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PROFESSIONAL QUALIFICATIONS

- Director of the Ecole Nationale Supérieure de Chimie de Rennes (France) (2001-2008)
- Chairman of the French Carbohydrate Group (1997 – 1999).
- Fellow of the Royal Society of Chemistry (1994-...).
- Refereeing duties for various international journals and french granting agencies.
- Chairman of Fédération Gay-Lussac (2006-2008)
- Codirector of the Sino-French Program in Chemical Sciences and Engineering (2009 -) involving Fédération Gay-Lussac, (FGL) France (www.19ecolesdechimie.com) and East China University of Science & Technology, (ECUST), Shanghai, China.

MAIN RESEARCH TOPICS

- **Oligosaccharides and glycoconjugates** for biomedical uses :
 - Oligosaccharides incorporating **hexofuranose moieties** for studying their biosynthesis in pathogenic microorganisms and for designing novel synthetic vaccines.
 - Cationic glycolipids for DNA transfer and targeting.
- **Archaeal glycolip** analogues : design, synthesis and supramolecular assemblies.
- Development of glycosidic amphiphiles and characterisation of their physicochemical properties.
- Facial amphiphilicity of selected carbohydrate derivatives for organic synthesis in aqueous media.
- 120 scientific publications.

CURRENT CONSULTANCY WORK AND AGREEMENTS WITH COMPANIES

- ♦ Ecology and applications of polyglycerol esters – European project – FAIR CT 97-1829 : Henkel KGaA (Düsseldorf, Germany), Rhône-Poulenc (Lyon, France), ONIDOL (Paris, France).
- ♦ Synthesis and biological properties of β -(1,3)-glycanes : Laboratoires GOËMAR (Saint-Malo, France).
- ♦ Novel cationic emulsifiers from agricultural resources ; EIFFAGE Group (Lyon, France).
- ♦ Amphiphilic compounds from alginates : CEVA (Pleubian, France).
- ♦ New green additives for bitumes: Conseil Général 35 (Rennes, France).

SOME REPRESENTATIVE RECENT PAPERS

- C. Denis, K. Misbahi, A. Kerbal, V. Ferrières, D. Plusquellec- Epoxydation of allylic alcohols in aqueous solutions of non surfactant amphiphilic sugars. **Chem. Commun.**, 2001, 2460-2461.
- G. Lecollinet, T. Benvegno, A. Gulik, G. Mackenzie, J.W. Goodby, D.Plusquellec-Supramolecular self-assembling properties of membrane-spanning archaeal tetraether glycolipid analogues. **Chem. Eur. J.**, 2002, **8**, 585-593.
- M. Brard, W. Richter, T. Benvegno, D.Plusquellec- Synthesis and supramolecular assemblies of bipolar archaeal glycolipid analogues containing a cis-1,3 - disubstituted cyclopentane ring. **J. Amer. Chem. Soc.**, 2004, **126**, 393 - 407.
- F. Jamois, V. Ferrières, D. Plusquellec, V. Vetvicka- Glucan-like synthetic oligosaccharides: iterative synthesis of oligo - β - (1,3) - glucans and immunostimulatory effects. **Glycobiology**, 2005, **15**, 393-407.
- R. Euzen, V. Ferrières, D. Plusquelle – General one-step synthesis of free hexofuranosyl 1-phosphates using unprotected 1-thioimidoyl hexofuranosides. **J. Org. Chem.**, 2005, **70**, 847-855.
- R. Euzen, J.P. Guégan, V. Ferrières, D. Plusquellec – First O-glycosylation from unprotected 1-thioimidoyl hexofuranosides assisted by divalent cations. **J. Org. Chem.**, 2007, **72**, 5743-5747.
- J. W. Goodby, V. Görtz, S. J. Cowling, G. Mackenzie, P. Martin, D. Plusquellec, T. Benvegno, P. Boullanger, D. Lafont, Y. Queneau, S. Chambert, J. Fitreman. **Chem. Soc. Review**, 2007, **36**, 1971-2032.
- F. Goursaud, M. Berchel, J. Guilbot, N. Legros, L. Lemiègre, J. Marcilloux, D. Plusquellec, T. Benvegno- Glycine betaine as a renewable raw material to greener new cationic surfactants. **Green Chemistry**, 2008, **10**, 318-328.
- A. Bellomo, R. Daniellou, D. Plusquellec- Aqueous solutions of facial amphiphilic carbohydrates as sustainable media for organocatalyzed direct aldol reactions. **Green Chemistry**, 2012, **14**, 281-284.

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