

Environmental Chemistry

Barreca D., Copley M. P., Graham A. E., Holmes J. D., Morris M. A., Seraglia R., Spalding T. R., Tondello E. (2006) *Methanolysis of styrene oxide catalyzed by a highly efficient zirconium-doped mesoporous silica*, Applied Catalysis, A: General, 304 14-20.

Carrasco N., Doussin J.F., O'Connor M., et al., (2007) *Simulation chamber studies of the atmospheric oxidation of 2-methyl-3-buten-2-ol: reaction with hydroxyl radicals and ozone under a variety of conditions*, Journal of Atmospheric Chemistry, 56 (1) 33-55.

Chiappini L., Carrasco N., Temine B., et al., (2006) *Gaseous and particulate products from the atmospheric ozonolysis of a biogenic hydrocarbon, sabinene*, Environmental Chemistry, 3 (4) 286-296, 2006

Clifford G.M. and Wenger J.C. (2006) *Rate coefficients for the gas-phase reaction of hydroxyl radicals with the dimethylbenzaldehydes*, International Journal of Chemical Kinetics, 38 (9) 563-569.

Grannas A.M., Jones A.E., Dibb J., Sodeau J., et al., (2007) *An overview of snow photochemistry: evidence, mechanisms and impacts*, Atmospheric Chemistry and Physics, 7 (16) 4329-4373.

Hanrahan J. P., Copley M. P., Spalding T. R., Holmes J. D., Steytler D.C., Amenitsch H., Steinhart M., Morris M. A. (2007) *In situ order-disorder phenomena in the synthesis of mesoporous silica*, J. Non-Crystal. Solids (in press).

Hanrahan J. P., Donovan A., Morris M. A., Holmes J. D. (2007) *Synthesis and swelling of large pore mesoporous silica spheres*, J. Mater. Chem., 17 3881-3887.

Harrington M.T., Brennan E., Wenger J.C., et al., (2006) *The remarkable reaction of N₂O with a binary component lanthanide oxide mixture*, Chemical Communications, (37) 3889-2890.

Harrington M.T., Brennan E., Wenger J.C. and Morris M.A. (2006) *The remarkable reaction of N₂O with a binary component lanthanide oxide mixture*, Chem. Comm., 7, 3889.

Hellebust S., O'Riordan B., Sodeau J. (2007) *Cirrus cloud mimics in the laboratory: An infrared spectroscopy study of thin films of mixed ice of water with organic acids and ammonia*, Journal Of Chemical Physics, 126 (8) Art. No. 084702.

Hellebust S., Roddis T., Sodeau J.R. (2007) *Potential role of the nitroacidium ion on HONO emissions from the snowpack*, Journal Of Physical Chemistry, A 111 (7) 1167-1171.

Holmes J. D., Petkov N., Wang K. (2007) *Applications of supercritical fluid in the preparation and processing of mesoporous materials*, Stud. Surf. Sci. Catal. (in press).

Li Z., Jaroniec M., Papakonstantinou P., Tobin J. M., Vohrer U., Attard G., Kumar S., Holmes J. D. (2007) *Supercritical fluid growth of porous carbon nanocages*, Chem. Mater., 19 3349-3354.

O'Connor M.P., Wenger J.C., Mellouki A, et al.,(2006) *The atmospheric photolysis of E-2-hexenal, Z-3-hexenal and E,E-2,4-hexadienal*, Physical Chemistry Chemical Physics, 8 (44) 5236-5246, 2006

O'Driscoll P., Lang K., Minogue N., Sodeau J., et al., (2006) *Freezing halide ion solutions and the release of interhalogens to the atmosphere*, Journal of Physical Chemistry, A 110 (14) 4615-4618.

Ruth A.A., Orphal J. and Fiedler S.E.(2007) *Fourier-transform cavity-enhanced absorption spectroscopy using an incoherent broadband light source*, Applied Optics, 46 (17) 3611-3616.

Ruth A.A. (2006) *Spin-lattice relaxation and rotational motion of aromatic triplet-state molecules in supercooled alkane solvents (Part I)* Journal of Physical Chemistry, A 110 (9) 3138-3150.

Ruth A.A. and Young J.A. (2006) *Generation of CdSe and CdTe nanoparticles by laser ablation in liquids*, Colloids and Surfaces A-Physicochemical and Engineering Aspects, 279 (1-3) 121-127.

Simpson W.R., von Glasow R., Riedel K., Sodeau J., et. al., (2007) *Halogens and their role in polar boundary-layer ozone depletion*, Atmospheric Chemistry and Physics, 7 (16) 4375-4418.

Temime B., Healy R.M., Wenger J.C.(2007) *A denuder-filter sampling technique for the detection of gas and particle phase carbonyl compounds*, Environmental Science & Technology, 41 (18) 6514-6520.

Venables D.S., Gherman T., Orphal J., Wenger J.C., Ruth A.A., (2006) *High sensitivity in situ monitoring of NO₃ in an atmospheric simulation chamber using incoherent broadband cavity-enhanced absorption spectroscopy*, Environmental Science & Technology, 40 6758-6763.

Wang K., Wei M., Morris M. A., Zhou H., Holmes J. D. (2007) *Mesoporous titania nanotubes: their preparation and application as electrode materials for rechargeable lithium batteries*, Adv. Mater., 19 3016-3020.

Wang K., Lin Y., Morris M. A., Holmes J. D. (2006) *Preparation of MCM-48 materials with enhanced hydrothermal stability*, J. Mater. Chem., 16 4051-4057.

Wei M., Wang K., Morris M. A., Holmes J. D., Zhou H. (2007) *Supercritical fluid processing of mesoporous crystalline TiO₂ thin films for highly efficient dye-sensitised solar cells*, J. Mater. Chem., 17 3888-3893 (Cover Issue).

Environmental Microbial Genomics

Abbas A., Adams C., Scully N., O'Gara F., et al., (2007) *A role for TonB1 in biofilm formation and quorum sensing in Pseudomonas aeruginosa*, FEMS Microbiology Letters, 274 (2) 269-278.

Andrzejewska J., Lee S. K., Olbermann P., Lotzing N., Katzowitsch E., Linz B., Achtman M., Kado C. I., Suerbaum S., and Josenhans C. (2006) *Characterization of the pilin ortholog of the Helicobacter pylori type IV cag pathogenicity apparatus, a surface-associated protein expressed during infection*, J. Bacteriol. 188:5865-5877.

Bentley S. D., Vernikos G. S., Snyder L. A., Churcher C., Arrowsmith C., Chillingworth T., Cronin A., Davis P. H., Holroyd N. E., Jagels K., Maddison M., Moule S., Rabinowitsch E., Sharp S., Unwin L., Whitehead S., Quail M. A., Achtman M., Barrell B., Saunders N. J. and Parkhill J. (2007) *Meningococcal genetic variation mechanisms viewed through comparative analysis of serogroup C strain, FAM18*. PLoS. Genet. 3:e23.

Collins C., Murray P.G., Denman S., Morrissey J.P., Byrnes L., Teeri T.T. and Maria G. Tuohy, MG., (2007) *Molecular cloning and expression analysis of two distinct β -glucosidase genes, bg1 and aven1, with very different biological roles from the thermophilic, saprophytic fungus Talaromyces emersonii*, Mycol Res., 2007 111 840-9.

Didelot X., Achtman M., Parkhill J., Thomson N. R. and Falush D. (2007) *A bimodal pattern of relatedness between the Salmonella Paratyphi A and Typhi genomes: Convergence or divergence by homologous recombination?* Genome Res. 17:61-68.

Eppinger M., Baar C., Linz B., Raddatz G., Lanz C., Keller H., Morelli G., Gressmann H., Achtman M., and Schuster S. C. (2006) *Who ate whom? Adaptive Helicobacter genomic changes that accompanied a host jump from early humans to large felines*, PLoS. Genet. 2:e120.

Falush D., Torpdahl M., Didelot X., Conrad D. F., Wilson D. J., and Achtman M. (2006) *Mismatch induced speciation in Salmonella: model and data*, Philos. Trans. R. Soc. Lond B Biol. Sci. 361:2045-2053.

Hickey A.M., Gordon L., Dobson A.D.W., et al., (2007) *Effect of surfactants on fluoranthene degradation by Pseudomonas alcaligenes PA-10*, Applied Microbiology and Biotechnology, 74 (4) 851-856.

Jones B.V., Marchesi J.R. (2007) *Accessing the mobile metagenome of the human gut microbiota*, *Molecular Biosystems*, 3 (11) 749-758.

Jones B.V., Marchesi J.R. (2007) *Transposon-aided capture (TRACA) of plasmids resident in the human gut mobile metagenome*, *Nature Methods*, 4 (1) 55-61.

Kabak B., Dobson A.D.W. and Var I. (2006) *Strategies to prevent mycotoxin contamination of food and animal feed: a review*, *Critical Reviews in Food Science and Nutrition*, 46 593-619.

Kennedy J., Marchesi J.R., Dobson A.D.W. (2007) *Metagenomic approaches to exploit the biotechnological potential of the microbial consortia of marine sponge*, *Applied Microbiology and Biotechnology*, 75 (1) 11-20.

Kerr L.M., Marchesi J.R. (2006) *Isolation of novel bacteria able to degrade alpha-halocarboxylic acids by enrichment from environmental samples*, *Chemosphere*, 64 (5) 848-855.

Kiely P.D., Haynes J.M., Higgins C.H., Franks A., Mark G.L., Morrissey J.P., O'Gara F. (2006) *Exploiting new systems-based strategies to elucidate plant-bacterial interactions in the rhizosphere*, *Microb Ecol.*, 51(3) 257-66.

Leimkugel J., Hodgson A., Forgor A. A., Pfluger V., Dangy J. P., Smith T., Achtman M., Gagneux S. and Pluschke G. (2007) *Clonal Waves of Neisseria colonisation and disease in the African Meningitis Belt: Eight-year longitudinal study in northern Ghana*, *PLoS. Med.* 4:e101.

Linz B., Balloux F., Moodley Y., Manica A., Liu H., Roumagnac P., Falush D., Stamer C., Prugnolle F., Van Der Merwe S. W., Yamaoka Y., Graham D. Y., Perez-Trallero E., Wadstrom T., Suerbaum S. and Achtman M. (2007) *An African origin for the intimate association between humans and Helicobacter pylori* *Nature* 445:915-918.

Mark G.L., Morrissey J.P., Higgins P., O'Gara F., et al., (2006) *Molecular-based strategies to exploit Pseudomonas biocontrol strains for environmental biotechnology applications*, *Fems Microbiology Ecology*, 56 (2) 167-177.

Mark G.L., Dow J.M., Kiely P., Higgins H., Haynes J., Baysse C., Abbas A., Foley T., Franks A., Morrissey J. and O'Gara F. (2006) *Elucidation of molecular interactions in the rhizosphere directed by transcriptome profiling of bacterial responses to root exudates*, *Proc. Natl Acad Sci USA*, 71 1818.

Marchesi J.R., Holmes E., Khan F., et al., (2007) *Rapid and noninvasive metabonomic characterization of inflammatory bowel disease*, *Journal of Proteome Research*, 6 (2) 546-551.

Marchesi J. and Shanahan F. (2007) *The normal intestinal microbiota*, *Current Opinion in Infectious Diseases*, 20 (5) 508-513.

Maunsell B., Adams C. and O'Gara F. (2006) *Complex regulation of AprA metalloprotease in Pseudomonas fluorescens M1114: evidence for the involvement of iron, the ECF sigma factor, PbrA and pseudobactin M1114 siderophore*, Microbiology 152, 29-42.

Mooney A., O'Leary N.P. and Dobson A.D.W. (2006) *Cloning and functional characterisation of the styE gene involved in styrene transport in Pseudomonas putida CA-3*, Appl. Environ. Microbiol., 72, 1302-1309.

Moriarty J., Marchesi J.R. and Metcalfe A. (2007) *Bounds on the distribution of the number of gaps when circles and lines are covered by fragments: Theory and practical application to genomic and metagenomic projects*, BMC Bioinformatics, 8 Art. No. 70.

Mulcahy H., O'Callaghan J., O'Grady E.P., O'Gara F., et al. (2006) *The posttranscriptional regulator RsmA plays a role in the interaction between Pseudomonas aeruginosa and human airway epithelial cells by positively regulating the type III secretion system*, Infection and Immunity, 74 (5) 3012-3015.

Mulcahy H., O'Rourke K.P., Adams C., O'Gara F., et al. (2006) *LST1 and NCR3 expression in autoimmune inflammation and in response to IFN-gamma, LPS and microbial infection*, Immunogenetics, 57 (12) 893-903.

O'Callaghan, J. and Dobson, A.D.W. (2006) *Phylogenetic analysis of polyketide synthase genes from Aspergillus ochraceus*, Mycotoxin Research, 22, 125-133.

O'Callaghan J., Stapleton P.M. and Dobson A.D.W. (2006) *Ochratoxin A biosynthetic genes in Aspergillus ochraceus are differentially regulated by pH and nutritional stimuli*, Fungal Genet. Biol., 43 213-221.

O'Callaghan J. and Dobson A.D.W. (2006) *Molecular characterisation of ochratoxin A biosynthesis and producing fungi*, Advances in Applied Microbiology, 58 227-243.

O'Grady E., Mulcahy H., Adams C., Morrissey J.P. and O'Gara F. (2007) *Manipulation of host Kruppel-like factor (KLF) function by exotoxins from diverse bacterial pathogens*, Nat Rev Microbiol., 5 337-41.

O'Grady E.P., Mulcahy H., O'Callaghan J., O'Gara F., et al., (2006) *Pseudomonas aeruginosa infection of airway epithelial cells modulates expression of Kruppel-like factors 2 and 6 via RsmA-mediated regulation of type III exoenzymes S and Y*, Infection and Immunity, 74 (10) 5893-5902, Oct 2006

Olsen M., Jonsson N., Magan N., Banks N., Fanelli C., Rizzo A., Haikara A., Dobson A.D.W., Frisvad J., Holmes S., Ollku J., Persson S-J and Börjesson T. (2006) *Prevention of ochratoxin A in cereals in Europe*, Adv. Exp. Med. Biol., 571 317-342,

O'Mahony M., Dobson A.D.W., Jeremy Barnes J. and Singleton I. (2006) *The use of ozone in the remediation of polycyclic aromatic hydrocarbon contaminated soil*, Chemosphere, 63 307-314.

Power T., Ortoneda M., Morrissey J.P. and Dobson A.D.W. (2006) *Differential regulation of genes involved in iron metabolism in Aspergillus fumigatus*, International Microbiology 9, 281-287.

Riedel C.U., Casey P.G., Mulcahy H., O'Gara F., et al., (2007) *Construction of p16Slux, a novel vector for improved Bioluminescent Labeling of gram-negative bacteria*, Applied and Environmental Microbiology, 73 (21) 7092-7095.

Roumagnac P., Weill F.-X., Dolecek C., Baker S., Brisse S., Chinh N. T., Le T. A., Acosta C. J., Farrar J., Dougan G. and Achtman M. (2006) *Evolutionary history of Salmonella Typhi.*, Science 314:1301-1304.

Roumagnac P., Gagnevin L., Pruvost O. and M. Achtman. (2006) *Insights into structure and evolution of bacterial species that are revealed by molecular methods*, In M. Tibayrenc (ed.), Encyclopedia of infectious diseases: Modern Methodologies. John Wiley & Sons, Ltd. New York.

Scanlan P.D., Shanahan F., O'Mahony C., Marchesi J.R., et al., (2006) *Culture-independent analyses of temporal variation of the dominant fecal microbiota and targeted bacterial subgroups in Crohn's disease*, Journal of Clinical Microbiology, 44 (11) 3980-3988.

Scanlan P.D., Shanahan F., O'Mahony C., Marchesi J.R. et al., (2007) *Culture-independent analyses of temporal variation of the dominant fecal microbiota and targeted bacterial subgroups in Crohn's disease*. Journal of Clinical Microbiology, 45 (5) 1671-1671.

Simons V., Morrissey J.P., Latijnhouwers M., Csukai M., Cleaver A., Yarrow C. and Osbourn A.E. (2006) *Dual effects of plant steroidal alkaloids on Saccharomyces cerevisiae*, Antimicrobial Agents and Chemotherapy, 50 2732-2738.

Tobin K.M., O'Leary N.D., Dobson A.D.W. and O'Connor K.E. (2007) *Effect of heterologous expression of phaG [(R)-3-hydroxyacyl-ACP-CoA transferase] on polyhydroxyalkanoate accumulation from the aromatic hydrocarbon phenylacetic acid in Pseudomonas species*, FEMS Microbiol. Letts., 268 9-15.

Tzitzilonis C., Prince S. M., Collins R. F., Achtman M., Feavers I. M., Maiden M. C. and Derrick J. P. (2006) *Structural variation and immune recognition of the P1.2 subtype meningococcal antigen*, Proteins 62:947-955.

White S., O'Callaghan J. and Dobson A.D.W. (2006) *Cloning and molecular characterisation of Penicillium expansum genes upregulated under conditions permissive for patulin biosynthesis*, FEMS Microbiol. Letts., 255 (1) 17-22.

Wirth T., Falush D., Lan R., Colles F., Mensa P., Wieler L. H., Karch H., Reeves P. R., Maiden M. C., Ochman H., and M. Achtman (2006) *Sex and virulence in Escherichia coli: an evolutionary perspective*, Mol. Microbiol. 60:1136-1151.

Wirth T., Morelli G., Kusecek B., Van Belkum A., van der Schee C., Meyer A. and Achtman M (2007) *The rise and spread of a new pathogen: seroresistant Moraxella catarrhalis*, Genome Research 17:1647-1656.

Sustainable Energy/Environmental Engineering

Bechrakis D.A., McKeogh E. J. and Gallagher P. D. (2006) *Simulation and operational assessment for a small autonomous wind-hydrogen energy system.* Energy Conversion & Management 47 46-59.

Huber C., Ryan L., Ó Gallachóir B. P., Resch G., Polaski K. and Bazilian M.(2007) *Economic modelling of price support mechanisms for renewable energy: case study on Ireland,* Energy Policy, 35 1172-1185.

Keller M., Menzel K., Schapke S., Scherer R. (2007) *Framework zur Referenzmodellierung in Bau-Netzwerken,* Kollaboratives Prozessmanagement, 105-125 Logos-Verlag Berlin (Germany) ISBN-13: 978-3-8325-1675-8.

Keller M., Schapke S., Menzel K., Berger C. (2007) *Mobiles Mängelmanagement im Bauwesen,* Kollaboratives Prozessmanagement: 141-158 Logos-Verlag Berlin (Germany) ISBN-13: 978-3-8325-1675-8.

McKenna F., Ó Gallachóir B. P., McKeogh E. J., Lightbody G. and Daly R. (2007) *Simulating real time load management to maximise wind energy supply within a liberalised electricity market – Irish case study,* International Journal of Energy Technology and Policy, special issue on: Electricity Power Systems Real Time Monitoring and Control, 5 708 – 729.

Menzel K., Rebolj D., Turk Z.(2006) *How to teach computing in AEC,* Lecture Notes In Artificial Intelligence, 4200 476-483 Springer-Science ISBN 978-3-540-46246-0.

Murphy J.D., Power N. (2007) *A technical, economic, and environmental analysis of energy production from newspaper in Ireland,* Waste Management, Vol. 27 177-192.

Murphy J.D., McKeogh E. (2006) *The benefits of integrated treatment of wastes for the production of energy,* Energy, Vol. 31 294-310.

Murphy J.D., Power N. (2006) *A technical economic and environmental comparison of composting and anaerobic digestion of biodegradable municipal waste,* Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances and Environmental Engineering, Vol. 41 5-12.

Ó Gallachóir B. P., O’Leary F., Bazilian M., Howley M. and McKeogh E. J. (2006) *Comparing primary energy attributed to renewable energy with primary energy equivalent to determine carbon abatement in a national context,* Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances and Environmental Engineering, 41 923-937.

Ó Gallachóir B.P., Gardner P., Snodin H. and McKeogh E. J. (2007) *Wind energy and system security - The grid connection moratorium in Ireland,* International Journal of Energy Technology and Policy, special issue on: Control and Protection of Distribution Systems with Distributed Generators, 5, 633 – 647.

Ó Gallachóir B. P., Keane M., Morrissey E. and O'Donnell J. (2007) *Using indicators to profile energy consumption and inform energy policy in a university - a case study in Ireland*, Energy and Buildings, 39 913 – 922.

Power N., Murphy J.D., McKeogh E. (2007) *What crop rotation will provide optimal first generation ethanol production in Ireland from technical and economic perspectives*, Renewable Energy (in press).

Schach R., Scherer R., Menzel K. (2007) *Mobile Computing im Bauwesen – Konzepte, Anwendungen, Potentiale*: expert Verlag, Renningen (Germany) ISBN-13: 978-3-8169-2589-7.

Marine & Freshwater Research

Caurant F., Aubaij A., Lahaye V., Rogan E., et al., (2006) *Lead contamination of small cetaceans in European waters - The use of stable isotopes for identifying the sources of lead exposure*, Marine Environmental Research, 62 (2) 131-148.

Coughlan J., McGinnity P., O'Farrell B., Cross T.F., et al., (2006) *Temporal variation in an immune response gene (MHC I) in anadromous Salmo trutta in an Irish river before and during aquaculture activities*, Ices Journal of Marine Science, 63 (7) 1248-1255.

Coughlan J., Mirimin L., Dillane E., Cross T.F., et al., (2006) *Isolation and characterization of novel microsatellite loci for the short-beaked common dolphin (Delphinus delphis) and cross-amplification in other cetacean species*, Molecular Ecology Notes, 6 (2) 490-492.

Coughlan J.P., Seymour J., Cross T.F. (2006) *Isolation and characterization of seven polymorphic microsatellite loci in the box jellyfish (Chironex fleckeri, Cubozoa, Cnidaria)*, Molecular Ecology Notes, 6 (1) 41-43.

Cronin K.M., Devoy R.J.N. and Gault J. (2007) *Modelling Estuarine Morphodynamics on the South Coast of Ireland*, Journal of Coastal Research, SI 50, 474-479.

Cronin M., Duck C. and Ó Cadhla O. (2007) *Aerial surveying of grey seal breeding colonies on the Blasket Islands, Co. Kerry, the Inishkea Group, Co. Mayo and the Donegal coast, Ireland*, Journal for Nature Conservation, Vol. 15.

Cronin M., Duck C., Ó Cadhla, O., Nairn R., Strong D. and O' Keeffe C. (2007) *An assessment of population size and distribution of harbour seals in the Republic of Ireland during the moult season in August 2003*, Journal of Zoology Vol. 273 (2) 131-139 ISSN 0952-8369.

Cronin M. (2006) *The status of the harbour seal (Phoca vitulina vitulina) in the Republic of Ireland*, NAMMCO Scientific Publications, (in press).

Cronin M. and Mulcahy M.F. (2007) *Incidence of Hexamita nelsoni in the native flat oyster Ostrea edulis infected with the protistan Bonamia ostrea*, Journal of Invertebrate Pathology (in review).

Cronin, M., Zuur, A., McConnell, B. and Rogan. E., 2007, *Is it the moon? Factors influencing the haul-out behaviour of harbour seals in southwest Ireland.*, Animal Behaviour

Cross T.F., et al., (2006) *Tetranucleotide microsatellite loci from the striped dolphin (Stenella coeruleoalba Meyen, 1833)*, Molecular Ecology Notes, 6 (2) 493-495

de Eyto E., McGinnity P., Consuegra S., Cross T.F., et al., (2007) *Natural selection acts on Atlantic salmon major histocompatibility (MH) variability in the wild*, Proceedings of the Royal Society B-Biological Sciences, 274 (1611) 861-869.

De Mol B., Kozachenko M., Wheeler A., et al., (2007) *Therese Mound: a case study of coral bank development in the Belgica Mound Province, Porcupine Seabight.* International Journal of Earth Sciences, 96 (1) 103-120.

Dillane E., Cross M.C., McGinnity P., Cross T.F., et al.,(2007) *Spatial and temporal patterns in microsatellite DNA variation of wild Atlantic salmon, *Salmo salar*, in Irish rivers,* Fisheries Management and Ecology, 14 (3) 209-219.

Dineen G., Harrison S.S.C. and Giller P.S. (2007) *Diet partitioning in sympatric Atlantic salmon and brown trout in streams with contrasting riparian vegetation,* Journal of Fish Biology, 71 (1) 17-38.

Dineen G., Harrison S.S.C. and Giller P.S. (2007) *Growth, production and bioenergetics of brown trout in upland streams with contrasting riparian vegetation,* Freshwater Biology, 52 (5) 771-783.

Dorschel B., Hebbeln D., Foubert A., et. al.,(2007) *Hydrodynamics and cold-water coral facies distribution related to recent sedimentary processes at Galway Mound west of Ireland,* Marine Geology, 244 (1-4) 184-195.

Doyle T.K., Houghton J.D.R., Buckley S.M., Hays G.C. and Davenport J. (2007) *The broad-scale distribution of five jellyfish species across a temperate coastal environmen,* Hydrobiologia, 579, 29-39.

Doyle T.K., Houghton J.D.R., McDevitt R., Davenport J. and Hays G.C. (2007) *The energy density of jellyfish: estimates from bomb-calorimetry and proximate-composition,* Journal of Experimental Marine Biology and Ecology, 343, 239-252.

Dunne D., Sutton G. (2006) *3D Web-mapping: integrating marine data into Google Earth,* Hydro International, Vol. 10 (7) 27-29.

Dunne D., Sutton G. (2006) *3D Web-mapping: integrating marine data into NASA World Wind,* Hydro International, Vol.10 (9) 7-9.

Gamble J.A., Price R.C., Smith I.E.M. (2006) *New Zealand andesites: Priming the lithosphere for a supervolcano,* Geochimica Et Cosmochimica Acta, 70 (18) A191-A191 Suppl S.

Gardner M.F., Carroll L.D., Gamble J.A., et al., (2007) *Short-term geochemical variation within a single eruption event: Mount Edgecumbe volcano, Bay of Plenty, New Zealand,* Geochimica Et Cosmochimica Acta, 71 (15) A309-A309 Suppl S.

Handler M.R., Suzuki K., Gamble J.A., et al., (2006) *Os and Hf isotopes in rare K-rich basalts from the Southern Kermadec arc volcanic front,* Geochimica Et Cosmochimica Acta, 70 (18) A226-A226 Suppl S.

Heyworth Z., Turner S., Schaefer B., et al.,(2007) *U-238-Th-230-Ra-226-Pb-210 constraints on the genesis of high-Mg andesites at White Island, New Zealand,* Chemical Geology, 243 (1-2) 105-121.

Houghton J.D.R., Doyle T.K., Davenport J., Lilley M.K.S., Wilson R.P. and Hays G.C. (2007) *Stranding events provide indirect insights into the seasonality and persistence of jellyfish medusae (Cnidaria: Scyphozoa)*, *Hydrobiologia* Vol. 589 1-11, 2007

Houghton J.D.R., Doyle T.K., Davenport J. and Hays G.C.(2006) *Developing a simple, rapid method for identifying and monitoring jellyfish aggregations from the air*, *Marine Ecology Progress Series*, Vol. 314 159-170.

Houghton J.D.R., Doyle T.K., Davenport J. and Hays G.C.(2006) *The ocean sunfish *Mola mola*: insights into distribution, abundance and behaviour in the Irish Sea and Celtic Seas*, *Journal of the Marine Biological Association of the United Kingdom*, Vol. 86 1237-1243.

Houghton J.D.R., Doyle T.K., Wilson M.W., Davenport J. and Hays G.C.(2006) *Jellyfish aggregations and leatherback turtle foraging patterns in a temperate coastal environment*, *Ecology*, Vol. 87 1967-1972.

Huvenne V.A.I., Bailey W.R., Shannon P.M., Wheeler A., et al., (2007) *The Magellan mound province in the Porcupine Basin*, *International Journal of Earth Sciences*, 96 (1) 85-101.

Ingram S.N., Walshe L., Johnston D., Rogan E., et al. (2007) *Habitat partitioning and the influence of benthic topography and oceanography on the distribution of fin and minke whales in the Bay of Fundy, Canada*, *Journal of the Marine Biological Association of the United Kingdom*, 87 (1) 149-156.

Irwin S. & Davenport J. (2006) *Implications of water flow and oxygen gradients for molluscan oxygen uptake and respirometric measurements*, *Journal of the Marine Biological Association, UK*, 86:1-2.

Irwin S., Davenport J. & Wall V. (2007) *Measurement of temperature and salinity effects on oxygen consumption of *Artemia franciscana* K., measured using fiber-optic oxygen microsensors*, *Hydrobiologia*, 575: 109-115

Kano, A., Ferdelman, T.G., Williams, T., Henriot, J.P., Ishikawa, T., Kawagoe, N., Takashima, C., Kakizaki, N., Abe, K., Sakai, S., Browning, E.L., Li, X., Andres, M.S., Bjaerger, M., Cragg B.A., De Mol, B., Dorschel, B. Foubert, A. Frank, T.D. Y. Fuwa, P. Gaillot, J.J. Gharib, J.M. Gregg, V.A.I. Huvenne, P. Léonide, K. Mangelsdorf, X. Monteys, I. Novosel, R. O'Donnell, A. Rüggeberg, V. Samarkin, K. Sasaki, A.J. Spivack, A. Tanaka, J. Titschack, D. van Rooij & A. Wheeler (2007), *Age constraints on the origin and growth history of a deep-water coral mound in NE Atlantic drilled during Integrated Ocean Drilling Program Expedition 307*, *Geology*, 35, 1051-1054.

Kelly C.J., Codling E.A., Rogan E., (2006) *The Irish Sea cod recovery plan: some lessons learned*, *Ices Journal of Marine Science*, 63 (4) 600-610.

Knights A.M., Crowe T.P. and Burnell G. (2006) *Mechanisms of larval transport: vertical distribution of bivalve larvae varies with tidal conditions*, Marine Ecology-Progress Series, 326 167-174.

Lahaye V., Bustamante P., Law R.J., Rogan E., et al.,(2007) *Biological and ecological factors related to trace element levels in harbour porpoises (Phocoena phocoena) from European waters*, Marine Environmental Research, 64 (3) 247-266.

Lassoued Y., Essid M. and Boucelma O., (2007) *A metadata-driven geographic data mediator*, Ingénierie des systèmes d'in **Mirimin L., Coughlan J., Rogan E.,**

Mienis F., van Weering T., de Haas H., Wheeler A., et al., (2006) *Carbonate mound development at the SW Rockall Trough margin based on high resolution TOBI and seismic recording*, Marine Geology, 233 (1-4) 1-19.

Murphy S., Rogan E. (2006) *External morphology of the short-beaked common dolphin, Delphinus delphis: growth, allometric relationships and sexual dimorphism*, Acta Zoologica, 87 (4) 315-329.

Mirimin L, Coughlan J, Rogan E, Cross TF, et al., (2006) Tetranucleotide microsatellite loci from the striped dolphin (*Stenella coeruleoalba* Meyen, 1833), Molecular Ecology Notes, 6 (2): 493-495

O'Driscoll J.F., Harrison S.S.C., Giller P.S. (2006) *Do trees make a difference? An evaluation of the impact of riparian vegetation on the ecology of nutrient poor headwater streams*, Polish Journal of Ecology, 54 (4) 695-700.

O'Leary D.B., Coughlan J., Dillane E., Cross T.F., et al., (2007) *Microsatellite variation in cod *Gadus morhua* throughout its geographic range*, Journal of Fish Biology, 70 310-335.

O'Leary D.B., Coughlan J., McCarthy T.V., Cross T.F., et al., (2006) *Application of a rapid method of SNP analysis (glycosylase mediated polymorphism detection) to mtDNA and nuclear DNA of cod *Gadus morhua**, Journal of Fish Biology, 69 145-153.

Otero-Villanueva M.D.M., Kelly M.S., Burnell G. (2006) *How prey size, type and abundance affects foraging decisions by the regular echinoid *Psammechinus miliaris**, Journal of The Marine Biological Association Of The United Kingdom, 86 (4) 773-781.

Ó Tuama É. and Hamre T. (2007) *Design and implementation of a distributed GIS portal for oil spill and harmful algal bloom monitoring in the marine environment*, Marine Geodesy, Vol. 30 Series ISSN 0149-0419.

Philpott E., Englund A., Ingram S., et al., (2007) *Using T-PODs to investigate the echolocation of coastal bottlenose dolphins*, Journal of the Marine Biological Association of the United Kingdom, 87 (1) 11-17.

Price R.C., George R., Gamble J.A., et al., (2007) *U-Th-Ra fractionation during crustal-level andesite formation at Ruapehu volcano, New Zealand*, Chemical Geology, 244 (3-4) 437-451.

Price R.C., Smith I.E.M., Gamble J.A., et al., (2007) *Magmatic processes and the evolution of crust: Insights from the New Zealand/Kermadec subduction system*, *Geochimica Et Cosmochimica Acta*, 71 (15) A810-A810.

Price R.C., Gamble J.A., George R., et al., (2006) *Mixing, fractionation and crustal assimilation in andesites: Evidence from U-Th disequilibrium data, Ruapehu, New Zealand*, *Geochimica Et Cosmochimica Acta*, 70 (18) A504-A504.

Quinn T.P., McGinnity P. and Cross T.F. (2006) *Long-term declines in body size and shifts in run timing of Atlantic salmon in Ireland*, *Journal of Fish Biology*, 68 (6) 1713-1730.

Roberts J.M., Wheeler A.J. and Freiwald A. (2006) *Reefs of the deep: The biology and geology of cold-water coral ecosystems*, *Science*, 312 (5773) 543-547.

Rogan E. and Mackey M. (2007) *Megafauna bycatch in drift nets for albacore tuna (Thunnus alalunga) in the NE Atlantic*, *Fisheries Research*, 86 (1) 6-14.

Shephard S. and Rogan E. (2006) *Seasonal distribution of orange roughy (Hoplostethus atlanticus) on the Porcupine Bank west of Ireland*, *Fisheries Research*, 77 (1) 17-23.

Shephard S., Connolly P., Hareide N.R., Rogan E., et al., (2007) *Establishing stakeholder connections for management of the Irish orange roughy fishery*, *Ices Journal of Marine Science*, 64 (4) 841-845.

Swift L.J., Devoy R. J. N., Wheeler A.J., Sutton G.D. and Gault J. (2006) *Sedimentary dynamics and coastal changes on the south coast of Ireland*. *Journal of Coastal Research*, SI 39, 227-232

Van Rooij D., Blamart D., Richter T., Wheeler A., Kozachenko M. and Henriët J-P. (2007) *Quaternary sediment dynamics in the Belgica mound province, Porcupine Seabight: ice rafting events and contour current processes*. *International Journal of Earth Science*, 96, 121-140.

Van Rooij D., Huvenne V.A.I., Foubert A., Blamart D., Staelens P., Henriët J.-P., Wheeler A. and de Haas H. (in press) *The Enya mounds: a lost mound-drift competition*, *International Journal of Earth Science*

Wheeler A.J., Beyer A., Freiwald A., de Haas H., Huvenne V.A.I., Kozachenko M., Olu-Le Roy K. and Opderbecke J. (2007) *Morphology and environment of cold-water coral carbonate mounds on the NW European margin*. *International Journal of Earth Science*, 96, 37-56.

Wheeler A.J. (2007) *Imaging the Seabed using Side-Scan Sonar* (James Elkins, ed.) *Visual Practices across the University*, Wilhelm Fink Verlag, Paderborn, p.258-264.

Wright I.C., Worthington T.J., Gamble J.A. (2006) *New multibeam mapping and geochemistry of the 30 degrees-35 degrees S sector, and overview, of southern Kermadec arc volcanism*, *Journal of Volcanology and Geothermal Research* 149 (3-4) 263-296.

Wysoczanski R.J., Wright I.C., Gamble J.A., et al., (2006) *Volatile contents of Kermadec Arc-Havre Trough pillow glasses: Fingerprinting slab-derived aqueous fluids in the mantle sources of arc and back-arc lavas*, *Journal of Volcanology and Geothermal Research*, 152 (1-2) 51-73.

Biodiversity and Ecotoxicology

Becart E., Aubry A. and Emmerson M.C. (2007) *The natterjack toad Bufo calamita in Co Kerry, Ireland: conservation status, current and foreseeable threats*, Irish Naturalists Journal, 28 477-487.

Brodte E., Graeve M., Jacob U., Knust R., Pörtner H.-O. (2007) *Temperature dependent lipid levels and components in polar and temperate eelpout (Zoarcidae)*, Fish Physiology and Biochemistry, (in press).

Carey J.B., Allshire A. and van Pelt F.N. (2006) *Immune modulation by cadmium and lead in the acute reporter antigen-popliteal lymph node assay*, Toxicol Sci, 91(1) 113-22.

Doak D.F., Estes J.A., Halpern B.S., Jacob U., Lindberg D.R., Lovvorn J., Monson D.H., Tinker M.T., Williams T.M., Wootton J.T., Carroll I., Emmerson M., Micheli F., Novak M. (2007) *Understanding and Predicting Ecological Dynamics: Are Major Surprises Inevitable?* Ecology, (in press).

Dowling V., O'Halloran J., van Pelt F., F.N.A.M., O'Brien N.M. and Sheehan D. (2006) *Protein carbonylation and heat shock response in Ruditapes decussatus following p,p'-dichlorodiphenyldichloroethylene (DDE) exposure: a proteomic approach reveals DDE causes oxidative stress*, Aquatic Toxicology, 77 11-18.

Dowling V., McDonagh B., Cotter E.M., O'Brien N., van Pelt F., O'Halloran J. and Sheehan D. (2006) *Two-dimensional electrophoresis analysis of glutathione affinity-selected proteins from the clam Tapes semidecussatus: Evidence for tissue-specific expression of redox protein*, Comp. Biochem. Physiol., Part D Proteomics and Genomics, 3 267-272.

Dowling V., Hoarau P. C., Romeo M., O'Halloran J., van Pelt F., O'Brien N. and Sheehan D.(2006) *Protein carbonylation and heat shock response in Ruditapes decussatus following p,p '-dichlorodiphenyldichloroethylene (DDE) exposure: A proteomic approach reveals that DDE causes oxidative stress*, Aquatic Toxicology, **77 11-18**.

Gittings T., O'Halloran J., Kelly T., et al. (2006) *The contribution of open spaces to the maintenance of hoverfly (Dipteral, Syrphidae) biodiversity in Irish plantation forests*, Forest Ecology and Management, 237 (1-3) 290-300.

Hartl M.G.J., Kilemade M., Coughlan B. M., O'Halloran J., van Pelt F.N.A.M., Sheehan D., Mothersill C. and O'Brien, N.M. (2006) *A two-species biomarker model for the assessment of sediment toxicity in the marine and estuarine environment*, J. Environ. Sci. Health, 41 939-953.

Hartl M.G., Kilemade M., Sheehan D., Mothersill C., O'Halloran J., O'Brien N.M., van Pelt F. (2007) *Hepatic biomarkers of sediment-associated pollution in juvenile turbot, Scopthalmus maximus*, L. Mar Environ Res., (in press)

Jessopp M.J., McAllen R.J. (2007) *Water retention and limited larval dispersal: implications for short and long distance dispersers in marine reserves*, Marine Ecology-Progress Series, 333 27-36.

Juhel G., Davenport J., O'Halloran J., Culloty S., Ramsay R., James K., Furey A. and Allis O. (2006) *Pseudodiarrhoea in zebra mussels Dreissena polymorpha (Pallas) exposed to microcystin*, J Exp Biol., 209 810-6.

Juhel G., Davenport J., O'Halloran J., Culloty S., O'Riordan R., James K., Furey A., and Allis O. (2006) *Impacts of micro cystins on the feeding behaviour and energy balance of zebra mussels, Dreissena polymorpha: a bioenergetics approach*, Aquatic Toxicology 79 391-400, 2006

Juhel G., O'Halloran J., Culloty S.C., et al., (2007) *In vivo exposure to microcystins induces DNA damage in the haemocytes of the zebra mussel, Dreissena polymorpha, as measured with the comet assay*, Environmental and Molecular Mutagenesis, 48 22-29.

Kelleher K. and O'Halloran J. (2006) *The breeding biology of the Song Thrush, Turdus philomelus, in an island population*, Bird Study, 53 142-155.

Kelleher K. and O'Halloran J. (2007) *The influence of nesting habitat on breeding Song Thrushes Turdus philomelus*, Bird Study 54, (in press)

Mintenbeck K., Jacob U., Brey T., Knust R. and Arntz W. E. (2007) *Depth-dependence in stable isotope ratio $d^{15}N$ of benthic POM consumers: a potential bias in isotope based food web studies*, Deep-Sea Research II, (in press)

Mintenbeck K., Brey T., Jacob U., Knust R., Struck U. (2007) *Sample treatment related bias in stable isotope ($d^{13}C$, $d^{15}N$) measurements*, Marine Biology, (in press)

McDermott C., et al., (2007) *Sub-chronic toxicity of low concentrations of industrial volatile organic pollutants in vitro*, Toxicol Appl Pharmacol, 219(1) 85-94.

McDermott C., et al., (2007) *In vitro exposure of Jurkat T-cells to industrially important organic solvents in binary combination: Interaction analysis*, Toxicol Sci. (in press)

McDermott C., et al., (2007) *Validation of a method for acute and subchronic exposure of cells in vitro to volatile organic solvents*, Toxicol In Vitro, 21(1) 116-124.

Ni Shuilleabhain S., Mothersill C., Sheehan D., O'Brien N.M., O'Halloran J., van Pelt F.N.A.M., Kilemade M. and Davoren M. (2006) *Cellular responses in primary epidermal cultures from rainbow trout exposed to zinc chloride*, Ecotoxicology and Environmental Safety, 65 (3) 332-341.

O'Connor N. E. and Crowe T. P. (2007) *Biodiversity among mussels: separating the influence of the size of individual mussels from the age of mussel patches*, Journal of the Marine Biological Association, (UK) 87 551-557.

O'Connor N. E. and Bruno J. F. (2007) *Loss of predatory fish affects structure and functioning of a model marine food web*, Oikos, 116 2027-2938.

O'Halloran J., (2007) *Ornithology: review*, Ir. Nat.J., Vol. 28 449-452.

Oxbrough A.G., Gittings T., O'Halloran J., et al. (2006) *The influence of open space on ground-dwelling spider assemblages within plantation forests.*, Forest Ecology and Management, 237 (1-3) 404-417.

Oxbrough A.G., Gittings T., O'Halloran J., et al., (2006) *The initial effects of afforestation on the ground-dwelling spider fauna of Irish peatlands and grasslands*, Forest Ecology and Management, 237 (1-3) 478-491.

Oxbrough A.G., Gittings T., O'Halloran J., et al., (2007) *Biodiversity of the ground-dwelling spider fauna of afforestation habitats*, Agriculture Ecosystems and Environment, 120 (2-4) 433-441.

Smiddy P., Cullen C. and O'Halloran J. (2007) *Time of roosting of Barn Swallows *Hirundo rustica* at an Irish reedbed during autumn migration*, Ringing and Migration, 23, (in press).

Stengal D., O'Reilly S. and O'Halloran J., (2006) *Pollution associated with transport*, In: Ecology of Transport, 15 361-390 (Davenport J and J. Davenport, Editors). Wiley,

van Pelt F.N.A.M., Carey J.B. and Carey M.A. (2007) *Acute and chronic liver diseases induced by drugs or xenobiotics*, Liver Immunology, Principles and Practice, 375-88, (M.E. Gershwin, J.M. Vierling, and M.P. Manns, Editors.) Humana Press: Totowa, New Jersey.

Virgo N., Law R. and Emmerson M.C. (2006) *Sequentially assembled food webs and extremum principles in ecosystem ecology*, Journal of Animal Ecology 75 377-386.

Wilson M.W., Pithon J., Gittings T., Kelly T.C., Giller P.S., and O'Halloran J. (2006) *The effects of growth stage and tree species composition on breeding bird assemblages of plantation forests*, Bird Study, 53 225-236 Part 3.

Environmental Law

McIntyre E., (2006) *The Role of Pre-emptive / Protective Costs Orders in Environmental Judicial Review Proceedings*, 13 Irish Planning and Environmental Law Journal 51.

McIntyre E., (2006) *Soil Protection under Irish Law*, 3:3 Journal of European Environmental and Planning Law 213.

McIntyre E., (2006) *The Role of Customary Rules and Principles of International Environmental Law in the Protection of Shared International freshwater Resources*, 46:1 Natural Resources Journal 157-210.

McIntyre E., (2007) *Environmental Protection of International Watercourses under International Law* (Book, Ashgate Publishing, UK, 422 pages).

McIntyre E., (2007) *The Potential Role in Irish Law of Voluntary Environmental Agreements for the Transposition and Implementation of E.C. Environmental Directives [Part II]*, 14/4 Irish Planning and Environmental Law Journal 147.

McIntyre E., (2007) *The Potential Role in Irish Law of Voluntary Environmental Agreements for the Transposition and Implementation of E.C. Environmental Directives' [Part I]*, 14/3 Irish Planning and Environmental Law Journal 99.

McIntyre E., (2007) *Sustainable Development and the Utilisation and Environmental Protection of Shared International Freshwater Resources – The Role of Equity*, 2007 IUCN Academy Colloquium, Rio + 15: A Legal Critique of Ecologically Sustainable Development, Rio de Janeiro and Parati, Brazil, (papers to be published by Cambridge University Press).