

CURRICULUM VITAE

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Centre de Recherches sur les Macromolécules Végétales (CNRS)

CERMAV - BP 53X, F 38041 Grenoble Cedex, France

Born 13 September 1947, Married, 4 children



EDUCATION

1986	Habilitation (Accreditation to supervise research)
1978	DSc. University of Grenoble, France
1973	Doctorate, University of Bordeaux, France
1971	Master in Physics, University of Bordeaux

EXPERIENCE AND POSITIONS HELD

2012-	Senior Research Scientist : CERMAV - CNRS, Grenoble, FR
2009-2011	Scientific Director , European Synchrotron Radiation Facility (ESRF) Grenoble, FR
2007-2009	Senior Research Scientist : CERMAV - CNRS, Grenoble, FR
1996-2006	Head of Research Institute , CERMAV (CNRS), Grenoble, FR
1987-2005	Senior Research Scientist , Institut National de la Recherche Agronomique, Nantes, FR
1984-1987	Research Scientist , CERMAV (CNRS), Grenoble, FR
1983-1984	Visiting Scientist , Dept. of Chemistry, Res. Lab. Eastman Kodak, Rochester, N.Y., U.S.A.
1977-1983	Junior Research Scientist , CERMAV (CNRS), Grenoble, FR
1974-1977	Research Associate , Dept. of Chemistry, University of Montreal, P.Québec, Canada.
1973-1974	Post. Doct. , Institute Molecular Biology, University of Oregon, Eugene, Ore., U.S.A.

SCIENTIFIC AREAS OF INTEREST

- Structural and conformational analysis of oligo, polysaccharides and glycoconjugates in solution and in the solid state.
- Molecular interactions (polysaccharides-polysaccharides, protein-carbohydrates,..)
- Crystallography, Molecular Modeling and Graphics, NMR spectroscopy,...
- Enzymic hydrolysis of carbohydrates – Green chemistry & Bio-ethanol
- Biotechnological applications of carbohydrates.

PUBLICATIONS : H INDEX : 46, NUMBER OF CITATIONS: > 6900 (JANUARY 2012)

250	Publications in referred journals, reviews and book chapters	(sum of the times cited : 7150)
>80	Invited lectures	(Cited articles: 4550)
>150	Oral presentations, seminar and conferences	(Aver Cit/items : 29.0)

TEACHING AREAS

1999-2003	Director. "Diplôme Etudes Approfondies" Structural and Molecular Physical Chemistry Univ. Joseph Fourier – Grenoble.
2003-2006	Deputy Director. Doctoral School Chemistry & Life Sciences Univ. Joseph Fourier– Grenoble.
2007-2009	Director. Doctoral School Chemistry & Life Sciences Univ. Joseph Fourier – Grenoble.
2011-2012	Deputy Director. Doctoral School Chemistry & Life Sciences Univ. Joseph Fourier – Grenoble.

EDITORIAL BOARDS

1992 - ...	Journal of Carbohydrate Chemistry	1999-2005	Carbohydrate Research
1999 ...	Biopolymers	2000	Carbohydrates in Europe
2002 - ...	Glycoconjugate Journal	2004-...	Adv. in Carbohydrate Res.

ORGANISATION SCIENTIFIC MEETINGS

1998	Starch Workshop	Nantes	Co-organiser
1990	3rd Workshop on Plant Polysaccharides	Nantes	Co_organiser
1991	Meeting French Molecular Graphics	Le Croisic	Organiser
1992	International Symposium on Conformational Studies of Oligo, Polysaccharides Glycoconjugate	Le Croisic	Organiser
1994	XVth Journées Chimie & Biochimie des Glucides	Le Croisic	Organiser
1996	International Cereal Symposium	Nantes	Co-organiser
2003	12th European Carbohydrate Symposium	Grenoble	Chairman (700 part.)
2006	Workshop : Interface Physics – Plant Biology	Lyon	Organiser
2011	Structural Glycosciences	Grenoble	Co-organiser

SCIENTIFIC COUNCILS : FRENCH NATIONAL COMMITTEE OF SCIENTIFIC RESEARCH : CONRS

2001-2004	Nominated Member: <i>Complex Molecular Systems.</i>
2003-2004	Elected Member: <i>Physics and Chemistry of Biological Assemblies</i>
2005-2008	Elected Chairman : <i>Supra and Macromolecular Systems: Properties, Functions, Engineering</i>

OTHERS ... (SELECTION)

2000-2008	Member of the French National Committee for Scientific Research
2003_2005	Chairman of the European Carbohydrate Organisation
2000-2003	Elected national representative to the International Carbohydrate Organisation
1995-1999	Elected national representative to the European Carbohydrate Organisation
1993-1995	Elected chairperson of the French Carbohydrate Society
From now on.....	Member of ten scientific societies

EUROPEAN COMMUNITY

1994-1996	Member. Research Training Network “Carenet-I”.
1994-1996	Member, Research Program Biotechnology “Pectins”
1997-2000	Member. Research Training Network “Carenet-II”.
2000-2003	Member. Research Training Network “GlycoTrain”.
2004-2007	Coordinator. Research Training Network “Glycosciences: CERMAV-TRAIN”.
2005-2008	Member. Research Training Network “GlycoNanoParticles”.
2008-2012	Member. Research Training Network “EuroGlycanArrays”.
2008-2012	Member. Research Training Network “CARMUSYS”.

OTHERS (SELECTION)

2004-2007	Deputy-Director: National Network INRA-CNRS :”Assembly of Plant Macromolecules”
2003-2008	Member, Managing Team: National Network CNRS“ <i>Chemistry for Sustainable Development</i> ”
2002- 2012	Vice President and member of Council of the Grenoble Bio-Network ADEBAG
2001-2007	Chairman, Evaluation Committee “ <i>Institut de Biologie Physico-Chimique</i> ”, Paris
2005	Chairman, Evaluation Committee. <i>Department of Chemistry, Slovak Academy Sciences.</i>
2004 -2006	Chairman, Evaluation Committee. « <i>Istituto di Ricerca sui Sistemi Macromolecolari</i> », Milano, Genova, Biella
2012-	Members of 10 National Evaluations Committees (AERES) Evaluation of Research Units higher Education Programs. Member, Scientific Committee, AXELERA. Network for the Chemistry and Environment in Rhones-Alpes Region. Partnership Industry-Academia.

<i>The Most Cited Published Articles</i>				<i>Times Cited</i>
1988	A.Imberty, H. Chanzy S.Perez, A. Buleon & V. Tran	The Double Helical Nature of A-Starch.	<i>J. Mol. Biol.</i> , 201, 365-378	274
1988	A. Imberty & S. Perez	A Revisit to the Three-dimensional Structure of B-Amylose.	<i>Biopolymers</i> , 27, 1205-1221	253
1991	A. Imberty, A. Buleon V. Tran & S. Perez	Recent Advances in Knowledge of Starch Structure.	<i>Die Starke</i> , 43, 375-384	229
1979	R.H. Marchessault & S. Perez	Conformations of the Hydroxymethyl Group in Crystalline Aldohexopyranose	<i>.Biopolymers</i> ,18, 2369-2374	205
1982	T.L. Blum, Y. Deslandes, R.H. Marchessault, S. Perez & M. Rinaudo	Solid-State and Solution Conformation of Scleroglucan	<i>Carbohydr. Res.</i> 100, 117-130.	161
2001	Bracini & S. Perez	Molecular Basis of Ca++ induced Gelation in Alginates and Pectins: The Egg-Box Model Revisited	<i>Biomacromolecules</i> 2, 1089-1096	185
1992	D. Gallant, B. Bouchet, A. Buleon & S. Perez	Physical Characteristics of Starch Granules and Susceptibility to Enzymatic Digestion	<i>European Journal of Clinical Nutrition</i> , 46, S3-S16	155
2000	A. Imberty & S. Perez	Structure, Conformation and Dynamics of Bioactive Oligosaccharides: Theoretical Approaches and Experimental Validations	<i>Chem. Rev.</i> 100, 4567-4588.	148
1996	I. Tvaroska & S. Perez	Conformational Energy Calculations of Oligosaccharides. A Comparison of Methods and Strategy of Calculations.	<i>Carbohydr. Res.</i> , 149, 389-410	131
1998	S. Perez, A. Imberty, S.B. Engelsens, et al.,	A Comparison and Chemometrics Analysis of Several Molecular Mechanics Force Fields and Parameters Sets for Carbohydrates	<i>Carbohydr. Res.</i> , 314, 141-155	128
2002	E. Mitchell, C. Houles, D. Sudakevitz, M.Wimmerova C. Gauthier, S. Perez A.M. Wu, N. Gilboa-Garber & A. Imberty	Structural Basis for oligosaccharide-mediated adhesion of <i>Pseudomonas aeruginosa</i> in the lungs of cystic fibrosis patients	<i>Nature (Structural Biology)</i> 9, 918-921	112
1979	S. Perez, J.F. Revol S. Poulin-	The Crystal Structure of Poly(Trimethylene Terephthalate	<i>Polymer</i> , 20, 419-	101

Some Recent Selected Publications (see http://www.cermav.cnrs.fr/pages_perso/perez_publications.htm)

2012	M. Reynolds, S. Penades, A. Imberty & S. Perez	Gold Glyconanoparticles: Influence of ligand presentation density on multivalent protein-carbohydrate interactions	<i>Chemistry, A European Journal</i> 18 , 4264-4273
2011	G. Cioci, D. Loganathan, S. Mason, S. Perez & A. Imberty	Low Temperature Neutron Diffraction Structures of N-Glycoprotein Linkage Models and Analogs: Structure Refinement and Bifurcated Hydrogen Bonds	<i>J. Amer. Chem. Soc.</i> , 113 , 10042-10045.
2010	M. Reynolds & S. Perez	Thermodynamics and chemical characterization of protein-carbohydrate interactions: the multivalency issue	<i>Comptes Rendus Chimie</i> , 14 , 74-95
2010	V. Gargiulo, M.A. Morando, A. Nurisso, A. Silipo, S. Perez, A. Imberty, F. J. Canada, J. Jimenez-Barbero, & C. De Castro	Insights on the Conformational Properties of Hyaluronic Acid by using NMR Residual Dipolar Couplings and MD simulations	<i>Glycobiology</i> , 20 , 1208-1216.
2010	S. Perez & D. Samain	Structure and Engineering of Celluloses	<i>Adv. Carbohydrate Chem & Biochem</i> , 64 , 25-116.
2010	S. Perez & E. Bertoft	The Molecular Structures of Starch Components: A comprehensive	<i>Starch</i> , 62 , 389-420.
2009	J. Rossen., L. Miguet & S. Perez,	Shape: Automatic conformation prediction of carbohydrates using a genetic algorithm	<i>J. Cheminformatics.</i> doi: 10.1186/1758-2946-1-16.
2009	P. Donnadieu, S. Lazar, G. Botton, I. Pignot-Paintrand, M. Reynolds & S. Perez	Seeing Structures and Measuring Properties with TEM Images: A Simple and Relevant Contribution to Study Size Effect in Nano-Particle System	<i>Applied Physics Lettr</i> , 94 , Article N.263116
2008	M. Mohamed Naseer Ali, U. Aich, B. Varghese, S. Pérez, A. Imberty & D. Loganathan	On the conformational preferences of the aglycon moiety in the models and analogs of GlcNAc-Asn linkage.	<i>J. Amer. Chem. Soc.</i> 130 , 8317-25
2009	H. Angellier-Coussy, S. Perez, J.L. Putaux, S. Molina-Boisseau, A. Dufrene & E. Bertoft,	The molecular structure of waxy maize starch nanocrystals	<i>Carbohydr. Res.</i> , 344 , 1558-1566.