

Professor Felicity Roddick

Position	Deputy PVC, Research and Innovation
School / Work Unit	Science, Engineering & Health Office
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Location	Building: 14 Level: 12 Room: 12 City Campus
College/Portfolio	Science, Engineering & Health Office



Qualifications

- DEng (RMIT University)
- MAppSc in Environmental Engineering (University of Melbourne)
- BAppSc (Applied Biology) with Distinction (RMIT)
- FRMIT- Fellowship Diploma in Applied Biology

Employment History

- 2008-Associate Dean (Research and Innovation) College of Science Engineering and Health
- 2004- Professor (Environmental Technologies)
- 2001-2004 Foundation Head, School of Civil and Chemical Engineering, RMIT University
- 1999- Professor (Environmental Technologies) Head, Department of Chemical and Metallurgical Engineering, RMIT University
- 1998 Associate Head of Department, as above
- 1991- Associate Professor (Biochemical Engineering) in the Foundation Professoriate, as above

Affiliations / Professional Memberships

- Institution of Engineers, Australia (Fellow)
- Institution of Chemical Engineers (Fellow)
- Environment Institute of Australia (Fellow)
- Membrane Society of Australasia (Member)
- Australian Water and Wastewater Association (Member)

Educational Activities

Responsible for the development and delivery of environmental engineering and biochemical engineering subjects in the Chemical Engineering program.

RMIT University representative for Water Quality Research Australia (successor organisation to CRC for Water Quality and Treatment) and Chairman of its Education Committee.

Have supervised 33 (as senior supervisor) and 9 (as second supervisor) postgraduate students.

Areas of Research and Consulting Expertise

- Potable and waste water treatment via physical, chemical and biological means, and combinations of these
- Removal of organic matter
- Advanced oxidation processes and membrane processes

Recent Selected Publications

- Meizler, A., Roddick, F. and Porter, N (2011) A novel glass support for the immobilization and UV-activation of horseradish peroxidase for treatment of halogenated phenols. *Chemical Engineering Journal* 172, 792– 798
- Puspita, P., Roddick, F. A. and Porter, N. A. (2011) Decolourisation of secondary effluent by UV-mediated processes, *Chemical Engineering Journal* 171 (2), 464-473
- Fan L ., Nguyen T. and Roddick F.A. (2011) Characterisation of the impact of coagulation and anaerobic bio-treatment on the removal of chromophores from molasses wastewater, *Water Research* 45 No. 13, 3933-3940
- Hakata Y., Roddick F.A. and Fan L . (2011) Impact of ultrasonic pre-treatment on the microfiltration of a biologically treated municipal effluent, *Desalination* (in press, doi:10.1016/j.desal.2011.03.032)
- Liu K., Roddick F.A. and Fan L . (2011) Potential of UV/H₂O₂ oxidation for enhancing the biodegradability of municipal reverse osmosis concentrates, *Water Science and Technology* 63 No. 11, 2605-2611
- Goh, Y. T., Harris, J. L . and Roddick F. A. (2011) Impact of *Microcystis aeruginosa* on membrane fouling in a biologically treated effluent. *Water Science and Technology* 63 (12) 2853-2859
- Meizler, A., Roddick, F.A. and Porter, N. (2010) Continuous enzymatic removal of 4-bromophenol initiated by UV irradiation. *Water Science and Technology* 62(9) 2016-2020
- Goh, Y. T., Harris, J.H. and Roddick, F. A. (2010) Reducing the effect of cyanobacteria in the microfiltration of secondary effluent. *Water Science and Technology* 62(7) 1682-1688
- Nguyen, S. and Roddick, F.A. (2010) Effects of ozonation and biological activated carbon filtration on membrane fouling in ultrafiltration of an activated sludge effluent. *Journal of Membrane Science* 363 (1-2) 271-277
- Beale, D. J., Kaserzon, S. L ., Porter, N. A., Roddick, F. A. and Carpenter, P. (2010) Detection of s-triazine pesticides in natural waters by modified large-volume direct injection HPLC. *Talanta*, 82 (2), 668-674.
- Bond, T., Goslan, E.H., Jefferson, B., Roddick, F., Fan, L . and Parsons, S.A. (2009) Chemical and biological oxidation of NOM surrogates and effect on HAA formation. *Water Research*, 43 (10), 2615-2622
- Solarska, S., May, T., Roddick, F. A. and Lawrie, A. C. (2009) Isolation and screening of natural organic matter-degrading fungi. *Chemosphere*, 75 (6), 751-758

- Soh, Y.C, Roddick, F.A. and van Leeuwen, J. (2008) The impact of alum coagulation on the character, biodegradability and disinfection by-product formation potential of reservoir NOM fractions. *Water Science and Technology*, 58(6), 1173-1179
- Buchanan, W., Roddick, F.A. and Porter, N. A. (2008) Removal of VUV pre-treated natural organic matter by biologically activated carbon columns. *Water Research*, 42, pp 3335-3342
- Fan L ., Nguyen, T., Roddick F.A. & Harris J. L . (2008) Low-pressure filtration of secondary effluent in water reuse: Pre-treatment for fouling reduction, *Journal of Membrane Science*, 320 No. 1-2, 135-142