

CHRISTIAN LARROCHE, Ph.D.

Professor and Dean

Polytech Clermont-Ferrand, University Clermont Auvergne (UCA)

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Laboratory Pascal Institute (team "Chemical engineering, engineering thermodynamics and biosystems") and **Laboratory of Excellence IMobS3** (team "Processes of Energy production for mobility")Tel +33 4 73 40 75 01; Fax +33 4 73 40 75 10 ; E-mail: *christian.larroche@uca.fr***EDUCATION AND ACADEMIC TRAINING**

University Blaise Pascal, Clermont-Ferrand II	France	Biochem. Eng.	Ph. D.	1983-1990
University Paul Sabatier, Toulouse II	France	Organic chemistry;	research thesis	1979-1982
National Institute of Applied Sciences	France	Biochem. Eng.	Eng. diploma	1973-1979

PUBLICATIONS

(Scopus *h-index*: 23; Google scholar *h-index* 29; citations more than 3900; Research Gate (RG) Score: 36.79).

24 Books and journal special issues; 15 Book chapters; 114 Refereed Journal Papers; 3 Patents; 24 Proceedings in international conferences; more than 60 communications; 35 invited speaker at various international/national conferences/workshops and universities from more than 10 different countries.

Examples:

- **Biohydrogen**, book published by Elsevier (eds: A. Pandey, J.S. Chang, P. Hallenbeck, C. Larroche), 2013, ISSN: 978-0-444-59555-3, 358 pp.
- **Advances in Industrial Biotechnology**, book published by IK International Publishers, New Delhi (eds: R.S. Singh, A. Pandey, C. Larroche), 2014, ISBN: 978-938-233-2534, 532 pp.
- **Pretreatment of Biomass**, book published by Elsevier (eds: A. Pandey, S. Negi, P. Binod, C. Larroche), 2014, ISBN 9780128000809, 273 pp.
- **Industrial Biorefineries & White Biotechnology**, book published by Elsevier (eds: A. Pandey, R. Höfer, M. Taherzadeh, K. M. Nampoothiri, C. Larroche), 2015, ISBN: 978-0-444-63453-5, 710 pp.
- **Current Developments in Biotechnology and Bioengineering, Book 6: Bioprocesses, Bioreactors and Controls**, book series published by Elsevier (vol 6 eds: C. Larroche, M. A. Sanroman, G. Du, A. Pandey), 2016, ISBN: 978-0-444-63663-8
- **Z. TRAD, C. VIAL, J.P. FONTAINE, C. LARROCHE (2015)**. Modeling of hydrodynamics and mixing in a submerged membrane bioreactor. *Chem. Eng. J.*, 282, 77-95.
- **V. BELIGON, L. POUGHON, G. CHRISTOPHE, A. LEBERT, C. LARROCHE, P. FONTANILLE (2015)**. Improvement and modelling of culture parameters to enhance biomass and lipid production by the oleaginous yeast *Cryptococcus curvatus* grown on acetate. *Biores. Technol.*, 192, 582-591.
- **Z. TRAD, J. AKIMBOMI, C. VIAL, C. LARROCHE, M. J. TAHERZADEH, J. P. FONTAINE (2015)**. Development of a submerged anaerobic membrane bioreactor for concurrent extraction of volatile fatty acids and biohydrogen production. *Bioresource Technol.*, 196, 290-300.
- **V. BELIGON, G. CHRISTOPHE, P. FONTANILLE, C. LARROCHE (2016)**. Microbial lipids as potential source to food supplements. *Current Opinion in Food Science (COFS 94)*, 7, 35-42.
- **V. BELIGON, L. POUGHON, G. CHRISTOPHE, A. LEBERT, C. LARROCHE, P.**

FONTANILLE (2016). Validation of a predictive model for fed-batch and continuous lipids production processes from acetic acid using the oleaginous yeast *Cryptococcus curvatus*. *Biochem. Eng. J.*, 111, 117-128.

– **Z. TRAD, J.P. FONTAINE, C. LARROCHE, C. VIAL (2016).** Multiscale mixing analysis and modeling of biohydrogen production by dark fermentation. *Renewable Energy*, 98, 264-282.

– **Z. TRAD, C. VIAL, J.P. FONTAINE, C. LARROCHE (2016).** Mixing and liquid-to-gas transfer under digester operating conditions. *Chem. Eng. Sci.*,

– **V. BELIGON, A. NOBLECOURT, G. CHRISTOPHE, A. LEBERT, C. LARROCHE, P. FONTANILLE (2016).** Proof of concept for biorefinery approach aiming at two bioenergy production compartments, H₂ and biodiesel coupled by an external membrane. *Biofuels*, in press

PROFESSIONAL POSITIONS AND ACADEMIC EXPERIENCE

- Full professor at Polytech Clermont-Ferrand, a graduate school of engineering of University Clermont Auvergne, Clermont-Ferrand, France since 2001.
- Responsible of the **Biological Engineering department** of Polytech during 10 years (1992-2002)
- **Vice-president of the university** in charge of valorization and technology transfer (2008-2012)
- **Director (Dean) of Polytech Clermont-Ferrand since 2012.** Polytech is a graduate school of engineering of the university with 1000 students and 80 permanent faculties.

PROFESSIONAL SOCIETIES AND SERVICES

(A) Professional Affiliations

International Forum on Industrial Bioprocesses (IFIBiop, co-founder in 2004 under the name ICBF, now member of the council as administrator); French Society for Process Engineering (SFGP, member and actively participating in the working group Food and Biochemical Engineering); French Federation of Biotechnology (FFB); European federation of Chemical Engineering (EFCE).

(B) Editor of Bioresource Technology (IF 2015 4.917, more than 7000 manuscripts received per year).

- Member of the editorial board of *Brazilian Archives of Biology and Technology*, *Journal of Energy and Environmental Sustainability*. Formerly member of the editorial boards of *Indian Journal of Biotechnology*, *Journal of Food, Agriculture and Environment*.

- Reviews for *Bioresource Technology* and about 10 other journals (*Trends Biotechnol.* (TIBTECH), *Appl. Biochem. Biotechnol.*, *J. Agric. Food Chem.*, *Biochem. Eng. J.*, *Proc. Biochem.*, *J. Nat. Prod.*, *Enzyme Microb. Technol.*....).