CSIRO LAND AND WATER

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|  | CSIRO_Grad_RGB_hr.jpgCurriculum Vitae: Graeme E. Batley  Aquatic Contaminants Group  Contaminants and Biotechnology Program  CSIRO Land & Water  Locked Bag 2007, Kirrawee NSW 2232, Australia  Phone: +61 2 9710 6830  E-mail: graeme.batley@csiro.au |
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|  | Profile Summary  Dr Graeme Batley is a Chief Research Scientist in the Environmental Contaminant Mitigation and Technology research program, at the Lucas Heights site of CSIRO Land and Water. He was previously Leader of the Energy and Environment Theme in CSIRO Energy Technology which was transferred to Land and Water in 2006. Dr Batley was instrumental in the formation of the Centre for Environmental Contaminants Research (CECR) and is a past Director. Dr Batley's research expertise is in the area of the analytical and environmental chemistry of trace contaminants in natural water systems, with particular emphasis on heavy metals and their chemical forms, fate, transport, bioavailability and ecotoxicology in waters and sediments. A major focus has been on weight of evidence approaches, risk assessment, and the development of regulatory guidelines for both organic and metal contaminants.  Relevant Experience / Achievements  Qualifications and Training   * Bachelor of Science (Hons 1), University of New South Wales, 1962 * Master of Science, University of New South Wales, 1964 * Doctor of Philosophy, University of New South Wales, 1967 * Doctor of Science, University of New South Wales, 1994   Professional Work Experience  **Period Organisation Position**  **1981-present** Centre for Environmental Contaminants Research (CECR) Chief Research Scientist  CSIRO Land and Water  **1969-1981** Chemical Technology Division Research Scientist  Australian Atomic Energy Commission  Dr Batley’s major research interest is the analytical and environmental chemistry of trace contaminants in natural water systems, with particular emphasis on heavy metals and their chemical forms in waters, sediments and biota. Topics of special interest have included:   * Fate, transport and bioavailability of contaminants, including metals and organometals, polycyclic aromatic hydrocarbons and pesticides, in aquatic systems. * Sediment quality assessment, including ecotoxicology and bioavailability of metals and organic toxicants in sediments * Electroanalytical techniques for ultratrace analysis. * Development and application of novel methods for the speciation of heavy metals in waters. * Development of Australian and New Zealand water and sediment quality guidelines * Environmental impact of ocean disposal of dredged sediments. * Impact of metals from mining operations on aquatic systems. * Behaviour of antifouling paints including tributyltin in the aquatic environment. * Risk assessment of environmental contaminants * Fate and impacts of nanomaterials in aquatic systems * Environmental impacts of coal seam gas recovery   Clients have included NSW Office of Environment and Heritage, Roads and Traffic Authority of NSW, NSW Maritime Authority, Connell Wagner, Sydney Water, Victorian EPA, Western Australian EPA, SA EPA, Queensland EPA, Department of Sustainability and Environment, Victoria, Queensland Department of Primary Industry and Energy, Melbourne Water Corporation, Ok Tedi Mining Ltd, Porgera Joint Venture, Morobe Mining, PNG, Lihir Gold Ltd, Tasmanian EPA, Shell Refining Ltd, PT Freeport, Rio Tinto, BHP Billiton, Xstrata, Wafi-Golpu Joint Venture, SA Department of Fisheries, Commonwealth Department of the Environment and Energy and Department of Agriculture and Water Resources, and a large range of environmental consultants.  Professional Activities  Fellow, and Life Member Royal Australian Chemical Institute  Member, SETAC Australasia (formerly Australasian Society for Ecotoxicology)  Member, Society of Environmental Toxicology and Chemistry (SETAC)  Foundation President, SETAC Asia/Pacific (1996-2003)  Board Member, SETAC Asia/Pacific (2003-2011)  Chairman, Organising Committee, 5th SETAC World Congress Sydney (2008)  Past Chairman, Environmental Chemistry Division, Royal Australian Chemical Institute  Past President, Royal Australian Chemical Institute NSW Branch (1992-93)  Director, Australian Centre for Mining Environmental Research Limited (2004)  Ambassador, Business Events Sydney (2009-present)  Member, Project Committee for the Review of Australian Water Quality Guidelines (1997-2002)  Chair, Working Group on Toxicants and Sediments for NEPC/EPHC Joint Steering Committee Review of Fresh and Marine Water Quality Guidelines for Australia and New Zealand (2009-2012)  Member, Review of Fresh and Marine Water Quality Guidelines for Australia and New Zealand, Expert Reference Panel (2012- present)  Chairman, InterSECT 96 (International Symposium on Environmental Chemistry and Toxicology)  Member, NSW Department of Environment and Climate Change Hazardous Chemicals Advisory Committee (1993-2009)  Member, Site Auditor Accreditation Panel, NSW Office of Environment and Heritage (1999-present)  Member, Porgera Environmental Advisory Komiti (PEAK) (1997-2005)  Member, Great Barrier Reef Marine Park Reef Monitoring Technical Committee (2005-2006)  Member, Reef Water Quality Partnership Scientific Advisory Panel (2006-2008)  Member, Expert Advisory Panel, NW Shelf Cumulative Monitoring Program (2005-2008)  Member, Scientific Committee, Adelaide Coastal Waters Study (2002-2008)  Member, Science Advisory Panel, Sydney Metropolitan Catchment Management Authority (2006-present)  Member, Chief Scientist’s Panel reviewing the Gunn’s Pulp Mill for the Minister for the Environment (2007)  Member, Advisory Panel Marine Environmental Monitoring Program Sydney Desalination Plant, Sydney Water (2007-present)  Member, George River Water Quality Panel for the Tasmanian EPA (2010)  Member, Independent Expert Group on Gunns Paper Mill Project for the Department of the Environment, Water, Heritage and the Arts (2007-2011)  Member, NSW Environmental Trust Environmental Research Program Technical Committee (2005-present)  Commissioner, NSW Planning and Assessment Commission (2011)  Chairman, Visiting Committee, School of Chemistry, University of NSW (2002-2010)  Honorary Associate, Department of Chemistry and Biomolecular Sciences, Macquarie University (2004-2006)  Competent Independent Reviewer, Wafi-Golpu Joint Venture, Environmental Impact Assessment (2017 -present)  Assessor, National Association of Testing Authorities (1980-2004)  Past Editor, *Chemical Speciation and Bioavailability* (1993-2005)  Past Editorial Board Member, *Environmental Toxicology and Chemistry* (1998-2000)  Past Editorial Board Member, *Science of the Total Environment* (1992-2000)  Foundation Member Editorial Board, *Integrated Environmental Assessment and Management* (2004-2010), Associate Editor, *Integrated Environmental Assessment and Management* (2010-present)  Foundation Member Editorial Board, *Environmental Chemistry* (2004-2010)  Member Editorial Advisory Board, *Environmental Chemistry* (2010-2018)  Associate Editor, *Environmental Chemistry* (2019-present)  Awards   * AAEC Development Training Award, 1980 * Academia Sinica / CSIRO Visiting Scientist Award, 1987 * *Current Contents* Citation Classic, for the most cited paper in *Marine Chemistry,* 1988 * Royal Australian Chemical Institute Analytical Chemistry Medal, 1991 * Guy Parker Award for the best paper in *Water,* 1993 * Erskine Fellowship, University of Canterbury, New Zealand, 1995 * Royal Australian Chemical Institute Environment Medal, 1995 * Visiting Fellowship, CNR Istituto di Biofisica, Pisa, Italy, 1996 * CSIRO Chairman’s Medal, 1996 * Most highly cited paper award 2000-2006 *Comparative Physiology and Biochemistry*, 2006 * Land and Water Australia Eureka Prize for Water Research, 2006 * CSIRO Medal for Research Achievement, 2006 * Society of Environmental Toxicology and Chemistry (SETAC) Herb Ward Exceptional Service Award, 2006 * CSIRO Land and Water Publication Award, 2008 * Honorary Life Membership, Royal Australian Chemical Institute, 2011 * Excellence in Review Award, *Environmental Science and Technology*, 2013 * SETAC Fellow, 2015 * SETAC Asia/Pacific Lifetime Achievement Award, 2016 * SETAC Presidential Citation for Exemplary Service, 2016 * Top 20 downloaded paper 2017-18, *Environmental Toxicology and Chemistry,* 2019   Publications  Author of 440 research papers, book chapters and reports on analytical and environmental chemistry, and ecotoxicology of contaminants, and author and/or editor of 8 books. In the period 1970-2020, these publications have been cited over 16,400 times (Google Scholar) (ISI h-index: 47; Google Scholar h-index: 60). |
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