

Prof Fiona Regan Publication List

Invited Book

- Regan F, Chapman, J and Sullivan, T. 2012, Nanoparticles in anti-microbial materials: their use and characterisation, RSC Publishing.

Book Chapters

- F. Regan and B. Fogarty, Endocrine disrupting chemicals, Encyclopaedia of Analytical Chemistry, 2005, Vol. 2. Elsevier Publishers Ltd.

Invited Chapters

- Sustainable Water: Chemical Science Priorities, RSC, November 2007.
(http://www.rsc.org/images/waterreport_tcm18-108403.pdf) T. Sullivan, J. Chapman, F. Regan, Nanoantimicrobial materials and their characterisation, Nano-Antimicrobials, Springer, 2011

Book Reviews:

(i) F. Regan, HSPS, Volume 35, Par 2, 371-382 (2005) " Attis, David and Charles Mollan, eds., Science and Irish Culture: Why the history of science matters in Ireland. Vol. 1 Dublin: Royal Dublin Society, 2004. 194 pp."
(ii) Prentice Hall Review: Practical Skills in Forensic Science, Langford etc al, Prentice Hall Publ. 2005.

Published Reports

- F. Regan, A. Lawlor and A. McCarthy, SmartCoast Project – Smart Water Quality Monitoring System, STRIVE Report Series No. 30, Environmental Protection Agency. ISBN: 978-1-84095-310-7

- F. Regan, A. Lawlor, B. O'Flynn and J. Wallace, DEPLOY: Smart Demonstration of Online Water Quality Monitoring on the River Lee, Cork, Ireland., STRIVE Report Series No. 82, Environmental Protection Agency. ISBN: 978-1-84095-423-4. 2010

- F. Regan, L. Jones and J. Chapman, Monitoring Criteria for priority Chemicals leading to emission factors, STRIVE Report No. , Environmental Protection Agency. ISBN: 2012

- F. Regan, Assessing, preventing and managing priority hazardous substances in surface and groundwater, STRIVE Report No. , Environmental Protection Agency. ISBN: 2012.

Refereed Journal articles

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1. *Regan, F., Meaney, M., MacCraith, B. And Vos, J. G., On-line monitoring of organic species in the aquatic environment using infrared optical fibres, Proc. Environmental Analysis of Pesticides and their Conversion Products in the Aquatic Environment, Barcelona, European Commission Water Pollution Research Report 31, 49-52 (1994).

2. Regan, F. B., Meaney, M. P., and Lunte, S. M., Determination of metal ions by capillary electrophoresis using on-column complexation with 4-(2-pyridylazo)resorcinol following trace enrichment by peak stacking, *J. Chromatogr.*, 657 (1994) 409-417.

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3. Meaney, M., Regan, F., Pesticide Monitoring using ATR spectroscopy, Proc. Environment Workshop on On-line Monitoring of Micropollutants in Aquatic Systems, Thessaloniki, European Commission Water Pollution Research Report 33, (1995).

4. Walsh, J. E., MacCraith, B. D., Regan, F., Vos, J. G. and Meaney, M., Midinfrared fibre sensor for the in-situ monitoring of chlorinated hydrocarbons, Proc. Sensors and their Applications VII, Ed., Augousti, A. T., 75-80, 1995.

5. Walsh, J. E., MacCraith, B. D., Regan, F., Vos, J. G., Meaney, M., Lancia, A. and Artjushenko, S., Mid-infrared fibre sensor for the in-situ detection of chlorinated hydrocarbons, Proc. SPIE, 2508 (1995) 233.

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6. Walsh, J. E., MacCraith, B. D., Regan, F., Vos, J. G., Meaney, M., Lancia, A. and Artjushenko, S., Sensing of chlorinated hydrocarbons and pesticides in water using polymer coated mid-infrared optical fibres, Proc. Sensors and Signals III, *Analyst*, 121 (1996) 789-792.

7. *Regan, F., Meaney, M., Vos, J. G., MacCraith, D. D. and Walsh, J. E., Determination of Pesticides in Water using ATR-FTIR spectroscopy on PVC / Chloroparaffin Coatings, *Anal. Chim. Acta*, 334 (1996) 85-92.

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8. *Regan, F., MacCraith, B. D., Walsh, O'Dwyer, K, J. E., Vos, J. G. and Meaney, M., Novel Teflon-coated optical fibres for TCE determination using FTIR spectroscopy, *Vibrat. Spectros.*, 14 (1997). 239-246.

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9. *B. Fogarty, F. Regan and E. Dempsey, Separation of two groups of oestrogen mimicking compounds using micellar electrokinetic chromatography. *J. Chromatography A*, 895 (2000) 237-246.

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11. *F. Regan, A. Moran, B. Fogarty and E. Dempsey, Development of comparative methods using GC-MS and capillary electrophoresis for the determination of endocrine disrupting chemicals in bio-solids. *J. Chromatography B*, 770 (2002) 243-253.

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12. *F. Regan, F. Walsh and J. Walsh, Development of plasticised PVC sensing films for the determination of BTEX compounds in aqueous samples. *Intern. J. Environ. Anal. Chem.*, 83, 7-8, 621-631, (2003)

13. *D. Leamy and F. Regan, A robust spin-coated optical sensing device for rapid determination of predominant metal ions in wastewater streams. *Intern. J. Environ. Anal. Chem.*, 83, 867-877 (2003)

14. *F. Regan, A. Moran, B. Fogarty and E. Dempsey, Novel modes of capillary electrophoresis for the determination of endocrine disrupting chemicals in the environment, *J. Chromatography A*, 1014 (2003) 141-152.

15. B. Fogarty, E. Dempsey and F. Regan, Potential of micro emulsion electrokinetic chromatography for separation of priority endocrine disrupting compounds, *J. Chromatogr. A*. 1014 (2003) 129-139.

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16. F. Regan and Y. Shakalisava, Rapid simultaneous determination of alkylxanthines by CZE and its applications in analysis of pharmaceuticals and food samples *Anal. Chim. Acta* 540 (2005) 103-110

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17. Gillian Whitaker, Brendan Kincaid, Malcolm Smyth, Ray Leonard, Fiona Regan, The potential of Capillary Electrophoresis for the Analysis of Inorganic and Acidic anions in cyanoacrylate adhesives, *Electrophoresis*, 2006, 27, 4532-4537.

18. Yuliya Shakalisava and Fiona Regan. Determination of association constants of inclusion complexes of steroid hormones and cyclodextrins from their electrophoretic mobility. *Electrophoresis* 2006, 27, 3048-3056.

19. Michael McMahon, Fiona Regan and Helen Hughes, The determination of total germanium in real food samples including Chinese herbal remedies using graphite furnace atomic absorption spectroscopy, *Food Chemistry*, Volume 97, Issue 3, August 2006, Pages 411-417,

20. Keith Farrington, Edmond Magner and Fiona Regan, Predicting the performance of molecularly imprinted polymers: Selective extraction of caffeine by molecularly imprinted solid phase extraction *Analytica Chimica Acta*, 566, 1, 27 2006, 60-68

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22. Antifouling strategies for marine and riverine sensors, Aine Whelan and Fiona Regan, *J. Environ. Monit.*, 2006, 8, 880

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24. A. Stafiej, K. Pyrznska, F. Regan, Determination of anti-inflammatory drugs and estrogens in water by HPLC with UV detection, *J. Sep. Sci.* 2007, 30, 985-991.

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26. Keith Farrington and Fiona Regan, Investigation of the nature of MIP recognition: The development and characterisation of a MIP for Ibuprofen , *Biosensors and Bioelectronics*, Volume: 22, (2007) 1138-1146

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27. G. Whitaker, A Lillquist, S. A. Pasas, R. O'Connor, F. Regan, C. E. Lunte, and M. R. Smyth, CE-LIF method for the separation of anthracyclines: Application to protein binding analysis in plasma using ultrafiltration", *Journal of Separation, Science*, 2008.

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29. Emma Weir, Antoin Lawlor, Aine Whelan, Fiona Regan, The use of nanoparticles in anti-microbial materials and their characterisation, *Analyst*. 133, 2008, 835-845.

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31. F. Regan, A. Lawlor, B. O Flynn¹, J. Torres, R Martinez-Catala, C. O'Mathuna and J. Wallace, A demonstration of wireless sensing for long-term monitoring of water quality, *IEEE*, October 2009.

32. F. Regan, A. Lawlor and A. McCarthy, EPA STRIVE Report Series No. 30, SmartCoast project- Smart Water Quality Monitoring System, EPA 2009.

33. B. Schazmann, F. Regan, M. Ross, D. Diamond and B. Paull Introducing Quality Control in the chemistry teaching laboratory using control charts, *J. Chem. Ed.* (2009) 86, 9, 1085-1090.

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34. J. Chapman, E. Weir and F. Regan, Period Four Metal Nanoparticles on the Inhibition of Biofouling, *Colloids and Surfaces B: Biointerfaces*, 78 (2010) 208-216 (2.78)

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50.Edel O’Connor, Alan Smeaton, Noel O’Connor, Fiona Regan, A neural network approach to smarter sensor networks for water quality monitoring, Sensors 2012, 12, 4 4605-4632

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55. James Chapman, Claire Hellio, Tim Sullivan and Fiona Regan, Bioinspired synthetic macroalgae: examples from nature for antifouling applications, International Biodeterioration & Biodegradation, xxx (2013) 1-8
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57. Fiona Regan, Timothy Sullivan, Ciprian Briciu, Helen Cooney, Kevin Murphy, Dian Zhang, Edel O'Connor, A Smart City-Smart Bay Project – Establishing an Integrated Water Monitoring System for Decision Support in Dublin Bay, Sensor Comm 2013.
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60. F. Regan and E. O'Donoghue, Sample matrix effects on measurements of chlorinated hydrocarbons using a fibre-optic infrared sensor, Instrumentation Science and Technology, 2013 in press.
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