamics and rheology of colloidal star polymers", *Soft Matter* **6**, 2825 (2010)
28. B. M. Erwin, S. A. Rogers, M. Cloitre, and D. Vlassopoulos, "Examining the validity of Strain-Rate Frequency Superposition when measuring the linear viscoelastic properties of soft materials", *J. Rheol.* **54**, 187 (2010)
29. N. Merlet-Lacroix, E. Di Cola, and M. Cloitre, "Swelling and rheology of thermoresponsive gradient copolymer micelles", *Soft Matter* **6**, 984 (2010).
30. C. Christopoulou, G. Petekidis, B. M. Erwin, M. Cloitre, and D. Vlassopoulos, "Aging and yield behavior in model soft colloidal glasses", *Phil. Trans. Royal Soc. London A*, **367**, 5051 (2009).
31. F. Monti, S.-Y. Fu, and M. Cloitre, "Double responsive polymer-microgel composites : rheology and structure", *Langmuir* **24**, 11474 (2008).
32. J. Seth, M. Cloitre, and R. T. Bonnecaze, "Influence of short-range forces on wall-slip in microgel pastes", *J. Rheol.* **52**, 1241 (2008).
33. E. Di Cola, C. Fleury, P. Panine, and M. Cloitre, "Steady shear flow alignment and rheology of lamellae-forming ABC triblock copolymer solutions: Orientation, defects, and disorder", *Macromolecules* **41**, 3627 (2008).

34. C. Balu, M. Delsanti, P. Guenoun, F. Monti, and M. Cloitre, "Colloidal phase separation of concentrated PNIPAm solutions", *Langmuir* **23**, 2404 (2007).
35. C. Boudet, I. Iliopoulos, F. Monti, M. Cloitre, and O. Poncelet, "Smart reactivity of the chemical cross-linking of gelatin by a thermo-sensitive polymer: an example of switchable reactivity", *Macromol. Symp.* **239**, 114 (2006).
36. G. Degré, P. Joseph, P. Tabeling, S. Lerouge, M. Cloitre, and A. Ajdari, "Rheology of complex fluids by particle image velocimetry in microchannels", *Appl. Phys. Lett.* **89**, 024104 (2006).
37. J. R. Seth, M. Cloitre, and R. T. Bonnecaze, "Elastic Properties of Soft Pastes: Effect of Microstructure", *J. Rheol.* **50**, 353 (2006).
Selected to appear in: *Virtual Journal of Biological Physics Research* **11**, 2006.
38. C. Boudet, I. Iliopoulos, O. Poncelet, and M. Cloitre, "Control of the chemical cross-linking of gelatin by a thermo-sensitive polymer: An example of switchable reactivity", *Biomacromolecules* **6**, 3073 (2005).
39. M. Cloitre, "Tailoring the flow properties of soft colloidal dispersions", *Macromolecular Symposia* **229**, 99 (2005).
40. D. Yamaguchi, M. Cloitre, P. Panine, and L. Leibler, "Phase behavior and viscoelastic properties of thermoplastic elastomer gels based on ABC triblock copolymers", *Macromolecules* **38**, 7798 (2005).
41. C. Ligoure, M. Cloitre, C. Lechatelier, F. Monti, and L. Leibler, "Making Polyurethane Foams from Microemulsions", *Polymer* **46**, 6402 (2005).
42. S.P. Meeker, R.T. Bonnecaze, and M. Cloitre, "Slip and flow of soft particle pastes", *Phys. Rev. Lett.* **92**, 198302 (2004).
43. S.P. Meeker, R.T. Bonnecaze, and M. Cloitre, "Slip and flow in pastes of soft particles: direct observation and rheology", *J. Rheol.* **48**, 1295 (2004).
44. L. Corte, K. Yamauchi, F. Court, M. Cloitre, T. Hashimoto, and L. Leibler, "Annealing and defect trapping in lamellar phases of triblock terpolymers", *Macromolecules* **36**, 7695 (2003).
45. M. Cloitre, R. Borrega, F. Monti, and L. Leibler, "Structure and flow behaviour of polyelectrolyte microgels", *C.R. Physique* **4**, 221 (2003).
46. M. Cloitre, R. Borrega, F. Monti, and L. Leibler, "Glassy dynamics and flow properties of soft colloidal pastes", *Phys. Rev. Lett.* **90**, 068303 (2003).
47. A. Mongruel and M. Cloitre, "Orifice flow for measuring the elongational viscosity of semi-rigid polymer solutions", *J. Non-Newtonian Fluid Mech.* **110**, 27 (2003).
48. F. Morin, R. Borrega, M. Cloitre, and D. Durian, "Static and dynamic properties of highly turbid media determined by spatially-resolved diffusive-wave-spectroscopy", *Appl. Opt.* **41**, 1 (2002).
49. M. Cloitre, R. Borrega, and L. Leibler, "Rheological aging and rejuvenation in microgel pastes", *Phys. Rev. Lett.* **85**, 4819 (2000).
50. I. Borukhov, D. Andelman, R. Borrega, M. Cloitre, L. Leibler, and H. Orland, "Polyelectrolyte titration: theory and experiment", *J. Phys. Chem. B* **104**, 11027 (2000).

51. R. Borrega, M. Cloitre, I. Betremieux, B. Ernst, and L. Leibler, "Concentration dependence of the low-shear viscosity of polyelectrolyte micro-networks: from hard spheres to soft microgels", *Europhys. Lett.* **47**, 729 (1999).
52. M. Cloitre and A. Mongruel, "The shear viscosity of aligned suspensions of non-Brownian fibers", *Rheol. Acta* **38**, 451 (1999).
53. M. Cloitre and A. Mongruel, "Dynamics of non-Brownian rod-like particles in a non uniform elongational flow", *Phys. Fluids* **11**, 1 (1999).
54. M. Cloitre, T. Hall, C. Mata, and D.D. Joseph, "Delayed die-swell and sedimentation of elongated particles in wormlike micellar solutions", *J. Non-Newtonian Fluid Mech.* **79**, 157 (1998).
55. C. Allain, M. Cloitre, and P. Perrot, "Experimental investigation and scaling analysis of die-swell in semi-dilute polymer solutions", *J. Non-Newtonian Fluid Mech.* **73**, 51 (1997).
56. S. Newman, M. Cloitre, C. Allain, G. Forgacs, and D. Beysens, "Viscosity and elastic modulus of fibril assembly of in vitro collagen with and without beads", *Biopolymers* **41**, 337 (1996).
57. A. Mongruel, M. Cloitre, and C. Allain, "Scaling of boundary-layer flows driven by double-diffusive convection", *Int. J. Heat Mass Transfer* **39**, 3899 (1996).
58. A. Mongruel and M. Cloitre, "Extensional flow of semi-dilute suspensions of rod-like particles through an orifice", *Phys. Fluids* **7**, 2546 (1995).
59. C. Allain, M. Cloitre, and F. Parisse, "Settling of clusters in aggregating colloidal suspensions", *J. Colloid Interface Sci.* **178**, 411 (1996).
60. C. Allain, M. Cloitre, and M. Wafra, "Aggregation and sedimentation in colloidal suspensions", *Phys. Rev. Lett.* **74**, 1478 (1995).
61. C. Allain, M. Cloitre, B. Lacoste, and M. Marsone, "Viscosity renormalisation in concentrated colloidal suspensions", *J. Chem. Phys.* **100**, 4537 (1994).
62. C. Allain and M. Cloitre, "The effects of gravity on the aggregation and gelation of colloids", *Adv. Colloid Interface Science* **46**, 129 (1993).
63. C. Allain and M. Cloitre, "Interaction between particles trapped at fluid interfaces: I Exact and asymptotic solutions for the force between two horizontal cylinders" *J. Colloid Interface Sci.* **157**, 261 (1993).
64. C. Allain and M. Cloitre, "Interaction between particles trapped at fluid interfaces: II Free energy analysis of the interaction between two horizontal cylinders. *J. Colloid Interface Sci.* **157**, 269 (1993).
65. C. Allain, M. Cloitre, P. Perrot, and D. Quemada, "Die swell in semi-rigid polymer solutions", *Eur. J. Mech. B/Fluids* **12**, 175 (1993).
66. C. Allain, C. Amiel, M. Cloitre, and M. Wafra, "The influence of gravity on the equilibrium and the growth of tenuous structures", *Fluids in Space* (ESA Publications) **353**, 341 (1992).

67. C. Allain, M. Cloitre, and M. Wafra, "Sedimentation of colloidal suspensions in the presence of reversible aggregation", *Physical Chemistry of Colloids and Intertaces in Oil Production* (Technip) **259** (1992).
68. C. Allain, M. Cloitre, and A. Mongruel, "Scaling in flows driven by heat and mass convection in a porous medium", *Europhys. Lett.* **20**, 331 (1992).
69. C. Allain and M. Cloitre, "Characterizing the lacunarity of random and deterministic fractal sets", *Phys. Rev. A* **44**, 3552 (1991).
70. C. Allain and M. Cloitre, "Capillary aggregation at an interface", in *Universalities in Condensed Matter* (Springer, 1988).
71. T. Shinn and M. Cloitre, "Analytic Matrixes of Science Organization", *Sociologia e ricerca sociale* **24**, 83 (1987).
72. C. Allain and M. Cloitre, "Spatial spectrum of a general family of self-similar arrays", *Phys. Rev. A* **36**, 5751 (1987).
73. M. Cloitre and T. Shinn, "Enclavement et diffusion du savoir", *Informations sur les Sciences Sociales* **25**, 161 (1986).
74. M. Cloitre, "Phénomènes d'agrégation de particules sur une interface, induits par interaction capillaire, à deux dimensions", *Thèse de doctorat ès sciences* (Université Paris VI, 1989).
75. C. Allain and M. Cloitre, "Horizontal cylinders at an interface: equilibrium, shape of the meniscus and capillary interaction", *Ann. Phys.* **13**, 141 (1988).
76. C. Allain and M. Cloitre, "Characterizing the lacunarity of random and deterministic fractal sets", *Phys. Rev. A* **44**, 3552 (1991).
77. C. Allain and M. Cloitre, "Diffraction properties of recursive surface fractals". *Physica A* **157**, 352 (1989).
78. C. Allain and M. Cloitre, "Optical diffraction on fractals", *Phys. Rev. B* **33**, 3566 (1986).
79. J.C. Charmet, M. Cloitre, M. Fermigier, E. Guyon, P. Jenffer, L. Limat & L. Petit, "Applications of Forced Rayleigh Scattering to hydrodynamics measurements", *IEEE Journal of Quantum Electronics* **QE22**, 1461 (1986).
80. M. Cloitre and E. Guyon, "Forced Rayleigh Scattering in turbulent plane Poiseuille flows", *J. Fluid Mech.* **164**, 217 (1986).
81. C. Allain and M. Cloitre, "Experimental study of two-dimensional aggregation", in *Fractals in Physics* (North Holland Publishing, 1986) 283.
82. C. Allain and M. Cloitre, "Fourier transforms of fractals", in *Fractals in Physics* (North Holland Publishing, 1986) 61.
83. M. Cloitre and T. Shinn, "Expository Practice : social and epistemological linkage", in *Expository Science: Forms and functions of popularisation* (D. Reidel Publishing Company, 1985) 31.
84. C. Allain and M. Cloitre, "Diffraction on fractals", in *Scaling Phenomena in disordered matter*, Nato Asi Series **133**, 193 (1985).

85. M. Cloitre and M. Chauveau, "Metal dithizonate for flash photolysis applications in hydrodynamics", *Opt. Commun.* **47**, 42 (1984).
86. M. Cloitre, M. Fermigier, P. Jenffer, L. Limat, C. Allain, and E. Guyon, "An experimental study of turbulent pair diffusion for pure liquids and polymer solutions", *Ann. N.Y. Acad. Sci.* **404**, 87 (1982).
87. M. Cloitre, "Etude expérimentale du champ de gradient de vitesse dans un écoulement de Poiseuille turbulent", *Thèse de Doctorat de Spécialité*, Université Paris VI, (1982).
88. E. Guyon, P. Jenffer, A. d'Arco, and M. Cloitre, "Sur une mesure en laboratoire de diffusivités thermiques et massiques", *Eur. J. Phys.* **2**, 193 (1982).
89. A. d'Arco, J.C. Charmet, and M. Cloitre, "Technique de marquage d'écoulements par utilisation de molécules photochromes", *Revue Phys. Appl.* **17**, 89 (1982).
90. M. Fermigier, M. Cloitre, E. Guyon, and P. Jenffer, "Applications de la diffusion Rayleigh Forcée à l'étude d'écoulements laminaires et turbulents", *J. Méca. Théo. Appl.* **1**, 1 (1982).

Book Chapters

1. **"Grains et pâtes : structure, dynamique et écoulement des dispersions colloïdales"**, M. Cloitre, in *La Matière en Désordre* (E. Guyon, J. P. Hulin, D. Bideau Eds, EDP Sciences, 2014).
2. **"Block copolymers in external fields: Rheology, flow-induced phenomena and applications"**, M. Cloitre and D. Vlassopoulos, in *Applied Rheology of Polymeric Fluids* (M. Kontopoulou Ed.) John Wiley & Sons Inc, 2011
3. **"Yielding, flow and slip in microgel suspensions: Bridging the gap between microstructure and macroscopic rheology"**, M. Cloitre, in *Microgel based-materials* (H. Wyss, A. Fernandez de Las Nieves, J. Mattson, D.A. Weitz Eds) Wiley-VCH, 2011
4. **"Micromechanics of Soft Particle Glasses"**, R. T. Bonnecaze and M. Cloitre, in *High Solid Dispersions* (M. Cloitre Ed) Springer-Verlag, 2010. *Advances in Polymer Science*, DOI: 10.1007/12_2010_90
5. **"An introduction to cellular plastics: materials, applications and challenges"**, M. Cloitre, in *Cellular metals and metals foaming technology* (J. Banhart, N.A. Fleck, A. Mortensen Eds) Verlag MIT Publishing, Berlin, 2003

Patents

"Composition de liant hydraulique extrudable", S. Banfi, F. Morin and M. Cloitre, FR 02/02094 and PCT/FR03/00500

"Extrudable binder composition", S. Banfi, F. Morin and M. Cloitre, WO 2003070658 A1

Invited lectures and seminars: 80

Communications at conferences: 136

PhD supervisions under progress

Sarah Goujard (2016-2019)

Maddalena Mattiello (2015-2018)

Léo Gury (2015-2018; PhD codirected with Prof Dimitris Vlassopoulos, FORTH and University of Crete)

PhD supervisions completed

Marie Gracia, 2017 (L'Oréal, France)

Rémi Fournier, 2016 (Poweltec, France)

Charlotte Pellet, 2015 (Sanofi, France)

Lavanya Mohan, 2013 (Exxon, USA; PhD codirected with Roger T. Bonnecaze, Department of Chemical Engineering, University of Texas at Austin)

Clémentine Locatelli-Champagne, 2011 (Coatex SAS, France)

Fabrice Monti, 2010 (CNRS, France).

Jyoti Seth, 2008 (Professor, Chemical Engineering Department, ITT Bombay ; PhD codirected with Roger T. Bonnecaze, Department of Chemical Engineering, University of Texas at Austin).

Nathalie Merlet, 2008 (Schlumberger, France).

Fabienne Morin, 2003 (ArianeGroup, France)

Carine Fleury, 2001 (St Gobain, France)

Régis Borrega, 2000 (Spontex SAS, France)

Anne Mongruel, 1994 (Professor, Pierre et Marie University, France).

Mustapha Wafra, 1993.

Postdoctoral researcher supervisions completed

Helen Lentzakis, 03/2014-02/2015 (Kruger Biomaterials, Canada)

Nick Virgilio, 09/2009-09/2010 (Professor, Ecole Polytechnique de Montréal, Canada)

Brian Erwin, 05/2008-05/2009 (IBM, Hudson Valley Research Park, USA)

Eric Janiaud, 12/2007-02/2009 (St Gobain, France)

Emanuela Di Cola, 11/2004-10/2005 (Research Scientist, European Synchrotron Research Facility)

Steven P. Meeker, 01/2002-11/2003 (Solvay, France)

Daisuke Yamaguchi, 04/2001-04/2003 (Japan Atomic Energy Research Institute)

Florence Petit-Agnély, 09/1998-09-1999 (Professor, Paris-Sud University)

Emmanuel Girard-Reydet, 10/1996-10/1997 (Institute of Advanced Studies of Aix-Marseille, France)