

Tatiana BUDTOVA

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PROFESSIONAL EXPERIENCE

- From 01.09.2004 From October 2021 “senior research director” (directeur de recherche classe exceptionnel), from April 2015 “research director” (directeur de recherche), from October 2008 senior researcher (maître de recherche), researcher (chargé de recherche) in CEMEF, Mines ParisTech
- From September 2015 **Editor-in-chief** of Carbohydrate Polymers journal (Elsevier), impact factor: 10
- From January 2016 to October 2020 **Finland Distinguished Professor**, Aalto university, Finland (part time)
- From September 2008 to 2016 **Holder of the Industrial Chair in Bioplastics** : Chair in Mines ParisTech sponsored by a consortium of five French companies.
- From 1997 to 01.09.2004 **Visiting professor** and "**Responsable-adjoint**" in CEMEF, Mines ParisTech, Sophia-Antipolis, France (part time from November 1997 to September 2000; full time from September 2000 to September 2004).
- 2000 (2 weeks) **Invited professor**. Colorado State University, USA
Subject: «Polymer-metal complexes and gel formation»
- 1994-1996 (12 months) **Invited research position**. CEMEF, ENSMP, Sophia-Antipolis, France
- 1993 (3 months) **Post-doctoral fellowship**. CEMEF, ENSMP, Sophia-Antipolis, France.
- From 1987 to 2004 **Researcher** in the Institute of Macromolecular Compounds, Russian Academy of Sciences, St.-Petersburg, Russia.

ACADEMIC BACKGROUND

- 2003 Qualified as a **professor** in section 33, France
- 2002 Qualified as a **professor** in sections 28 and 31, France
- 1999 **Habilitation à diriger des recherches**, University of Nice/Sophia-Antipolis-ENSMP, France
- 1992 **Candidate thesis** (equivalent to a PhD). Institute of Macromolecular Compounds, Russian Academy of Sciences, St.-Petersburg, Russia.
- 1987 **Diploma** in physics (equivalent to Master degree, 5.5 years study). Physical faculty of St.-Petersburg State University, Russia.

AWARDS

- 2020 Silver Medal/Medaille d'argent CNRS
- 2017 Prix “Innovation - Prix Imagin’Maïs 2016-2017” pour « Matériaux innovants et fonctionnels à base d’amidon: les bio-aérogels »
- 2015 Grade “Chevalier de Palmes Académiques” (Order of Academic Palms)
- 2014 Prix des Techniques Innovantes pour l’Environnement “Pollutec-2014”/ADEME
- 1997 Award for post-doctoral researches from the city of St.-Petersburg
- 1994 Russian Academy of Sciences award for young researchers

- 1993, 1994 Two travelling grants from the International Science Foundation (USA)
 1993 Personal grant from the International Science Foundation (USA)

PUBLICATIONS

- refereed journals (published and accepted) 177
 - books and book chapters 10
- H-index: 41 (WOS), 50 (Google Scholar)

PATENTS

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CONFERENCES

- invited lectures in international conferences 37
- invited lectures in national conferences 19

RESEARCH PROJECTS: SCIENTIFIC AND MANAGEMENT RESPONSIBILITIES

- 2023 – 2025 Research project financed by CARNOT MINES “Santé” (Health)
- 2021 – 2024 ANR research project “Bio-gels”, coordinator. Partner: Hamburg university of Technology, Germany.
- 2021 – 2025 PhD research project “3D printing of gels and aerogels for biomedical applications” sponsored by China Scholarship Council
- 2020 – 2023 Research project financed by CARNOT MINES on “High-added value bio-based materials via new approach of textile recycling”, coordination of a consortium of CEMEF/Mines ParisTech, RAPSODEE/IMT Mines Albi, CTP/Mines Paris, and C2MA/IMT Mines Ales and SMS/Mines Saint-Etienne
- 2020-2021 Research project sponsored by UPM, Finland
- 2019 – 2023 COST AERoGELS, member of the Core Group, management committee, representative of France and Working Group leader.
- 2019 – 2022 CNRS research project (PhD) « Impression 3D d’aérogels de polymères biosourcés pour applications médicales »
- 2019 – 2020 Research project sponsored by Roquette, France
- 2018 – 2019 Research project sponsored by Luxottica, Italy
- 2015-2019 EC project “Nanohybrids”, responsible for Mines ParisTech side.
 Partners: technical university of Hamburg-Harburg, German Aerospace center, Koc university (Istanbul), Mendeleev Institute for Chemical Technology (Moscow), University of Patras, university of Athenes; companies: BASF, Nestle, Drager, Arcelik, Innventia.
- 2015-2016 ADEME (French agency for energy and environment) project “Aerofibres”: “Superinsulating composites with natural fibres”, responsible for Cemef.
 Partners: PERSEE/Mines ParisTech, Proteus (France)
- 2014-2017 ERA-NET “Wood Wisdom” EC project “Aerowood”: “Wood-based aerogels”, responsible for Cemef.
 Partners: universities of Helsinki, Hamburg, Vienna and Maribor.
- 2013-2014 ADEME (French agency for energy and environment) project “Sicx”: “Elaboration of new thermal superinsulating materials based on nanostructured silica and cellulose”, responsible for Cemef.
 Partners: state research laboratories – Persée/Mines ParisTech, university of Montpellier, university of Lorraine, company – PCAS.
- 2011-2015 EC project “Aerocoins”: “Aerogel-Based Composite/Hybrid Nanomaterials for Cost-Effective Building Super-Insulation Systems », responsible for Cemef

- Partners: state research laboratories – CEP/Mines Paristech, EMPA (Switzerland), Politechnika Lodzka (Poland), Technalia (Spain), VTT (Finland), ZAE Bayern (Germany); companies - PCAS (France), ACCIONA INFRAESTRUCTURAS (Spain), SEPAREX (France)
- 2011-2014 EC project (coordination and support action) “Stream” Strengthening the Romanian research capacity in Multifunctional Polymeric Materials”, responsible for Cemef.
- 2010-2012 ADEME (French agency for energy and environment) project “Silica-cell”: “Elaboration and study of new thermal super-insulators based on nanostructured silica and cellulose for buildings”, responsible for Cemef.
Partners: state research laboratories – CEP/Mines Paristech, university of Montpellier, company – PCAS.
- 2010-2012 ANR (French National Research Agency) project “Nanocel”: “Cellulose nanostructured materials for thermal insulation”, responsible for Cemef.
Partners: state research laboratories – CEP/Mines Paristech, university of Montpellier, CETHIL, CEA/LFSM, CSTB, companies – NEOTIM, EDF.
- 2008-2015 Industrial Chair in Bioplastics. Chair holder: overall coordination, scientific and administrative responsibilities.
Consortium: Arkema, l’Oreal, Nestle, PSA, Schneider Electric.
- 2008-2012 EC project “Surfuncell”: “Surface functionalisation of cellulose matrices using coatings of functionalized polysaccharides with embedded nano-particles”, responsible for Cemef.
Partners: universities – Graz, (Austria), Iena (Germany), Hull (UK), Maribor (Slovenia), Utrecht (The Netherlands), companies – TITK (Germany), NanoMePs (France), Norrit (The Netherlands), Innovia (UK), Litija (Slovenia), CHT (Germany), Mondi (Austria)
- 2009-2010 French-Austrian project sponsored by French ministry of foreign affairs via Egide “Preparation and characterization of novel cellulose membranes made by eco-friendly processing”, responsible for Cemef.
- 2009-2010 French-Romanian project sponsored by French ministry of foreign affairs via Egide “Syntesis and characterization of magnetic-polyethylene glycole nanoparticles”, responsible for Cemef.
- 2006-2008 EC project “Hycore”: “Hygienic coatings with active ingredient controlled release”, responsible for Cemef.
Partners: universities – Cidemco (Spain), Itech (France); companies – Barbot (Portugal), Lippens (Belgium), Farbe (Spain), Protec (Spain), Zimtec (Russia), Lamirsa (Spain).
- 2006-2009 ANR (French National Research Agency) project “Carbocell”: “New nano-structured carbons from cellulose and its derivatives for energy storage and conversion”, responsible for Cemef.
Partners: universities – CEP (ENSMP), INPG/Lepmi (Grenoble); companies - Saft, Paxitech, Batscap, Timcal (Switzerland)).
- 2006-2007 Eco-Net research project sponsored by French ministry of foreign affairs (Egide) “New fullerene-based formulations for controlled release applications”, Coordinator.
Partners: Institute of Macromolecular Compounds (Russia), Institute of Macromolecular Chemistry (Romania).
- 2005-2009 EC project “EPNOE”: “European Polysaccharide Network of Excellence”, scientific participation to research and exchange with partners.
Partners: research institutes - Fraunhofer Institute (Germany), Institute of Macromolecular Chemistry (Romania), TITK (Germany), VTT (Finland), Institute of Chemical Fibres (Poland); universities – BOKU (Austria), F.Schiller (Germany), Hamburg (Germany), Abo (Finland), Maribor (Slovenia),

- Nottingham (UK), Wageningen (The Netherlands), Innsbruck (Austria), Utrecht (The Netherlands).
- 2006-2008 Research project (PhD funded) “Starch granule”: co-tutelle thesis, co-direction with Prof.J.Mitchell/B.Wolff (Nottingham University, UK)
- 2005-2006 Research project (PhD) “Physical and numerical modelling of dip-coating”: coordination assisted by J.Bikard (Cemef)
Partners: Mapa/Hutchinson (France), PIP (France).
- 2004-2006 EC project “Aerocell”: scientific direction for Cemef, management responsible for Cemef and CEP parts (ENSMP).
Partners: Companies - GeniaLab (Germany), Lenzing (Austria), Natex (Austria), Novamont (Italy), Saft (France); universities - Grenoble (France), Manchester (UK) and Fraunhofer Institute (Germany).
- 2004-2006 Réseau National Matériaux et Procédés project (France) “Vegetal capsule”: « Pharmaceutical capsules from natural polymers », scientific coordination of the project and responsible for Cemef.
Partners: companies - Roquette, Roxlor, Degussa, universities - INRA (Nantes).
- 2003-2006 Research project (PhD funded) on cellulose: co-responsible with P.Navard.
Partners: Spontex (France), Innovia Films (UK).
- 2001-2003 Réseau National Matériaux et Procédés project (France) « Polyelectrolyte adaptive gels»: co-coordinator of the project with P.Navard.
Partners: Parfums Dior (France), Hutchinson (France) and Le Maine University (France).
- 2000 Research project sponsored by St.-Petersburg branch of Russian Academy of Sciences « Polyelectrolyte gels – new prospective materials for ecological applications»: responsible for the Institute of Macromolecular Compounds, Russia.
- 1999-2001 Research project (PhD funded) on cellulose: co-responsible with P.Navard.
Partners: Spontex (France).
- 1999, 2000 Research projects on gels, responsible for Cemef.
Partners: Parfums Dior (France).
- 1998-2000 Russian Foundation of Basic Research grant "Macromolecular interactions in the mixtures of aqueous solutions of polyelectrolytes with cellulose ethers and in the corresponding hydrogel+linear polymer systems": responsible for the Institute of Macromolecular Compounds, Russia.
- 1995-1997 EC project “Rheological constitutive equation for polymers in processing conditions”: responsible for the Institute of Macromolecular Compounds, Russia.
Partners: Cambridge university (UK), Hamburg university (Germany), Naples University (Italy), Institute of Macromolecular Chemistry (Romania), Cemef (France).
- 1994-1995 Research project “Light scattering by polymer dispersed liquid crystals”: responsible for the Institute of Macromolecular Compounds, Russia.
Partners: Thomson (France), Cemef (France).
- 1994 Research contract “Synthesis of cross-linking agents based on cellulose derivatives for testing in production of superabsorbents”: responsible for the Institute of Macromolecular Compounds, Russia.
Partners: Atochem (France).

INTER-ACADEMIC COLLABORATION

- 2021-2022 Bilateral French/Canada project “Nanochitin-hyaluronic acid composite bio-aerogels for wound dressing applications” in the frame of France-Canada Research Fund with the university of British Columbia, Canada. Responsible for the French side.
- 2020-2021 Bilateral French/Netherlands project “Functional aerogels for wound dressings and

	tissue engineering” in the frame of PHC Van Gogh program (Campus France) with the university of Utrecht, The Netherlands. Responsible for the French side.
2017-2018	Bilateral French/Romanian project “Biogels” in the frame of PHC “Brancusi” program (Campus France) with the Institute of Macromolecular Chemistry P.Poni, Iasi, Romania. Responsible for the French side.
2012-2013	Project “Functional ultra-porous polysaccharides” with the Institute of Elemento-organic Compounds, Russian Academy of sciences, sponsored by Russian ministry of science and education, invited as an expert.
2010-2011	Bilateral CNRS/Russian Academy of Sciences project “New approach in the understanding of starch single granule and its suspension behaviour under mechanical stress” between Cemef and Institute of Macromolecular Compounds (St.-Petersburg); responsible from the French side
2009-2010	Bilateral CNRS/Austrian project “Preparation and characterization of novel cellulose membranes made by eco-friendly processing” between Cemef and University of Graz; responsible from the French side.
2009-2010	Bilateral CNRS/Romanian Academy project “Synthesis and characterization of magnetic-polyethylene glycole nanoparticles” between Cemef and Institute of Macromolecular Chemistry (Iasi); responsible from the French side
2006-2007	Bilateral CNRS/Russian Academy of Sciences project “Novel multi-component micro-gel systems as fullerene carriers for controlled release” between Cemef and Institute of Macromolecular Compounds (St.-Petersburg); responsible from the French side.
2003-2004	Bilateral CNRS/Romanian Academy project “New interpolymer complexes with hydrophilic-hydrophobic sequences” between Cemef and Institute of Macromolecular Chemistry (Iasi); responsible from the French side.
1999-2004	Bilateral Russian Academy of Sciences/Romanian Academy project «Intermolecular interactions in ternary mixtures of hydrophilic/hydrophobic block-copolymers: formation and properties of interpolymer complexes» between Institute of Macromolecular Compounds (St.-Petersburg) and Institute of Macromolecular Chemistry (Iasi); responsible from the Russian side.
1996-2003	Bilateral CNRS/Russian Academy of Sciences project «Hydrogel swelling induced phase transitions in polymer solutions and suspensions» between Institute of Macromolecular Compounds (St.-Petersburg) and Cemef: responsible from the Russian side.
1999-2000	Collaboration on polymer-metal complexes with Prof. L.Belfiore (Colorado University, USA) in the framework of NSF program.
1997-2000	Collaboration on neutron scattering by gels with St.-Petersburg Institute of Nuclear Physics (Russia).

OTHER ACTIVITIES

- Participation to committees: recruitment, evaluation (HCERES): several per year
 - Refereeing articles in more than 20 scientific journals
 - Refereeing research projects (several per year)
 - Refereeing PhD and HDR thesis: national and international (several per year)
 - Interviews and articles for scientific community and general public: several per year
- Elected Chair of Cellulose and Renewable Materials division, American Chemical Society, 2023-2024.
 - Secretary of Cellulose and Renewable Materials division, American Chemical Society, 2019 – 2020, 2021-2022.

- Member of the board in GDR (national research network) “DUMBIO” (Sustainability and biobased materials) and responsible of topic “Biobased materials and hydrated biopolymers”
- Member of board in GDR (national research network) “Polymers and ionic liquids” and responsible of topic “Polymers processing from ionic liquids” (2014-2017, 2018-2021)
- Organiser and co-organiser of international and national conferences
 - Conference co-organiser 7th European Polysaccharide Conference and co-organiser of the session “Gels and porous materials”, Nantes, 11-15 October 2021.
 - Session on “Gels and porous materials” at ACS conferences in 2017, 2018, 2019, 2020, 2021, 2022, 2023
 - International seminar on All-cellulose composites, Aalto university, 20 November 2019
 - Session “Porous materials from polysaccharides” at 6th International Polysaccharide conference of EPNOE, October 2019
 - “Aerogels” international conference, Sophia Antipolis, France (2016)
 - Work-shop “Biobased composites”, Sophia Antipolis (2015), Grenoble (2016)
 - Work-shop “Ionic liquids and biobased polymers”, in the frame of French Research Group on Ionic Liquids and Polymers (LIPs), Sophia Antipolis (2014)
- Member of the organising committee of international and national conferences:
 - the International Conference on Bio-based Materials and Composites ICBMC’14, May, Montreal, Canada (2014)
 - French-Romanian conference on polymers, Piteshti, Romania (2014)
 - international Polysaccharide conferences (Wageningen 2011, Nice 2013)

Member of scientific societies:

Groupe Français de Polymères, ACS division « Cellulose and Renewable Materials »

ACADEMIC SUPERVISING

Supervising PhD thesis:

- 2022 - Loris GELAS (Cemef, Mines Paris)
Subject : Understanding phase transitions in bio-gels for structure/properties control of bio-aerogels
- 2021 - Sujie YU (Cemef, Mines Paris)
Subject : 3D printing of gels and aerogels for biomedical applications
- 2020 - Marion NEGRIER (Cemef, Mines ParisTech)
Subject: Aerogels from waste textile
- 2016-2021 Feng CHEN (Aalto university)
Subject: Designing High Performance All-Cellulose Composites by Dissolution/Swelling of Macro- and Nano-scale Cellulose Fibers
Defended 5 February 2021
- 2016-2020 Oona KORHONEN (Aalto university)
Subject : Short-Fiber Reinforced All-Cellulose Composites Using Aqueous NaOH Solution
Defended 10 June 2020
- 2016-2019 Lucile DRUEL (Cemef, Mines ParisTech)
Subject : Cellulose based aerogels: properties and shaping as beads
Defended 10 May 2019
- 2015-2019 Sophie GROULT (Cemef, Mines ParisTech)

- Subject : Pectin-based aerogels: Advanced materials for thermal insulation and drug delivery applications “
Defended 29 May 2019
- 2011-2015 Arnaud DEMILECAMPS (Cemef, Mines ParisTech)
Subject : « Synthesis and characterization of polysaccharide-silica composite aerogels for thermal superinsulation »
Defended 7 July 2015.
- 2010-2013 Cyrielle RUDAZ (Cemef, Mines ParisTech)
Subject : « Cellulose and Pectin Aerogels: Towards their nano-structuration”
Defended 6 december 2013
- 2009-2013 François BESSON (Cemef, Mines ParisTech)
Subject : «Mélanges de polymères thermoplastiques à matrice biosourcée : amélioration de la résistance au choc d’un dérivé cellulosique»
Defended 18 december 2013
- 2009-2013 Thibaut GERARD (Cemef, Mines ParisTech)
Subject : « Elaboration et caractérisation de matériaux multiphasiques à base de polylactide (PLA) et de polyhydroxyalcanoates (PHA)»
Defended 28 august 2013
- 2008 Kim ANH LE (Cemef, Mines ParisTech)
Subject : « Cellulose-ionic liquid solutions »
- 2006-2010 Romain SESCOUSSE (Cemef, Ecole des Mines de Paris)
Subject : « New ultraporous cellulosic materials and their carbons from green solvents»
Defended November 2010
- 2003-2007 Cyril CHAUDEMANCHE (Cemef, Ecole des Mines de Paris)
Subject: « Polysaccharides, an alternative for the development of a new plant hard capsule»
Defended April 2007.
- 2003-2007 Roxane GAVILLON (Cemef, Ecole des Mines de Paris)
Subject: « Preparation and characterisation of ultra-porous cellulose materials »
Defended March 2007.
- 2000-2003 Sylvie VERVOORT (Cemef, Ecole des Mines de Paris)
Subject: «Behaviour of hydrogels swollen in polymer solutions under shear»
Defended May 2006
- 1999-2002 Anna ZANINA (Cemef, Ecole des Mines de Paris and Institute of Macromolecular Compounds, Russia)
Subject: "Rheology of gel suspensions and deformation of gel particle"

Co-directing PhD thesis:

- 2023 - Hiba BOURAS (Cemef, Mines Paris)
Subject : Hydrogels et aérogels nanocomposites biosourcés pour des applications biomédicales
Co-directing with S. Buwalda and Y. Tillier
- 2022 - Eleni EFFRAIMOPOULOU
Subject : Energy saving by employing thermal superinsulating bio-aerogels
Co-directing with A. Rigacci
- 2021 - Lauriane LEGAY (Cemef, Mines ParisTech)
Subject : « Hyaluronic acid aerogels »
Co-directing with S. Buwalda
- 2019 - 2023 Coraline CHARTIER (Cemef, Mines ParisTech)

- Subject: “ 3D printing of bio-aerogels for medical applications »
Co-directing with S. Buwalda, B. Nottelet and H el ene van den Berghe (univ. Montpellier)
- 2012-2015 Ahmed ABDENNADHER (Cemef, Mines ParisTech)
Subject: « Injection Moulding of Natural Fibre Reinforced-Polypropylene: Process, Microstructure and Properties »
Co-directing with M.Vincent
Defended 1 december 2015
- 2009-2013 Weiqing LIU (Cemef, Mines ParisTech)
Subject: « Cellulose solutions and hybrid/composite materials from ionic liquid and alkaline solvents »
Co-directing with P.Navard
Defended 18 january 2013
- 2008-2013 Anne Le DUC (Cemef, Mines ParisTech)
Subject: “ Comportement et rupture de fibres cellulosiques lors de leur compoundage avec une matrice polym ere ”
Co-directing with B.Vergnes
Defended 20 december 2013
- 2005-2008 Melinda DESSE (Cemef, Ecole des Mines de Paris, co-tutelle with Nottingham university, UK)
Subject: « From a swollen granule to a suspension: shear flow behaviour of a physically modified starch »
Co-directing with J.Mitchell/B.Wolf
Defended December 2008
- 2002–2006 Magali EGAL (Cemef, Ecole des Mines de Paris)
Subject: «Structure and properties of cellulose-NAOH-water solutions, gels and regenerated objects »
Co-directing with P.Navard
Defended December 2006
- 1999-2002 Cedric ROY (Cemef, Ecole des Mines de Paris)
Subject: "Cellulose-soda solutions"
Co-directing with P.Navard.
Defended March 2002.

Participating to directing of PhD thesis:

- 2013-2017 Steven GREEN (university of Leeds)
Subject: “Cellulose-ionic liquid solutions”
Co-directing with M. Ries
- 2005-2006 Emmanuelle RELOT (Cemef, Ecole des Mines de Paris)
Subject: « Physical and numerical modelling of dip-coating »
Co-directing with J.Bikard and P.Navard.
- 1994-1999 Olga NIKOLAEVA (Institute of Macromolecular Compounds)
Subject: “Interpolymer complex formation in the system polyelectrolyte-semirigid chain polymer”
Co-directing with S.Frenkel.
Defended autumn 1999.
- 1994-1997 Jer ome MAUGET (Cemef, Ecole des Mines de Paris)
Subject: "Phase separation in thermosetting resins"
Co-directing part of the work with P.Navard.
Defended 1997.

Post-master degree (Mastère specialise)

- 2008-2009 Achraf KALLEL (Cemef and Spontex)
Subject: “Investigation of hornification origins and mechanisms through surface characterization of cellulose model films”
- 2006-2007 Vincent GILBERT (Cemef, ENSMP and Spontex, France)
Subject: “Cellulose carbamate solutions for making sponges”
Co-directing with P.Navard.
Defended: September 2007.

Supervising post-doctoral researchers

- 2020-2021 (12 months) Daniel AGULIERA (Cemef, Mines ParisTech)
Subject: “Hyaluronic acid aerogels”
Co-directing with Sijtze Buwalda
- 2019–2020 (18 months) Fangxin ZOU (Cemef, Mines ParisTech)
Subject: “Starch aerogels”
- 2018-2019 (18 month) Loan VO (Cemef, Mines ParisTech)
Subject: “Processing of cellulose acetate”
Co-directing with Patrick Navard
- 2015-2016 (18 months) Thibault COUSIN (Cemef, Mines ParisTech)
Subject: “Processing of cellulose acetate”
Co-directing with Patrick Navard
- 2015-2016 (18 months) Gediminas MARKEVICHIUS (Cemef, Mines ParisTech)
Subject: “Reinforcing of silica aerogels”
Co-directing with A. Rigacci
- 2014-2015 (18 months) Nela BUCHTOVA (Cemef, Mines ParisTech)
Subject: “Cellulose aerogels, cryogels and xerogels”
- 2014-2015 (12 months) Erika DI GIUSEPPE (Cemef, Mines ParisTech)
Subject: “Polymer composites with natural fibres”
Co-directing with B. Vergnes
- 2013-2014 (10 months) Romain CASTELLANI (Cemef, Mines ParisTech)
Subject: “Polymer composites with natural fibres”
Co-directing with B. Vergnes
- 2013-2015 (18 months) Mindaugas BULOTA (Cemef, Mines ParisTech)
Subject: “Algues-based composites”
- 2013-2015 (18 months) Rachid LADJ (Cemef, Mines ParisTech)
co-directing with A. Rigacci
Subject: “Reinforcement of aerogels”
- 2012-2013 (1 year) Georg POUR (Cemef, Mines ParisTech)
Subject : « Modifications of aerocellulose »
- 2010 (1 year) Nicolas LE MOIGNE (Cemef, Mines ParisTech)
Subject : « Bio-composites »
- 2007-2009 (2 years) Daniela RUSU (Cemef, Mines ParisTech)
Subject: “Micro-gel suspensions for paint applications”
- 2004 (9 months) Undina ZEO (Cemef, Mines ParisTech)
Subject: « Synthesis and properties of porous polyelectrolyte gels».

Foreign visitors (duration longer than 1 week)

- 2023 (1 month) Chenming LIU (Oulu university, Finland)
Subject: Investigation on the morphology, porosity and thermal insulation property of cellulose nanofiber/aramid nanofiber aerogels fabricated through supercritical CO₂ drying
- 2022 (1 month) Sara VALENTE (Aveiro university, Portugal)
Subject: Nano-in-microparticle chitosan-galactomannan aerogels as a potential delivery system
- 2022 (1 month) Francesco CIUFFARIN (Udine university, Italy)
Subject: Development of cellulose aerogels as templates for structuring edible oil for food applications
- 2021 (1 month) Martina VIOLA (Utrecht university, The Netherlands)
Subject: Silk fibroin aerogels
- 2021 (1 month) Arijeta BAFTI (university of Zagreb, Croatia)
Subject: "Preparation of cellulose aerogels and cryogels for acoustic insulation"
- 2020 (1 month) Yijiao DONG (Aalto university, Finland)
Subject: "Preparation of pectin aerogels"
- 2019 (1 month) Michael HUMMEL (Aalto university, Finland)
Subject: "Mechanical properties of all-cellulose composite based on textiles"
- 2016 (3 months) Khaled LABIDI (National Centre for Research on Materials' Science, Tunisia)
Subject: "all-cellulose composites from alfa fibers"
In the frame of FiDiPro project in Aalto university on All-cellulose composites.
- 2016 (1 month) Martin RAMOS (univ. Helsinki, Finland)
Subject: "Rheological characterisation of nanofibrillated cellulose-xylan mixtures"
In the frame of AEROWOOD project
- 2016 (3 weeks) Youssef AKIL (univ. of Hamburg, Germany)
Subject: "Rheology of modified hemicellulose"
In the frame of AEROWOOD project
- 2016 (1 month) Sakeena QURAIISHI (BOKU, Vienna, Austria)
Subject: "Lignosulfonate gels and aerogels"
In the frame of AEROWOOD project
- 2015 (1.5 months) Katarina DIMIC-MISIC (university of Aalto, Finland)
Subject: "Aerogels and cryogels from nanofibrillated cellulose"
- 2015 (6 months) Rabiaa HAJII (National Engineering school of Gaves, Tunisia)
Subject: "Aerogels from natural fibres"
- 2014 (1.5 months) Suzanne SCHMIDT (university of Jena, Germany), in the frame of COST project
Subject: "Properties of thermoplastic starches"
- 2013-2014 (1 year) Wencong WANG (Donghua University, China, co-directing with P. Navard)
Subject: "Properties of low-substituted hydroxyethylcellulose solutions"
- 2013 (1.5 months) Maria BERCEA (Institute of Macromolecular Chemistry, Iasi, Romania), STREAM project
Subject: "Polysaccharide-based interpolymer complexes", "Rheological properties of modified cellulose"
- 2013 (2 weeks) Michael RIES (university of Leeds, UK).

- 2012 (2 months) Subject: “Cellulose-ionic liquids”
Irina PRISACARU, “Gheorge Asachi” Technical University of Iasi, Romania
Subject: “New aqueous micellar systems for controlled release applications”
- 2012 (1 month) Sergui COSERI (Institute of Macromolecular Chemistry, Iasi, Romania), STREAM project
Subject: “Properties of oxidised pullulan”
- 2012 (3 months) Stanislav PATLAZHAN (Institute of Chemical Physics, Russian Academy of Sciences), in the frame of the Industrial Chair in Bioplastics
Subject: “Mechanical properties of PLA-based blends”
- 2012 (1 week) Michael RIES (university of Leeds, UK).
Subject: “Properties of ionic liquids”
- 2012 (1 month) Maria BERCEA (Institute of Macromolecular Chemistry, Iasi, Romania), STREAM project
Subject: “Oxidised pullulan”
- 2012 (1 month) Raluca DARIE (Institute of Macromolecular Chemistry, Iasi, Romania), post-doctoral EC program
Subject: “PLA-based blends and composites”
- 2011 (1 month) Maria BERCEA (Institute of Macromolecular Chemistry, Iasi, Romania), post-doctoral EC program
Subject: “Hydroxyethyl methacrylate hydrogels », “PLA-based blends and composites”
- 2011 (1 week) Loredana NITA (Institute of Macromolecular Chemistry, Iasi, Romania), post-doctoral EC program
Subject: “Hydroxyethyl methacrylate hydrogels »
- 2011 (1 months) Raluca DARIE (Institute of Macromolecular Chemistry, Iasi, Romania), post-doctoral EC program
Subject: “PLA-based blends and composites”
- 2011 (2 weeks) Asanah RADHI (university of Leeds, UK), grant from the EPCRS
Subject: “rheological properties of cellobiose-ionic liquid solutions”
- 2010 (1 week) Michael RIES (university of Leeds, UK), grant from the EPCRS.
Subject: “Cellulose-ionic liquid solutions”
- 2010 (1 week) Stanislav PATLAZHAN (institute of chemical physics, Moscow, Russia)
Subject: “Complex fluids under flow”
- 2009 (1 month) Michael RIES (university of Leeds, UK), visiting grant from the Royal Society.
Subject: “Viscosity of cellulose-ionic liquid solutions”
- 2008 (2 weeks) Peter ROSENBERG (Abo Academi University, Finland), exchange in the framework of EPNOE EC project.
Subject: “Characterisation of biocelsol/NaOH aqueous solutions”
- 2007 (2 weeks) Stephanie HORNIG (Centre of Excellence for Polysacchiride Research, F.Schiller university, Iena, Germany), exchange in the framework of EPNOE EC project.
Subject: “Flow of polysaccharide nano-particles”
- 2007 (6 months) Martin GERIKE (Centre of Excellence for Polysacchiride Research, F.Schiller university, Iena, Germany), exchange in the framework of EPNOE EC project.
Subject: “Rheology of cellulose/ionic liquid solutions”

- 2007 (2 weeks) AnneMarie HUIJBRECHTS (Wageningen University, Wageningen, The Netherlands), exchange in the framework of EPNOE EC project.
Subject : «Rheo-optical study of etherified starches »
- 2007 (2 weeks) Valeria HARABAGIU (P.Poni Institute of Macromolecular Chemistry, Iasi, Romania), Eco-Net grant from the French ministry of foreign affairs (Egide).
Subject: “Swelling behaviour of hydrogels in fullerene-cyclodextrine complexes”.
- 2007 (2 weeks) Djamel ALLIOUCHE (Boumerdes University, Algeria)
Subject: “Polyelectrolyte gels”
- 2007 (1 month) Adrian FIFERE (P.Poni Institute of Macromolecular Chemistry, Iasi, Romania), Eco-Net grant from the French ministry of foreign affairs (Egide).
Subject: “Swelling behaviour of hydrogels in fullerene-cyclodextrine complexes”.
- 2007 (3 months) Elena TARABUKINA (Institut of Macromolecular Compounds, St.-Petersbourg), bilateral interacademic collaboration CNRS-Russian Academy of Sciences and Eco-Net grant from the French ministry of foreign affairs (Egide).
Subject: «Swelling behaviour of hydrogels in aqueous solutions of polymer-fullerene complexes»
- 2007 (4 weeks) Kerstin SCHLUFTER (Iena university, Germany), exchange in the framework of the European Polysaccharide Network of Excellence
Subject: “Rheology of bacterial cellulose in ionic liquids”
- 2007 (1 week) Stanislav PATLAZHAN (N.Semenov Institut of Chemical and Physical Problems, Moscow, Russia).
Subject : « Behaviour of soft and rigid particles under flow »
- 2006 (2 weeks) Mariana PINTEALA (P.Poni Institute of Macromolecular Chemistry, Iasi, Romania), Eco-Net grant from the French ministry of foreign affairs (Egide).
Subject: “Swelling behaviour of hydrogels in fullerene-cyclodextrine complexes”.
- 2006 (1 month) Adrian FIFERE (P.Poni Institute of Macromolecular Chemistry, Iasi, Romania), Eco-Net grant from the French ministry of foreign affairs (Egide).
Subject: “Swelling behaviour of hydrogels in fullerene-cyclodextrine complexes”.
- 2006 (2 weeks) Kerstin SCHLUFTER (Iena university, Germany), exchange in the framework of the European Polysaccharide Network of Excellence
Subject: “Rheology of bacterial cellulose in ionic liquids”
- 2006 (3 months) Elena TARABUKINA (Institut of Macromolecular Compounds, St.-Petersbourg), bilateral interacademic collaboration CNRS-Russian Academy of Sciences and Eco-Net grant from the French ministry of foreign affairs (Egide).
Subject: «Swelling behaviour of hydrogels in aqueous solutions of polymer-fullerene complexes»
- 2006 (2 weeks) Djamel ALLIOUCHE (Boumerdes university, Algeria), algerian university grant
Subject : « Superabsorbent gels »
- 2005 (1 month) Djamel ALLIOUCHE (Boumerdes university, Algeria), algerian university grant.

- 2004 (3 months) Subject : « Superabsorbent gels »
Yulduz MIRKHAIDAROVA (Institute of Macromolecular Chemistry, Tashkent, Uzbekistan), UNESCO grant.
- 2004 (1 month) Subject: « Rheology of micro-gel suspensions »
Baya SID (Boumerdes university, Algeria), algerian university grant.
- 2003 (2 months) Subject: « Behaviour of superabsorbent gels»
Elena TARABUKINA (Institut of Macromolecular Compounds, St.-Petersbourg), bilateral interacademic collaboration CNRS-Russian Academy of Sciences.
- 2003 (3 months) Subject: «Influence of surfactants on the release of solvent from gels under shear»
Baya SID (Boumerdes university, Algeria), algerian university grant.
- 2002 (12 months) Subject: « Behaviour of superabsorbent gels»
Stanislav PATLAZHAN (Institut Physico-Chemical Problems, Moscow, Russia), invited professor, « poste rouge » from CNRS.
- Subject : « Behaviour of polyelectrolyte gels under compression »

Master students:

- 2022 (2 months) Arthul KARAULIC (La Rochelle university)
 Subject: Evaluation of cellulose gels and aerogels as a matrix for fluorescence amplification
- 2022 (5 months) Elyes El HAJ (ENSAM)
 Subject: Bio-aerogels for fluorescence amplification
- 2020 (6 months) Yitong JIANG (University of Technology of Troyes)
 Subject: “Amplification of fluorescence in aerogel »
- 2017-2018 (5 months) Amelie KENKEL (Hamburg-Harburg university of technology)
 Subject: “Cellulose aerogel beads via emulsion technique”
- 2017 (6 months) Katrina CHAN (Freiburg univ., Germany)
 Subject: “Pectin-CNC aerogels”
- 2017 (3 months) Omar CARDENAS (Nottingham univ., UK)
 Subject: “Cellulose porous materials”
- 2016 (6 months) Otto LINTUNEN (Aalto university)
 Subject: “All-cellulose acetate composites)
 Co-directing with P. Navard
- 2016 (6 months) Gerrit SPIESS (Hamburg university, Germany)
 Subject: “Wood-based aerogels)
- 2016 (6 months) Isadora de Souza RUFINO (ENSIACET, Toulouse, France)
 Subject : « Cellulose aerogel beads »
 Co-directing with P. Navard
- 2016 (6 months) Julien JAXEL (Ecole Nationale Supérieure des Industries Chimiques)
 Subject : « Reinforcing silica aerogels »
- 2015 (6 mois) Yosra BELGHITH (Ecole Nationale d'Ingénieurs de Monastir, Tunisie)
 Subject: “Influence of fibers’ physico-chemical treatment on the properties of composites”
 Co-directing with Riadh ZOUARI
- 2015 (6 months) Lucile DRUEL (university of Troyes)
 Subject: “Starch aerogels”

- 2015 (3 months) Marine MICHEL (ENSIACET (National Polytechnic Institute of Chemical Engineering and Technology), France, and Imperial College, London)
Subject: “Wood-based aerogels”
- 2015 (6 months) Christophe BERTO (university of Nice, France)
Subject: “Processing of plasticised cellulose acetate”
 Co-directing with P. Navard
- 2014-2015 (6 months) Richard BARDL (University of Aachen, Germany)
Subject: “Starch-based aerogels”
- 2013-2014 (6 months) Philipp NIEMEYER (University of Aachen, Germany)
Subject : « Reinforced aerogels »
 Co-directing with A. Rigacci
- 2013 (6 months) Maria Daniela VILLAVICENCIO (INSA, Lyon, France)
Subject: “All miscanthus composites”
 Co-directing with P. Navard
- 2013 (6 months) Margot ALVES (ESCOM, Compiègne)
Subject: “Hydrophobic aerocellulose”
- 2012 (2 weeks) Simon LIU, Clément TIRET (Mines ParisTech)
Subject « Aerocelluloses »
- 2012 (6 months) Mouhannad BERRO (ENSICAEN, Caen)
Subject : « Bioplastic blends »
- 2012 (2 weeks) Davide COLOMBO, Etienne SAHUGUET, Paul-Aymé TOULEMONDE (Mines ParisTech)
Subject « Bioplastic blends »
- 2011 (6 months) Robin PAUL, ENSCBP, Bordeaux)
Subject : « Cellulose aerogels »
- 2011 (6 months) Aurelie VANHILLE (ENSCBP, Bordeaux)
Subject : « Cellulose ester-polyolefine blends »
- 2011 (6 months) Tiffany NOTO (Institut des Sciences de l’Ingénieur de Toulon et du Var, Toulon)
Subject : “PLA/PHA blends »
- 2011 (6 months) Ahmed ABDENNADHER (Ecole Nationale d’Ingénieurs de Sfax, Sfax, Tunisia)
Subject: “Natural fiber reinforced polypropylene)
- 2010 (6 months) Lise MAISONNEUVE (ENSCBP, Bordeaux)
Subject : « Surface modifications of cellulose films »
- 2010 (6 months) Anne PEREZ (ENSCBP, Bordeaux)
Subject: “Natural fiber reinforced polypropylene”
- 2009 (6 months) Audrey SMACCHIA (EEIGM)
Subject : Preparation of highly porous cellulose-lignin materials »
- 2008 (2 weeks) Joachim BOKOBZA and Nicolas GOVILLOT (Mines-ParisTech, Paris)
Subject : « Preparation of aerocellulose from ionic liquids ».
- 2008 (6 months) Dorine FRAISEAU (Institute Supérieur de Plasturgie d’Alençon, Alençon)
Subject : « Deformation of a droplet of soft-particle suspension : a rheo-optical study »
- 2008 (1 month) Sebastien ROUSSEL (Nice university, Nice)
Subject : « Characterisation of Aerocellulose »
- 2007 (6 month) Min Bao LE (Ecole Polytechnique, Paris)
Subject : « Modelling of cellulose foam behaviour »
 Co-Directing with J. Bikard.

- 2006 (4 months) Romain SESCOUSSE, Nice university, Nice)
Subject : « Encapsulation of solid particles into porous cellulose »
- 2005 (6 months) Jose DE OLIVEIRA (Ecole d'Ingénieur Polytechnique de Marseille)
Subject : « Modelling of coating by a liquid during dip-coating procedure : thermomechanical approach and experimental validation »
 Co-directing with J.Bikard
- 2003 (6 months) Cyril CHAUDEMANCHE (Ecole Polytechnique de l'Université de Nantes, in collaboration with Rohm and Haas, Sophia-Antipolis).
Subject: « Behaviour of oil emulsion in aqueous viscoelastic solutions under shear »
- 2003 (3 months) Manel BEN SAAD (Ecole des Mines in collaboration with Parfums Dior, Paris)
Subject: “Influence of rheological parameters on the release of active compounds absorbed by a chemically cross-linked polyelectrolyte gel”
- 2002 (3 months) Liliana RIPAN (University of Medicine, Iasi, Romania, in the framework of Leonardo da Vinci EC programme.)
Subject : «Swelling dynamics and phase coexistence in a strongly charged gel place in aqueous media of different pH”
 Co-directing with D.Rusu (Romania)
- 2002 (3 months) Adriana MUNTEANU (University of Medicine, Iasi, Romania, in the framework of Leonardo da Vinci EC programme)
Subject: «Swelling behaviour and absorption properties of a polyelectrolyte gel in polymer solution of different molecular weights”
 Co-directing with D.Rusu (Romania)
- 2002 (3 months) Ouardia BELLABIOD (Nice University, Nice)
Subject: «Influence of the interfacial tension on the solvent release from the gel»
- 2001 (1 month) Alexandra KHVOSTOVA, (Institute of Macromolecular Compounds, St.-Petersburg), University of Natural Polymers, St.-Petersburg)
Subject: «Formation of interpolymer complexes between polymethacrylic acid and polvinylpyrrolidone»
- 2000 (3 months) Jan WEYTS (University of Leuven, Belgium)
Subject: «Mechanical properties of highly swollen gels at high deformations»
- 2000 (3 months) Enis HACHANI (Nice university, in collaboration with Dior)
Subject: «Behaviour of polyelectrolyte gels»
- 1999 (3 months) Ann VERLY (university of Leuven, Belgium)
Subject: «Deformation of a polyelectrolyte gel particle under shear»
- 1999 (3 months) Isabelle SALOMON (Nice university, in collaboration with Dior)
Subject: «Emulsion stabilisation by polymers»
- 1999 (2 months) Karen STOEFLER (INSA of Lyon)
Subject: «Study of emulsion stabilisation»
- 1993 (3 months) Olga BIGANSKA (L'viv university, Ukraine)
Subject: “Light scattering by nematic droplets embedded in an isotropic matrix”
 Co-directing with P.Navard.