

Prof. Jean-Francois GERARD



> UMR CNRS #5223

Ingénierie des Matériaux
Polymères



PROFESSIONAL PREPARATION AND APPOINTMENTS

1998- present	Professor (CEX2), Materials Science Dept., INSA Lyon
1997	Directeur de Recherche CNRS, UMR CNRS #5627/5223
1992	Habilitation à Diriger des Recherches, Université Lyon 1
1985	Chargé de Recherche CNRS, UMR CNRS #5627/5223
1985	PhD Materials Science, INSA Lyon
1981	Certificat Aptitude Administration des Entreprises, IAE Lyon
1980	MsC Macromolecular Materials & Composites, Univ. St-Etienne
1980	Engineer Diploma, INSA Lyon Physics of Materials Engineering

EXPERIENCE

Research

2002-2011	Head UMR #5627 / #UMR 5223 Laboratory 'Ingénierie des Matériaux Polymères' (Polymer Materials Institute). INSA Lyon / C. Bernard Lyon 1 University/ J. Monnet St-Etienne University
1997-2011	Head Laboratoire Matériaux Macromoléculaires INSA Lyon site URA#507/UMR#5223/UMR#5627

INSA de Lyon / Université de Lyon

2016-04/2017	Directeur Général Adjoint SATT PULSALYS Lyon-Saint Etienne
2011-2016	Vice-President Research, Institut National des Sciences Appliquées Lyon
2002-2006	INSA Lyon Scientific Council
1998-2006	Department Materials Science Engineering INSA Lyon Council
1995-2008	President of CNU 31-32-33 INSA Lyon Committee

National

Research management

2021-	Program Director PEPR France 2030 'Recyclage, Recyclable & Ré-Utilisation des Matières
2017-	Adjt Directeur Scientifique Référent CNRS Région AURA (Clermont-Ferrand site)
2016-	Scientific Deputy Director - Institut de Chimie CNRS
2008-2011	President Section 11 CoNRS Committee (Comité National Recherche) <i>Systèmes et matériaux supra et macromoléculaires : élaboration, propriétés, fonctions</i>
2008-2010	Member Commission MESR PEDR/PES Section 33
2004-2008	Elected member Section 11 CoNRS Committee

Agence Nationale de la Recherche

2016-2017	Member CSPD Défi 3 'Renouveau Industriel' Committee
2013-2015	President ANR Blanc/Intern./JC SIMI8-CES 29 Committees 'Chemistry of Solids, Colloids, Physico-Chemistry'
2007-2013	Member Steering Committee ANR 'Materials & Processes'
2007-2010	Member Sectorial Committee ANR 'Chemistry & Materials'

Scientific Learn Societies

2021	Grand Prix - French Polymer Society/Div. Polym.French Chemical Soc.
2017	Distinguished Senior Member of the French Chemical Society (SCF)
2012-2015	President Division 'Chemistry of Polymers & Materials' French Chemical Society (SCF) / GFP
1995-2007	President Rhône-Alpes French Polymer Group

Europe

2015-2018	President of the European Polymer Federation EPF
2007-present	Vice-President European Center for Nanostructured Polymers ECNP
2004-2008	Vice-Coordinator Network of Excellence NANOFUN-POLY FP7
2013-present	Member EPF (European Polymer Federation) Board (French delegate)
2015-2017	President of the European Polymer Federation EPF

RESEARCH

Research interests

Soft matter

Polymer networks, hydrogels, supramolecular polymers and interfaces, wettability, colloidal suspensions such as bitumens

Nanostructured polymers and nanostructuration processes

Nanocomposites, hybrid organic inorganic nanomaterials, (nano)microphase separation phenomena including RIPS – (nano)blends-, polymer confinement, nanostructuration (oxo-clusters, ionic liquids, nanoparticles, etc)

Surfaces, interfaces and interphases / Multiphase polymer materials

Polymer surfaces, superhydrophobic coatings, adhesion processes in multiphase materials, i.e. polymer blends, coatings, composites (particle-based, fiber-based)

Polymer-based composite materials

Interfacial phenomena (fiber sizing, micromechanics), processing – reactive or non-reactive-

Polymer processing

Electrospinning, rotomolding, 3D printing (FDM, SLA), coatings, recycling

Scientific Outputs

h-index (WoS)	51
Citations (without self-citations)/ Av. cit. per item (WoS)	7,350 / 28.5
Papers published in international reviewed journals	297
Book chapters / Published extended abstracts	11/81
Invited lectures in international / national conferences	155/60
Communications in international /national conferences	470/170
Patents	25

Supervised Research

Defended PhDs / Current advised PhDs	84/6
Post-doctoral scientists	37

Research Networks

European Research Networks

NANOFUN-POLY FP7 Network of Excellence (Nanostructured and Multifunctional Polymer-Based Materials & Nanocomposites) – Vice co-ordinator (2004-2008)
European Center for Nanostructured Polymers ECNP - Vice-President (2009 → present)
Co-ordinator RTN (Research Training Network) POLYNETSET
Co-ordinator RTN (Research Training Network) NBB-HYBRIDS
COST Expert Smart Textiles (2018-)
Participant FP5, FP6, FP7, H2020 research projects

National Research Networks

GDR CNRS BIOMATPRO CNRS / INRA - UMR CNRS 5223 (2009-2014)
GDR CNRS 3585 'Ionic Liquids and Polymers' President of the Scientific Committee (2013-)
GDR CNRS 3661 'Nanofilled Polymers' – Member of the Scientific Committee (2014-)
PEPR 'Recyclage, Recyclabilité et Ré-Utilisation des Matières' SGPI-CNRS (2021-)
PEPR DIADEM 'Découverte accélérée de polymères par haut débit et IA' (2022-)
PEPR H2 'Hydrogène décarboné' – Stockage hyperbare Type IV

Main and current international collaborations

Xiamen University, Xiamen (China)– Department of Chemistry (Prof. L. Dai)(PICS project)
Institute Macromolecular Chemistry (Prof. L. Matejka/Dr. H. Benes)
Mc Gill University (Canada) – Chemical Engng. (Prof. M. Maric)
University Rio de Janeiro (Brazil) (Prof. B. Soares)
ICEHT FORTH Patras (Greece) – (Prof. C. Galiotis)
Weizmann Institute (Israël) – (Prof. Dr. H.D. Wagner)
South Western Mississippi University of Technology (USA) – (Prof. J. Otaigbe)
Université Mons-Hainault (Belgique) – (Prof. P. Dubois)
University Minnesota, Minneapolis (USA) – (Prof. C. Macosko)
Université C. Ayaad Marrakech (Maroc) – (Dr. H. Kaddami)

Institute für Polymerforschung IPF Dresden (D) – (Prof. Dr. B. Voit)
Politecnico Milano – Alessandria (I) – (Prof. G. Camino)
Université Bejaia (Algérie) – (Dr. A. Boukerrou)
University Perugia (I) – (Prof. J. Kenny)

Editorial Activities

Editor-in-Chief New Journal of Chemistry RSC
Board of Frontiers in Chemistry section Polymer Chemistry, Functional Composites,
Materials Nature Springer, Polymers, Nanocomposites, Actualité Chimique

Reviewing activities

Clay Science, Composite Interfaces, Composites Science Technology, Journal Applied Polymer Science, Journal Materials Science, Journal of Nanostructured Polymers and Nanocomposites, Journal of Non-Crystalline Solids, Journal Polymer Sci. Phys., Journal of Rheology, Langmuir, Macromolecular Symposia, Macromolecules, Nature Nanotechnology, Polymer, Polymer for Advanced Technologies, Polymer Composites, Polymer Engineering Science Polymer and Polymer Composites, Journal of Sol-Gel Science & Technology

Scientific Committees

National Agency for Research (ANR): President, member, and external expert of various evaluation and prospective committees
Evaluation Agency of Research and High Education: President and member of various Committees for laboratories and institutions evaluations
Scientific Committee AFSSA (Agence Française de Sécurité Sanitaire Aliments, present : AFSSET) 'Materials for Food Contact'
HCSHSP Nanotechnologies Committee (Health Ministry)
LNE Scientific Committee (Laboratoire National d'Essais) – Packaging Division
IPF Scientific expert committee (Institut Français du Pétrole Energies Nouvelles)
Scientific expert CEA
CEA-DRT LITEN Grenoble Scientific Council (2008-2012)
Institut C. Gerhart Montpellier CNRS Scientific Committee
LACTIPS SA
POLYVIA Formation
Comité 'Chimie & Matériaux' Enrichissement de la Langue Française – Ministère de la Culture / Ministère de l'Economie

International expertises

European Commission

Marie-Curie (grants), RTN / ITN (research networks), Integrated Projects (FP6)

National expertises

Austrian Nano Initiative – Evaluation de projets et réseaux de recherche
FNRS Canada – Evaluation programmes de recherche
National Research Fund (FNR) – PEARLL Scientific Advisory Board - Luxembourg
EPFL Lausanne – Position candidacies evaluation
Czech Republic Academy of Science – IMC CSAZ evaluation, grant applications
Italian Ministry of Education – Evaluation of Department of Universities
Pakistan University Scientific Council – PhD reviews
ARC Scientific Initiatives and creation of research centers Australia
Greek Research Institutes (FORTH, CERTH)/ Ministry of Education & Research
Russian Science Foundation
Ministry of Education & Research / Republic of Serbia (2015-)
CNPq Brésil – Member National Institutes of S&T Program
Scientific Committee Key Lab. Xiamen University (RPC)
Expert scientific projects Université Libre de Bruxelles (2010)
PEARL Grant Committee (Luxembourg)
FCT Nanotech evaluation SR&TD (Portugal)

CSF 'Chemistry & Materials' Board Member – National Council of Industry
Vice-President & President of the Scientific Committee - AXELERA Industrial Cluster
Scientific & Strategic Committee CTI-PC 'Plasturgie et des Composites'
ACTIA Scientific Committee (Industries Agroalimentaires)
FDCA 'Fondation du Caoutchouc' Executive Committee – Personnalité sci. qualifiée
France Chimie-UIC (Union des Industries Chimiques) Groupe Académique Prospective
GT 'Chimie Biosourcée' Nouvelle France Industrielle (DGE/Ministry of Economy)
Réfèrent scientifique CNRS expertise collective ESCo CNRS/INRAE 'Polymères dans
l'agriculture & l'alimentation'

Collaborations with Industry

Collaborative projects with companies (recent and current)

AIRBUS/EADS IW, ASTRIUM ST/SAFRAN L./ARIANE, ARKEMA, CEA, CYTEC, DOW Chem. (D, NL), DOW CORNING, EIFFAGE, IVW, MERMET, MICHELIN, PLASTIC OMNIUM, OWENS-CORNING FIBERGLASS, PSA, RADIAL, RHODIA, ROSSIGNOL, SEB/TEFAL, SCHNEIDER, SOLVAY, SAINT-GOBAIN, SOPREMA, VENCOREX, VOLVO, WACKER Chem. (D), ...