

PROFESSOR DAVID C. WILSON

WASTE & RESOURCES MANAGEMENT CONSULTANT

Visiting Professor in Waste Management
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David C. Wilson is a senior and respected figure in waste and resources management in the UK and internationally. He was appointed a Member of the Order of the British Empire (MBE) in the UK's 2006 New Years Honours List, 'for services to waste management in the UK and Europe'. He was awarded the 2004 J W Starkey Silver Medal by the Royal Society for Promotion of Health, in recognition of 'outstanding merit in the promotion of health', for his work as author of the 'significant and important' *Training Resource Pack for Hazardous Wastes in Developing Economies*. He has been Visiting Professor in Waste Management at Imperial College, London since 2000. He was named Consultant of the Year in 1997 by the British Consultants Bureau and the Times newspaper, in recognition of his international waste work.

The first 15-20 years of Dr Wilson's career focused on developing policy and carrying out related research in hazardous and solid waste management, cleaner production and contaminated land. For example, he ran a hazardous waste research unit for the UK Department of the Environment (DoE); wrote two editions of the 'Gas Works Report', the first definitive guidance on contaminated land in the UK; and carried out a number of EU-wide comparative studies.

Over the last 10-15 years, Professor Wilson has continued his work in the UK and the EU, eg chairing the *Waste and Resources Research Advisory Group* (WRRAG) for Defra since 2004; advising DoE Northern Ireland since 1997 on developing and implementing their waste management strategy; and representing CIWM on the UK Hazardous Waste Forum, for whom he was lead author of their 2003 *Action Plan*.

Professor Wilson has also consolidated his reputation as one of the leading international experts on solid and hazardous waste management in developing economies. He has been responsible, e.g. for national strategies for waste management in Turkey, Philippines, Viet Nam, Poland, Hungary and Romania; strategic planning projects in Hong Kong, Chennai, Bangkok, China, Sri Lanka, Thailand, Ukraine and the Russian Federation; and a regional capacity building project for SWM in North Africa and the Middle East; He is principal author of the World Bank's definitive *Strategic Planning Guide for Municipal Solid Waste Management*, and of major reports for the International Maritime Organisation and the Basel Convention.

Professional Affiliations

- Chartered Scientist, Chartered Chemist, Member Royal Society of Chemistry
- Fellow, Chartered Institution of Wastes Management
- Chartered Environmentalist
- Member, International Solid Wastes Assoc. (ISWA)
- Life Member, Asian Soc. of Environmental Protection

Education

- BA Chemistry, Oxford, 1st Class Honours, 1974
- MA Chemistry, Oxford University, 1978
- D Phil, Engineering Science, Oxford, 1978

Languages

- Native English, some Russian, some French

Committees

- Waste and Resources Research Advisory Group (WRRAG), Defra, 2004 - 2007. Chair
- Hazardous Waste Forum (HWF), Defra, since 2003. Member representing CIWM, appointed Chair of Strategy Framework sub-group
- Northern Ireland HWF, since 2003. Chair
- ISWA Working Group on Hazardous Wastes, UK National Member representing CIWM, since 1985
- Member Scientific & Technical Committee, CIWM, 2005-2008
- Wastes Management & Research (international journal), Editorial Board, 1984-1996 and 2002-date

Honours & Awards

- 2006 Member of the British Empire (MBE), 'for services to waste management in UK and Europe'
- 2004 J W Starkey Silver Medal of the Royal Society for the Promotion of Health
- 2003 ISWA Publication Award, for *Training Resource Pack for Hazardous Wastes in Developing Economies (TRP)*, published by UNEP & Basel Convention
- 1997 International Consultant of the Year (British Consultants Bureau, sponsored by The Times)

Employment History

- 2003- date. Independent Waste and Resources Management Consultant. Full-time since October 2004
- 2000- date. Visiting Professor in Waste Management, Imperial College, London
- 1985-2004. Environmental Resources Management (ERM). Partner in International Waste Management
- 1974-1984. Environmental Safety Group, Harwell Laboratory. Head of Waste Research Unit 1977-82

SELECTED KEY PROJECTS

Professor Wilson's extensive project experience is first highlighted below with selected examples, and then summarised under 6 sub-headings: Strategic Planning for Waste Management, Hazardous and Industrial Wastes, Municipal Solid Waste Management, Contaminated Land, Contingency Planning and Chemical Safety, and Environmental Technologies / Waste Minimisation.

UK: Waste and Resources Research Advisory Group (WRRAG), for Defra, 2004 - 2007. Chair of WRRAG, originally to develop a medium/long term strategy for Defra's waste and resources research, and also a short-term strategy for the £5m per annum allocation of landfill tax funding over the next 3 years; and currently to oversee implementation of the research programme. Prof Wilson works closely on a day-to-day basis with the Waste Research Team within Defra. www.defra.gov.uk/environment/waste/wip/research/

UK: Hazardous Waste Forum, Department for Environment, Food and Rural Affairs (Defra), 2003-07. Representing the Chartered Institution of Wastes Management (CIWM) on this important Forum, which was convened by the Secretary of State to produce a framework for sound hazardous waste management and reduction. Appointed Chair of the Strategic Framework sub-group. Hired as a consultant to assist the secretariat in preparing the Forum's *Action Plan*, which was published in December 2003. <http://www.defra.gov.uk/environment/waste/hazforum/>

Northern Ireland: Waste Management Strategy, Department of the Environment NI, 1997-2006. Project Director and lead consultant for a continuous series of projects to develop and implement an integrated waste management strategy for Northern Ireland. The revised strategy 'Towards Resource Management' was published in March 2006; Dr Wilson presented the policy proposals at the Strategy launch. <http://www.ehsni.gov.uk/pubs/publications/wms.17.pdf>

International: Collaborative Working Group on Solid Waste Management in Low-and Middle-Income Countries (CWG), 2003-04. Dr Wilson represented the UK Department for International Development (DFID) at the CWG meeting in Dar-es-Salaam, and chaired a steering group to develop proposals for continuation of the CWG's role of representing the waste sector in the international development arena. Continued to work on the CWG management group until 2006.

International: Strategic Planning Guide for Municipal Solid Waste Management (MSWM), World Bank, Swiss Agency for Development and Cooperation (SDC) and UK Department for International Development (DFID), 1997-2000. Director and lead author for this prestigious CWG project. The Planning Guide provides a step-by-step

guide to the strategic planning process, plus an authoritative and in-depth guide to the substantial issues, including the institutional, social, financial, economic, environmental and technical aspects of MSWM. Published on CD in 2001. Available at www.worldbank.org/urban/solid_wm/erm/start_up.pdf

Middle East and North Africa: Regional Solid Waste Management Project, METAP, World Bank and EC SMAP, 2003-05. Technical Director and institutional expert for a major project to build regional capacity for integrated SWM in 8 countries (Algeria, Egypt, Jordan, Lebanon, Morocco, the Palestinian territories, Syria and Tunisia). Oversaw the preparation of regional guidelines on policy, institutional and legal aspects; finance and cost recovery; private sector participation; and public awareness and community participation. <http://www.metap-solidwaste.org/index.php?id=13#5>

Ukraine: Kharkiv Solid Waste Management Project, DFID / European Bank for Reconstruction and Development (EBRD), 2000-2002. Project Director for this major project, to assist the City of Kharkiv to improve solid waste management. Prepared an investment project for EBRD funding, including technical, institutional, financial, social and environmental aspects. Prepared tender documents for a management contract to operationalise a new corporatised WM utility company.

Hong Kong: Waste Reduction Plan, HK Environmental Protection Department (EPD), 1994-1996 and 2005. Technical Director for major, ground-breaking study to prepare a comprehensive waste reduction strategy for Hong Kong. The resulting plan was adopted by the HK Government in 1998. Also advised on the preparation of a White Paper: *A Policy Framework for the Management of Municipal Solid Waste 2005-2014* <http://www.epd.gov.hk/epd/msw/index.html>

UK: The Redevelopment of Gas Work and Similar Sites, Department of the Environment (DoE), 1986-87 and 1979- 81. Project Manager and lead author for this major report, which derived threshold and action trigger values for gas works contaminants in soil. Remained the most comprehensive guidance on redevelopment of contaminated land available in the UK until 2000.

UK: Waste Research for DoE, 1977-1993. Head of DoE's Waste Research Unit until 1982, a major policy-related research programme. Contributed to the preparation of DoE's Waste Management Papers, particularly that on pesticide wastes. Subsequently managed/ directed research for DoE on landfill, risk assessment of hazardous wastes, modeling of landfill leachate and gas production, and the effectiveness of landfill gas control.

STRATEGIC PLANNING FOR WASTE MANAGEMENT

Major strategic planning projects highlighted above:

- *Northern Ireland: Waste Management Strategy, DoENI, 1997-2006.* Project Director (PD) and Principal Advisor.
- *International: Strategic Planning Guide for Municipal Solid Waste Management, World Bank,* Lead author.
- *Hong Kong: Waste Reduction Plan, HK EPD, 1994-1996.* Technical Director.
- *Hong Kong: Policy Framework for Municipal Waste Management 2005-2014.* Senior Advisor to HK EPD's consultants.

National Level Strategic Planning Projects:

- *UK: Implementing the national waste strategies, Belfast, January 2007.* Chaired the 2nd annual workshop of the 4UK Waste Strategies group
- *Ireland: National Hazardous Waste Management Plan, Environmental Protection Agency, 2006-07.* Technical advisor.
- *Romania: Baseline Survey and National Plan for Industrial and Hazardous Waste Management in Romania, Japan International Co-operation Agency (JICA), 2001-2003.* PD for Phase 1.
- **Vietnam: National Hazardous Waste Management Strategy, National Environment Agency and ADB, 1997-1998.** Project Director and Institutional Expert. Scope included drafting hazardous waste regulations, which became law in 2000.
- *St Lucia: Waste Management Strategy, DFID, 1997-1998,* Project Director.
- *Mauritius: Waste Management Strategy, World Bank and Environment Ministry, 1998.* Project reviewer.
- **Turkey: National Solid Waste Management Strategy, METAP, World Bank and Turkish Ministry of Environment, 1995-96.** PD/ lead author.
- *Egypt: Workshop to Finalise National Environmental Action Plan, 1996.* Waste Management Expert.
- **Sri Lanka: Hazardous Waste Strategy and Pre-Feasibility Study, Ministry of Finance and Planning, 1996.** Project Director and Core Team member.
- *Scotland: Preliminary Framework for National Waste Strategy, SEPA, 1996.* Project Director.
- *Hungary: Development of a National Strategy for the Management of Asbestos Waste, EU PHARE programme, 1994-95.* Project Director.
- **Ireland: Recycling Strategy, DoE, 1992-93.** Project Director and waste management expert.
- **Poland: National Strategy for Municipal Waste Management, EC Phare and Polish Environment Ministry, 1991-1992.** Project Director/ lead author.

Regional/ City Level Strategic Planning Projects

- *Northern Ireland: Technical Audit of 3 Sub-regional Waste Management Plans, DoENI, 2006.* Technical advisor.
- *UK: Empowering local authorities to manage future pressures effectively. Lyons Inquiry Seminar on waste management, July 2006.* Panel member.
- *UK: Waste Strategy Delivery, Hyder, 2005.* Chaired two seminars for UK local authorities.
- **Russia: Development and implementation of a waste management strategy in Kaliningrad, EU Tacis, 2002-2004.** Project Director / strategy expert.
- *Russia: Waste Management Strategy in Ekaterinburg, DFID, 1999-2003.* Project Director.
- *Vietnam: Ho Chi Minh City Hazardous Waste Plan, NORaid and ADB, 2002.* Technical reviewer.
- *Argentina: SWM Study in La Pampa. IDB, 2001.* PD.
- *Vietnam: Field Testing of the Strategic Planning Guide for MSW, in Ha Long/CamPha, World Bank and Danida, 1999-2000.* Project Director.
- *China: Chung Qing Waste Management Strategy, World Bank, 1998.* Technical reviewer.
- **India: Regional Solid Waste Management Plan for the Chennai (Madras) Metropolitan Area, World Bank, 1995-1998.** Project Director.
- *Turkey: Trabzon and Rize Regional Waste Management Plan, GEF, World Bank and Ministry of Environment, 1995-96.* Project Director.
- *UK: Waste Management Strategy for Heathrow Airport, BAA, 1994-95.* Project Director.
- *Poland: Waste Management Study for City of Tarnow, Dutch Ministry of Housing, Physical Planning and Environment, 1994-95.* Project Director.
- **Turkey: Strategy and Feasibility Study for Domestic and Industrial Solid Waste Management, Bursa, Turkey, World Bank and Municipality, 1991 - 92.** PD
- **Hong Kong: Computerised Waste Management Model, HK EPD, 1982 - 83.** Resident project manager.

Capacity Building/ Research on Strategic Planning

- **International (India, Mali, and Honduras): Building Municipal Capacity for Integrated Solid Waste Management (ISWM) Planning, DFID, 2001 - 2003.** Project Director.
- *UK: Doctoral Research on Planning for the Management of Municipal Solid Wastes, Harwell Laboratory/Oxford University, 1974-1977.*

HAZARDOUS AND INDUSTRIAL WASTES

Projects highlighted above

- *UK: Hazardous Waste Forum, 2003-05.* Member and a principal author of the Forum's first *Action Plan*.
- National Strategies in Ireland, Vietnam, Romania, Sri Lanka, Hungary and Turkey; regional strategy in Ho Chi Minh City, Vietnam.
- *Waste Research for UK DoE:* more details below.

Policy/ Regulatory and Capacity Building Work

- *Northern Ireland: Chair of Hazardous Waste Forum, 2003- 2007.*
- *NI: Statement of Facility Needs for Hazardous Wastes, Department of the Environment, 2005.* Author
- *UK: Chair of National Used Oil Conference, 2005*
- *Russia: Developing and Demonstrating a Regulatory Management System for Hazardous Waste Control at the Regional Level, 1996-2000.* Project Director (PD) and international team leader.
- *Ukraine: regional capacity building for industrial wastes, Kharkiv Oblast, EC Tacis, 1999-2001.* PD
- *China: Jiangsu Province institutional strengthening, World Bank, 1991-92.* PD
- *China: Beijing, institutional development, 1990.* Technical Reviewer (TR).

Hazardous Waste Facility Development

- **Hong Kong:** *feasibility study and project implementation for first comprehensive hazardous waste treatment facility outside OECD, 1987-1994.* Institutional team leader.
- *India: centralized treatment facility, 1998.* PD
- *Lebanon: clinical wastes, 1997-99,* TR
- *Sri Lanka: hospital waste facility, 1996-1998,* PD
- *Hong Kong: clinical waste facility, 1991-1996,* PD
- *Bahrain: national strategy and facility feasibility study, 1987.* Project Manager (PM)
- *Korea: first centralized facility, 1985,* PM
- *NE England: regional treatment facility, 1979,* PM

Hazardous Waste Information Systems

- *Russia: National Industrial Waste Data Management System, 1996-1999.* PD and core team member.
- *Basel Convention: scoping information systems, 1998.* Project Director (PD)
- *EU: Improving information on hazardous wastes, 1987.* Team Leader.

Industrial/ Hazardous Waste Surveys

- *Mexico City, 1995.* PD
- *UK: London, 1990-91; Cornwall, 1990.* PD
- *UK: Lincolnshire, 1986,* PM and Team Leader.
- *Qatar, 1986.* Waste team leader.

Reports/ studies for International Organisations

- *Basel Convention, 'Annex 7' study, 1999-2000.* PD
- *ISWA, International reports comparing hazardous waste management systems in 18 countries, 1999 & 1987.* Project leader and principal author.
- **IMO, Global Waste Survey, 1991-1994.** Project leader
- *IMO, Attracting investment in hazardous waste facilities, 1994.* Project leader and principal author.
- **World Bank, Technical Manual on Hazardous Wastes in Developing Countries, 1989.** Project manager, author and editor in chief.
- *WHO, International Commission on Health and the Environment, hazardous waste working paper, 1991.* Author.
- *WHO, Identification of priority chemicals in hazardous wastes, 1990.* PD
- *UNEP/WHO.* Working group rapporteur, prepared first international guidelines and code of practice for hazardous waste management, 1981.

Hazardous Waste Training

- **UNEP/ ISWA/ Basel Convention, Training Resource Pack for HWM in Developing Economies, 1994-2002.** Project leader and principal author for this major 'train the trainers' toolkit. Winner of the 2004 JW Starkey Silver Medal of the Royal Society for the Promotion of Health and the 2003 ISWA Publication Award for this work.
- *Hazardous waste training courses, 1986-2002.* Course leader for international or national courses in China, Chile, Mexico, Philippines, Russia, Sri Lanka, Turkey, Ukraine, UK and Vietnam. Resource person for UNEP international courses in Bahrain, Moscow and Singapore.

EU Comparative Studies on Hazardous Wastes

Project Director and hazardous waste expert:

- *Technical and economic thresholds for facilities, 1991*
- *Inventory of hazardous waste facilities, 1989*
- *Hazardous waste charges and charging policy, 1989*
- *Chemical waste recycling, 1985*

Hazardous Waste Research for UK DoE, 1977-85

- *Risk assessment of HW facilities, PM/ team leader*
- **Waste Research Unit.** Head of Unit and research programme director. Specific projects included:
 - *Preparation of Waste Management Papers, main contributor to WMP 21 on Pesticide Wastes.*
 - *Co-disposal of HW in landfill sites.* PD
 - *Quantifying trace gas emissions from landfills.* PD
 - *Conditions for complete combustion of HW.* PD
 - *Detoxification of asbestos wastes.* PD
 - *Effectiveness of solidification for HW treatment.* PD

MUNICIPAL SOLID WASTE MANAGEMENT

in addition to the extensive work on strategic planning for SWM, at national and regional levels, highlighted above.

Institutional Capacity Building

- *Middle East and North Africa: Regional Solid Waste Management Project, 2003- 05.* Technical Director and institutional expert. (See details above).
- **Russia: Support to Waste Management at Federal and Regional Levels, EU Tacis and MNR, 2001-2003.** Project Director for a major project aimed at enhancing Russia's capacity to tackle more effectively existing and future municipal, hazardous and industrial waste management problems. Established a Waste Management Centre as a centre of excellence - now operating at both Federal and Regional levels.
- *Russia: Strengthening Waste Management in Kaliningrad.* EC Tacis, 2003-04. Senior Advisor.
- **Russia: Strengthening Waste Management Services in Ekaterinburg.** DFID, 1999-2003. Project Director.

Major Facility Development Projects

Typical components include detailed technical and economic feasibility studies, cost recovery and affordability, institutional arrangements, social and environmental impact assessment, options for private sector participation, preparation of tender documents, tender evaluation and (where specified) project supervision and implementation.

- **Ukraine: Kharkiv Solid Waste Management Project, 2000-2002.** Project Director (PD). (See details above).
- **Sri Lanka: Integrated SWM, Colombo, 1996-2000.** PD
- *Guyana: Georgetown SW disposal, IDB, 2002-03.* PD
- **Philippines: 3 integrated SWM investment projects in regional cities, 1997-2000.** PD
- *Hong Kong: Materials Recovery and Recycling Facility (MRRF), 1999-2000.* Technical Director.
- *St Lucia: Landfill sites and transfer stations, 1998.* PD
- *India: Landfill sites and transfer stations in Chennai, 1995-98,* PD.
- *Hong Kong: feasibility studies and implementation of Island East, West Kowloon and Yuen Long transfer stations, 1989-2000.* Technical Director.
- *Hong Kong: feasibility study and implementation of landfill gas control at Sai Tso Wan, 1987-91.* Tech D.

Other Facility Projects

- *Russia: upgrading Murmansk incinerator, 2002.* PD
- *Italy: Techno-economic assessment of a proposed MSW Incinerator, EIB, 1996.* PD
- *Northern Ireland: landfill gas control in Belfast, 1989-2002.* PD
- *Hong Kong, preparing tenders for Sha Tin and Island West transfer stations, 1992-94.* PD
- *Berkshire: assessment of MSW technologies, 1993.* PD
- *Cardiff: Anaerobic digestion pilot, 1990.* PD

- *UK: Techno-economic assessment of waste combustion technologies, DoEnergy, 1989-92.* PD
- **Bangkok: Innovative approach to private sector involvement in recycling and energy recovery from MSW, EC and Thai Ministry of Industry, 1987.** Team Leader.
- *UK: Market assessment for incinerator, Corby, 1988.* Lead consultant.
- *UK: Study of landfill costs, 1976.* Lead consultant.

EU Comparative Studies on MSW

- *Waste Management Statistics, EC and Eurostat, 1996.* Project director, to establish a baseline/ trends, and to develop a standard methodology for compilation of waste statistics by Member States. Report forms the basis of new EU Waste Statistics Regulations.
- *Legal and administrative aspects of MSWM, 1992.* PD
- *Technical and economic aspects of MSWM, 1992.* PD

Other Work Related to MSW Policy

(see also *Strategic Planning for Waste Management and Institutional Capacity Building* above)

- **International: Collaborative Working Group on Solid Waste Management in Low-and Middle-Income Countries, 2003-06.** Member of management group.
- *CWG, Chaired workshop on private sector participation in SWM in developing countries, 1996*
- *Scotland: 'databridge' project, 1999*
- *UK: Preparation of Waste Management Paper 26B on Landfill Operations, for DoE.* PD
- *UK: Guidelines for Landfill Gas Utilization and Control, DoEnergy, DoE and Office of Gas Supply, 1990 - 92.* Technical Reviewer.
- *UK: National Assessment of Landfill Gas Production, for the UK Department of Energy, 1987 - 89.* PD

MSW Training

- *UK: SWM in Developing Countries, 2000, 2001.* Developed and ran course for DFID staff and their consultants.
- *1- week Training courses: Egypt, 1995; Greece 1990; Shanghai, 1985.* Course leader.
- *Training courses: Hong Kong; Philippines; Russia - Kaliningrad, Moscow, Ekaterinburg; Sri Lanka; Thailand; UK; 1983-2003.* Resource person.

MSW Research,

- **UK: Chair of Waste and Resources Research Advisory Group, for Defra, 2004-06** (see above)

For UK Department of the Environment

- *Gas and Leachate Evolution and Assessment Model (GLEAM), 1991 - 93.* PD
- *Gas Migration Control - Effectiveness of Remedial Measures, 1989 - 92.* PD
- *Landfill Research Programme, 1984.* PD

- *Testing of artificial landfill liner materials*, 1978. PD

CONTAMINATED LAND

Policy and Research Work, for UK DoE

- ***The Redevelopment of Gas Work and Similar Sites*, 1986 -87 and 1979 -81.** Project Manager and lead author for this major guidance document, which remained in use until 2000. (See details above).
- ***Pilot Survey of Contaminated Land in Cheshire*, 1987.** Project Manager for this seminal project to compile a contaminated land register for three districts in Cheshire. This pilot study formed the basis for subsequent Government proposals under the *1990 Environmental Protection Act* for contaminated land registers. Dr Wilson later gave evidence to the House of Commons Select Committee on contaminated land.
- ***A Framework for Risk Assessment of Contaminated Land*, 1991 - 92.** Project director for this broad thinking study, and Chair of a subsequent 1994 DoE round-table workshop. The framework and the workshop laid the foundations for the standard methods of risk assessment now in use in the UK.
- *Environmental Risk Assessment of Hydrocarbons in Soil*, 1986 - 87. Project Manager.
- *Review of Guidance and Research Requirements on Contaminated Land*, 1986 - 87. Project Manager.

Site Specific Expert Witness Work

- **UK: legal action involving remediation of a former naval dockyard in Kent**, *English Estates*, 1991-96. Expert witness for the site owners in a major legal action against the consulting engineers. The remediation involved removal of contaminated soil, the quantities removed being 10 times greater than that estimated by the consultants. The dispute centred around the initial site investigation and on the recommended site clean-up standards. Dr Wilson prepared four expert reports and spent six days under cross-examination in the witness box. The judgement was in favour of the site owners.
- *Ireland: Development of Dublin Gas Works*, Planning Department, Dublin Corporation, 1991 -94. Advisor on controversial proposals to develop high density housing on this key inner city site.
- *UK: Evaluation of Development Proposals for Greenwich Gas Works*, for London Underground Limited, 1992. Prepared a proof of evidence.

CONTINGENCY PLANNING AND CHEMICAL SAFETY

Persistent Organic Pollutants (POPs)

- ***Regulatory Impact Assessment (RIA) for EU POPs Regulation*, 2005.** Advisor to the AEAT team working for Defra, examining the effect on UK industry of alternative 'low POPs contents' for dioxins in waste.
- ***International: Setting control levels for POPs*, 2004.** Advisor to the UK Delegation to the Basel Convention, and member of an expert group tasked with setting control levels for POPs in wastes under the Stockholm Convention. The agreed levels were adopted by the Basel Conference of Parties (COP7) in Oct 2004 and by COP1 of Stockholm in May 2005.

Planning for, and Response to, Chemical Accidents

- *China: Contingency Planning for Chemical Accidents in Jiangsu Province*, World Bank, 1991-92. Project Director.
- *WHO/UNEP/ILO: Workshop on Contingency Planning for, and Emergency Response to, Accidents Involving Potentially Toxic Chemicals*, 1982. Chaired all the major working sessions of this working group, which prepared the first international guidelines on "Emergency Response to Chemical Accidents".
- ***European Union: Major Hazards in the European Chemical Industry*, 1977-78.** Lead consultant for a major study to advise the EC on the relative hazards of various chemicals, as background to the development of the 'post-Seveso directive'.
- ***Italy: Decontamination and Dismantling of the ICMESA Factory at Seveso in Italy for the Givaudan Company*, 1978-82.** One of a 3-man team which advised on the decontamination and dismantling of the chemical reactor involved in the original accident. Report author.
- *UK: National Chemical Emergency Centre, Home Office & Chemical Industries Association*, 1979-1984. Duty Officer on 24-hour call.

Chemical Safety Studies

- *UK: Hazard Assessment of a New Transformer Fluid to Replace PCBs*, Electricity Council, 1980-85. Team Leader.
- *Kuwait: Chemical Hazards in Kuwait*, Kuwait Institute for Scientific Research (KISR), 1984. Project inception.
- *UK: Hazard Assessment for Chemicals Used by Divers in the North Sea*, DoEnergy, 1981-84. Team Leader.
- *UK: Risk Assessment of Toxic Gas Storage and Use*, Major Pharmaceutical Company, 1979. Lead Assessor.

ENVIRONMENTAL TECHNOLOGIES/ WASTE MINIMISATION

- *Ukraine: Waste Minimisation Demonstration Projects in Kharkiv Oblast, EC Tacis, 1999-2000.* Project Director for four pilot waste minimisation audits and development of investment projects, as part of a wider industrial waste capacity building programme.
- *Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova and Uzbekistan: Cleaner Production Dissemination Seminars in 6 NIS countries, EC Tacis, 1996-1997.* Project Director for this capacity building programme.
- *Russia: National Pollution Abatement Fund: Pre-Investment Studies. State Committee for Environmental Protection and the World Bank, 1996.* Project director for nine technical and financial pre-investment studies.
- *Russia: Guidelines for Environmentally Cleaner Production (ECP) in the Russian Federation, EC TACIS BISTRO facility, 1996 -97.* Project Director.
- *UK: Management of the DEMOS Programme, Department of Trade and Industry (DTI), 1991-96.* Project Director for ERM's management of DEMOS, a major government programme to support the demonstration of environmentally sound technologies in UK industry. ERM organised more than 30 seminars and workshops as part of the programme.
- *UK: Waste Minimisation Study for Oxfordshire Industry, Oxfordshire Business Environment Group and DTI, 1994.* Project Director.
- *UK: Management of Eureka EUROENVIRON Scheme, DTI, 1990 - 93.* Project Director for ERM's programme management of the UK part of the Eureka EUROENVIRON scheme for support of collaborative research and development in environmental technology. A total of ten UK projects were funded over a three year period.
- *European Union: Monitoring Clean Technology Projects, European Commission, 1987 - 1990.* Initially Project Manager and then Project Director for a series of contracts to monitor demonstration programmes in clean technology funded by the European Commission. ERM consultants visited on a continuing basis some 17 demonstration projects in six industry sectors in eight EU Member States.

PUBLICATIONS

A selection from >150 publications by Professor Wilson:

- **Waste Management - Planning, Evaluation and Technologies.** Oxford University Press, 1981, 530p.
- **Strategic Planning Guide for Municipal Solid Waste Management,** World Bank, March 2001. (Lead author)
- **The Safe Disposal of Hazardous Wastes: The Special Problems of Developing Countries.** World Bank Technical Paper 93 (3 Volumes), 1989. (Editor/ author)
- **Problems Arising from the Redevelopment of Gas Works and Similar Sites.** 1st edition 1981, 2nd edition 1987, HMSO, London. (Lead author).
- **Role of informal sector recycling in waste management in developing countries.** *Habitat International*, 30, 797-808, 2006. (Lead author).
- **Towards Resource Management – The Northern Ireland Waste Management Strategy.** DoENI, 2006, HMSO. Also 1st edition, 2000. (Senior author / editor)
- **The hazwaste dilemma – How the UK is coping with the demise of co-disposal.** *Waste Management World*, Sept-Oct 2005, pp64-69. (Lead author).
- **Hazardous Waste – an Action Plan for its Reduction and Environmentally Sound Management.** Report of the Defra Hazardous Waste Forum, Nov. 2003. (A principal author).
- **Waste Management – An Indicator of Urban Governance.** Paper prepared for DFID (UK), submitted to the global Habitat Conference on Urban Development, New York, June 2001. (Joint author)
- **Stick or Carrot? How to Move Waste Management up the Hierarchy.** *Waste Management & Research* (1996), No 14, pp 385-398.
- **Attracting Investment in Hazardous Waste Facilities in Developing Countries,** *ISWA Times*, No 1, 1995.
- **The Landfill Stepladder - Landfill Policy and Practice in an Historical Perspective.** *Wastes Management*, November 1993, 24-28.
- **Adapting Hazardous Waste Management to the Needs of Developing Countries: An Overview and Guide to Action.** *Waste Management & Research*, 8 (2), 87-97, 1990.
- **Hazardous Waste Management - The Way Forward.** *Resources and Conservation*, 14(2), 93-104, 1987.
- **Remedial Measures Following an Accidental Release of Dioxin.** *Chemosphere*, 12, 687-703, 1983.
- **Lessons from Seveso.** *Chemistry in Britain*, 18 (7), 499-504, 1982.
- **Waste Management Paper 21 - Pesticide Wastes.** DoE. HMSO, 1980. (Principal contributor).
- **The Uncertain Costs of Waste Disposal and Resource Recovery.** *Resource Recovery and Conservation*, 4, 261-299, 1979.