Yves QUENEAU
PhD, Research Director at CNRS (National Center for Scientific Research)
Honorary Professor at the University of Hull, UK

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Present and past positions:

Since 2011	Head of the Organic and Bioorganic team of ICBMS at INSA Lyon
Since 2009	Honorary professor at the University of Hull, UK, Department of Chemistry.
2004-2015	Deputy-director of the main synthetic organic chemistry department of the University of Lyon, named since 2007 "Institut de Chimie et Biochimie Moléculaires et Supramoléculaires (UMR 5246) (175 persons)

Education and career:

2007	Promoted Directeur de Recherche 1st Class
1995	Promoted to Directeur de Recherche au CNRS, in (Lyon) and director of this lab from 1999 to 2003 (full professor level)
1991	Post doc: Memorial Sloan Kettering Cancer Center, New York, synthesis of taxanes, Prof S.J. Danishefsky
1988	Appointed at CNRS as Chargé de Recherche, Orsay (assistant professor level)
1988	PhD in Organic Chemistry at University of Paris Orsay, Glycoorganic chemistry (supervision Prof A. Lubineau)

Awards:

1994	Bronze Medal of the CNRS
1998	Prize for Scientific Innovation, Europol'Agro (Alternative uses of renewable carbohydrates)
2009, 2012, 2015	Honorary professorship (and renewal) at the University of Hull, UK
2010	CNRS reward for excellence in science
2014	CNRS reward for research and doctoral supervision
2015	Lu Jiaxi Lecture Award, University of Xiamen, College of Chemistry and Chemical Engineering

Research interests: Carbohydrate chemistry: applications in sustainable chemistry and in biological chemistry. Bioorganic chemistry, design and multistep synthesis of signalling molecules, inhibitors of the quorum sensing. Glycoamphiphiles: from ecodesigned surfactants to membrane components. Direct conversion of carbohydrates to platform molecules. Chemistry in water.

International collaborations: China: University of Xiamen, Chair of a Franco Chinese workshop in Lyon in 2006, Co-chair of a workshop in Xiamen in 2007, Guest editor of two special issue on collaborations in chemistry between China and France (Comptes Rendus Chimie, 2008, issue 1 and of Science in China Chemistry, 2010, issue 9). Member of organizing committee French Chinese Green Chemistry Conference in Lyon, 2012, Co-chair of the conference FC2GChem 2014 in Wuhan and Shanghai and FC2GChem 2016 in Lyon. Several courses and lectures given since 2005 in Xiamen, Guangzhou (SCUT, SYS, GIBH CAS), Beijing (Peking Univ, ICCAS), Shanghai (ECNU, ECUST, SIOC), Wuhan (HUST, WIT). United Kingdom: University of Hull. Chili (Santiago). Portugal (Lisbon). India (Pune).

Publications, conferences and communications: 159 contributions (115 articles, 15 book chapters, 5 book co-editions, 7 proceedings, 6 editorials and popularization articles, 11 patents and extensions). Conferences: 182, among which 40 as invited speaker in national and international meetings, and 142 other conferences and seminars. Other communications: 240.

Supervision and co-supervision: PhD: total : 35, among which 9 within collaborative projects achieved in other labs. Other co-workers in whole career: 12 Post docs and 40 undergraduate students. Group size presently: 9 persons (3 staff, 1 master, 1 post doc, 4 PhD students).

Teaching: *Present:* Biorefinery post master programme, INP Grenoble. Master Pro Chimie et Environnement, University of Savoie, Chambéry. Département Biosciences, INSA Lyon. Department of Chemistry, University of Hull, UK. E-learnig course on carbohydrate chemistry, University of Lisbon, Portugal. ECUST, Shanghai, HUST, Wuhan. *Past:* University of Paris Orsay.

Expertise and boards, editorial duties:
Editor of the RSC book series "Carbohydrate Chemistry", Specialist periodical reports. Advisory board du Mediterranean Journal of Chemistry. Advisory board of the Journal of Carbohydrate Chemistry. Referee for: Journal of the American Chemical Society, Journal of Organic Chemistry, Organic Letters, European Journal of Organic Chemistry, Tetrahedron, Tetrahedron Asymmetry, Tetrahedron Letters, Synthesis, Synlett, Letters in Organic Chemistry, Carbohydrate Research, Journal of Carbohydrate Chemistry, Green Chemistry, Green Chemistry Letters and Reviews, Journal of Molecular Catalysis, Comptes Rendus Chimie, Croatica Chemica Acta, Biomacromolecules, Biochimie, Journal of Agricultural and Food Chemistry, Journal of Physical Chemistry, Molecules, Macromolecules, Topics in Current Chemistry, Journal of Surfactants and Detergents, Organic and Biomolecular Chemistry, Bioorganic and Medicinal Chemistry, Chemistry and Physics of Lipids, Journal of Polymer Research, Journal of Enzyme inhibition and Medicinal Chemistry, European Journal of Medicinal Chemistry, Mediterranean Journal of Chemistry, Current Organic Chemistry, Chinese Journal of Chemistry, Beilstein Journal of Organic chemistry, Sensors.

Member of the scientific board of the Pole of Competitiveness Axelera (2015). Evaluation committees for the ANR (National Research Agency) since 2010. Chair of the committe for sustainable chemistry ANR programme (2013) vice-chair (2012) and Chair for the international blank programme for chemistry, 2012. Président du Comité d'Evaluation du programme ANR CD2I, 2013. Président du Comité d'Evaluation du programme ANR Blanc International SIMI7 et SIMI8, 2012. Co chair working group on bioresources, Axelera (2010). Member of the committees for regional funding, 2010, 2014, Member of regional committees in other regions (Champagne-Ardenne, Normandie, Picardie). Member of recruitment committees (Lyon, Grenoble). Member of the National Committee for Scientific Research (Section 16) 2000-2004.

Invited lectures in international meetings:

5th Lingnan Organic Chemistry Conference, SCUT, Guangzhou, 2015. 2nd International conference on bioinspired and biobased chemistry and materials. 2014, Nice. 25emes Journées du Groupe Français des glycosciences, Paris, 2014**.** L'Oréal R&I Workshop on Glycobiology and Glycochemistry, Paris, 2013. Meeting of the National Tunisian Chemical Society, Monastir, 2012. Bioinspired materials, Nice, 2012. Green Chemistry for Industry 2011, Lille. Bilateral Sino-French Conference on Green Chemistry, Guangzhou, 2011. Iberian Carbohydrate Meeting, 2011. Biovision 2011, Lyon. Annual seminar of the Belgium Royal Society of Chemistry, Gembloux, 14 oct 2010. . 6th GERLI meeting, Rennes, 2 juillet 2009, 2nd Bioresources summit, NEPIC, Sedgefield, Durham, 25th nov 2008, XVth symposium AVH, "Utilisation of sugars as raw materials for chemical and biotechnological applications and eco-compatible processing", Reims, March 2008**.** From black to green gold: tomorrow towards a selected chemistry, Lyon, France, 2007. Université de l'Environnement, Lyon, France 2007. 14th European Carbohydrate Symposium, Lübeck, Germany, Septembre 2007. Glupor 6 and 3rd Iberian Carbohydrate Symposium, Coimbra, Portugal, 2005. International Workshop on Carbohydrates in Natural Products Chemistry, Cracow, Poland, 2005. International Symposium on Green Chemistry. Use of renewable ressources. Poitiers, France, 2003. COST Meeting "Towards New Processes for Chemistry",Carry le Rouet, France, 2001. XIth European Carbohydrate Symposium. Lisbonne, Portugal, 2001. COST Workshop on Preparative Aspects of Sonochemistry, Chambéry, France, 2000. International Seminar on Specialty Chemicals for the 21st Century, Valbonne, France, 1999. Conference COST D10 "Towards Environmentally begnin processes using sonochemistry", Chambéry, France, 1999. Workshop Lyon-Lodz, Ruciane-Nida, Pologne, 1999. Young Chemist Workshop on Extreme and non classic conditions, Gottingen, Germany, 1995. Young Organic Chemist workshop, Rocamadour, France, 1994.

Selected Publications

1 Carbohydrate steroid hybrid architectures: the viewpoint of amphiphilicity and self-organisation; Z. Yang et al., Carbohydrate Chemistry, Chemical and Biological Approaches, Specialist Periodical Reports, vol 42, RSC, **2017**, Y. Queneau; A.P. Rauter, T. Lindhorst, Eds, in press.
2 Insights into the Quorum Sensing Regulon of the 1 Acidophilic Acidithiobacillus. S. Mamani et al, *Frontiers Microbiol.* **2016, *7*, 1365.**
3 A continuous spectrophotometric assay that distinguishes between phospholipase A1 and A2 activities. M. El Alaoui et al. *J. Lipid. Res.* **. 2016,** 1589-1597.
4 Synthesis of new dicinnamoyl 4-deoxy quinic acid derivatives, toxicity against *Acyrthosiphon pisum*. X. Li et al. *Org. Biomol. Chem*. **2016**, *14, 2487-2497.*
5 A Pyranose-2-phosphate Motif is Responsible for both Antibiotic Import and Quorum-Sensing Regulation in *Agrobacterium tumefaciens*. A. El Sahili, S. L. Li, et al. *PLOS Pathogens*, **2015**, *11*, e1005071.
6 Glucosyloxymethylfurfural (GMF): a creative renewable scaffold towards bioinspired architectures. J. N. Tan et al., *Pure Appl. Chem.*, **2015,** *87*, 827-839.
7 Effect of Fatty Chains vs Cholesteryl Balance on the Self-organizing Behaviour of Glycosteroidal Bolaphiles. R.Xu et al. *Org. Biomol. Chem*., **2015**, *13*, 783.
8 Biobased solvents for the Baylis Hillman reaction of HMF. J. N. Tan et al. *RSC Adv*. **2015**, *5*, 69238-69242.
9 How sugar polarity can be used in chemistry, Y. Queneau and R. Xu, Carbohydrate Chemistry, Specialist Periodical Reports, vol 40, RSC, Y. Queneau; A.P. Rauter, T. Lindhorst, Eds. **2014**, p31.
10 Development of a high-throughput assay for measuring phospholipase A activity. M. El Alaoui et al. *Anal. Chem.* **2014**, *86*, 10576-10583.
11 Red Emitting Neutral Fluorescent Glycoconjugates for Membrane Optical Imaging. S. Redon et al. *Bioconjugate Chem*. **2014**, *25*, 773-787.
12 HMF derivatives as platform molecules: Aqueous Baylis-Hillman reaction towards new biobased acrylates, J. N. Tan et al. *RSC Advances*, **2013**, *3*, 17649.
13 Hydrophobic and hydrophilic balance and its effect on mesophase, M. K. Singh et al., *Chem. Eur. J.* **2013**, *19*, 5041-5049.
14 A new route towards fimbrolide analogues, M. Sabbah et al., *Med. Chem. Commun.* **2013**, *4*, 363-366.
15 Glyco-lipids as a source of original linear and cross-linked polyurethanes, A. Boyer et al. *Polymer. Chem*., **2013**, *4*, 296-306.
16 Sequestration of edible oil using microcapsules from plant spores, A. Diego-Taboada et al. *J. Mater. Chem.* **2012**, *22*, 9767.
17 Generation of Clickable Glycopolymers from Aqueous RAFT Polymerization of acrylamides. O. Abdelkader et al. *J. Polym. Sci. A*. **2011**, *49*, 1309.
18 Mechanisms and Synthetic Modulators of AHL-dependent Gene Regulation. A. M. Stevens et al., *Chem. Rev*. **2011**, *111*, 4-27.
19 Carbohydrates in sustainable development, Part 1. Renewable resources for chemistry and biotechnology, Eds. A. P. Rauter, Y. Queneau, P. Vogel, Topics in Current Chemistry Vol 294, Springer: Heidelberg, **2010**.
20 Carbohydrates in sustainable development, Part 2. A mine for new synthons and materials. Eds. A. P. Rauter, Y. Queneau, P. Vogel, Topics in Current Chemistry Vol 295, Springer: Heidelberg, **2010**.
21 Functionalization of carbohydrates in water, M.-C. Scherrmann, A. Lubineau, Y. Queneau, "Handbook of Green Chemistry", P. Anastas, Ed. Volume 5 "Green solvents. Reactions in water", C. J. Li, Ed., Wiley, **2010**, 291-330
22 Neutral Push-Pull Chromophores for Nonlinear Imaging of Membrane. C. Barsu et al. *Org. Biomol. Chem.*, **2010**, *8*, 142-150.
23 Enantioselective synhtesis of Ypoamide, J. Chen et al, *J. Org. Chem.* **2009**, 74, 7457.
24 The unusual self organization of a carbohydrate bolaphile, F. Alirachedi et al, *Chem. Commun*, **2009**, 6355.
25 Sucrose chemistry and applications of sucrochemicals, Y. Queneau et al. *Adv. Carbohydr. Chem. Biochem*. **2008**, 61, 217.
26 Thermotropic Liquid Crystalline Glycolipids, J.W. Goodby, V. Görtz, S. J. Cowlinget al., *Chem. Soc. Rev*., **2007**, 36, 1971.
27 Shape dependence in the formation of condensed phases exhibited by disubstituted sucrose esters. V. Molinier et al., *Chem. Eur. J.*, **2007**, 13, 1763.
28 Self-organizing Properties of Monosubstituted Sucrose Fatty Acid Esters: Chain Length and Unsaturation. V. Molinier et al. *Chem. Eur. J.*, **2006**, 12, 3547.
29 Straightforward route for anchoring a glucosyl moiety on nucleophilic species. S. Trombotto et al. *J. Org. Chem.*, **2003**, *68*, 6672.
30 Synthesis and gelling properties of sucrose N-palmitoyl-phenylalanine esters. J. Fitremann, et al. *Langmuir*, **2003**, *19*, 9981.
31 A bilayer to monolayer phase transition in liquid crystal glycolipids. V. Molinier et al., *Chem. Commun*., **2003**, 2860.
32 The effect of molecular shape on the liquid crystal properties of the O-[2-hydroxydedecyl]-Sucroses. Y. Queneau et al. *J. Mater. Chem.*, **2001**, *11*, 2839.
33 Gallic esters of sucrose as a new class of antioxidants. P. Potier et al., *Tetrahedron Lett*., **1999**, *40*, 3387.
34 Carbonyl additions and organometallic chemistry in water. A. Lubineau et al. in Organic Synthesis in Water, P. A. Grieco, Ed.; Thomson Sci. **1998**, p. 102.
35 Water promoted organic reactions. A. Lubineau, J. Augé et Y. Queneau, *Synthesis*, **1994**, 741.
36 A ready synthesis of intermediates containing the A-ring substructure of taxol. Y. Queneau et al. *J. Org. Chem.*, **1992**, *57*, 4043.
37 Aqueous cycloadditions using glyco-organic substrates, A. Lubineau et Y. Queneau, *J. Org. Chem*., **1987**, 52, 1001.