

Curriculum Vitae and Selected List of Publications

Neil Mitchison

Personal data:

Date of birth: 2 May 1951

Nationality: British

Family status: Married, with five adult children

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Most recent post

Head of "Security Technology Assessment" Unit, DG JRC, European Commission

Professional Experience:

- Aug '12 - Dec '14 Project leader and research manager, Joint Research Centre ("JRC") of the European Commission, Ispra, Italy. Progressively increasing strategic, policy, financial, and management responsibilities: from August 2012 Head of Unit, leading a team of 65-70 people (45 researchers + support staff), with direct responsibility for a further operational budget of €4M per year. In 2012-2014 the Unit's policy-oriented research covered: vulnerabilities of GPS and other satellite navigation and communication systems; usage of the radio spectrum, and analysis of interference between spectrum users; critical infrastructure vulnerabilities and resilience; cyber-security and computer dependability; prevention of, and response to, chemical accidents; standardisation of security technologies; analysis of the effects of natural catastrophes, including space weather events; and investigation of quantum technologies. Earlier work of the JRC groups I led included: design of real-time computer systems for use in crises; Internet privacy-preserving technologies; computer forensic methodologies; and design and testing of biometric passports. My tasks, in addition to personnel and budget management, included drawing up and implementing research strategy, quality management to ensure ISO 9001 certification, launching projects (some of high political profile, such as cooperation with the US DHS), agreeing projects with European Commission colleagues and with the Member States, and steering Directives and amendments through Council and Parliament. I also represented the JRC in the planning of the overall EU security research policy, with a budget of some €50 million per year.
- May '94 - May '06
- Oct '88 - Apr '93
- June '06 - July '12 European Commission representative in Scotland, and Head of European Commission office, Edinburgh. Presenting and explaining European Commission policies to a wide variety of audiences, including Press, Parliament, Government, stakeholders, and the general public. Dealing with journalists, taking part in radio and TV debates; also organising policy events and reporting to European Commission HQ on political and economic developments in Scotland. My responsibilities also included drawing up and having agreed at the highest level the Commission's policy on politically sensitive issues around Scottish independence.
- May '93 - Apr '94 Consultant Editor Europe, BBC TV, Glasgow. Launching "Eòrpa", a new BBC Scotland TV programme in Gaelic on European political, cultural and topical affairs. Responsibilities included researching, producing, and presenting discussions and analysis.

- Oct '87 - Oct '88 European Commission, Brussels. Press and Information Officer for the ESPRIT programme of research into advanced computing systems.
- Nov '85 - Oct '87 European Commission, Brussels. Computer Consultant and Analyst. Working primarily on financial systems; also teaching advanced computing.
- July '84 - Nov '85 Self-employed radio and TV broadcaster and journalist, mainly for the BBC; also working as computer consultant on large database systems.
- May '80 - June '84 Radio producer, journalist, and presenter, BBC Highland, Inverness. Primarily working on news and current affairs, in Gaelic and English.
- July '79 - Apr '80 Self-employed computer consultant, working on large database systems, mainly financial; also establishing a successful firm of computer consultants.
- Sept '78 - June '79 Research Fellow, Department of Experimental Psychology, University of Sussex. Research on computer analysis and synthesis of speech, and digital signal processing; teaching statistics, computing, and artificial intelligence.
- Apr '78 - Aug '78 Self-employed computer consultant, working on financial systems.
- Sept '77 - Mar '78 Research Associate, University of Edinburgh, Department of Linguistics; also teaching linguistics to undergraduates.
- Aug '76 - Aug '77 Sales Officer, Gaelic Books Council. Sales and exhibitions of Gaelic books.
- Sept '72 - Aug '74 Research Assistant, Edinburgh University; designing, building, and running an interactive system for location of dialects of medieval English.

Higher Education:

- 1974 - 1976 University of Edinburgh: phonetics training, postgraduate research in linguistics
 1969 - 1972 Senior Scholar, Trinity College, University of Cambridge;
 M.A. (1st class honours) in Mathematics

Professional Associations:

- * Chartered Member, British Computer Society (*MBCS*) and Chartered I. T. Professional (*CITP*)
- * Chartered Engineer, UK Engineering Council (*CEng*)

Working languages:

English, Scottish Gaelic: native
 French, Italian: very fluent, in speech and in writing
 German: good

Other recent activities:

- * 1999 - 2008: Member, Commission Scientifique / Conseil Scientifique, INERIS, F
- * 2008 - 2013 : President, Conseil Scientifique, INERIS, F
- * 1999: Liberal Democrat candidate, European Parliament, constituency: Scotland
- * 1992 & 1997: Liberal Democrat candidate, UK Parliament, constituency: Western Isles
- * 1989: Liberal Democrat candidate, European Parliament, constituency: Highlands & Islands

Selected list of publications

- * **Identifying a Low-Frequency Oscillation in Galileo IOV Pseudorange Rates**, D. Borio, C. Gioia, N. Mitchison, submitted to GPS Solutions, Springer, under review
- * **Space Weather and Financial Systems: Findings and Outlook**, E. Krausmann, C. Felton, W. Mutagh, N. Mitchison, S. Lechner, 9pp., EUR 26822 EN, Joint Research Centre of the European Commission, Luxembourg 2014
- * **Space Weather and Power Grids: Findings and Outlook**, E. Krausmann, E. Andersson, W. Murtagh, N. Mitchison, 16pp., EUR 26370 EN, Joint Research Centre of the European Commission, Luxembourg 2013
- * **Identity Theft - a discussion paper**, N. Mitchison, M. Wilikens, L. Breitenbach, R. Urry, S. Portesi, 33pp., EUR 21098 EN, Joint Research Centre of the European Commission, Italy 2004
- * **Cyber Crime Advisory Tool - C*CAT: a holistic approach to electronic evidence processing**, S. Frings, M Stanisic-Petrovic, J. Falkner, R. Urry, N. Mitchison, pp. 704-708, Human-Centered Computing: Cognitive, Social and Ergonomic Aspects, (Eds. D. Harris, V. Duffy, M. Smith, C. Stephendis), Lawrence Erlbaum, Mahwah, New Jersey, USA, 2003
- * **Protection against “internal” attacks on e-voting systems**, N. Mitchison, pp. 255-266 Informatik und Recht, Staempfli, Zürich, 2003
- * **La Direttiva 96/82/CE e le Prospettive Europee**, N. Mitchison, pp.211-214 Pianificazione del territorio e rischio tecnologico, P. Colletta, R. Manzo & A. Spaziante, Celid, Torino, 2002
- * **Crime and Abuse in e-Business**, N. Mitchison & R. Urry, *in* Journal of the Institute for Prospective Technological Studies, Joint Research Centre of the European Commission, Spain, Sept. 2001
- * **Land Recovery and Man-made Risks: a Perspective from the EU Accession Countries**, S. Duffield, A. C. Lucia, N. Mitchison & H. Kasamas, pp. 91-103, Journal of Hazardous Materials, Vol. 78 - 1/3, 2000
- * **Accident Scenarios and Emergency Response/ Escenarios de Accidentes y Respuesta a la Emergencia**, Eds. N. Mitchison, A. Garcés de Marcilla & B. Smeder, EUR 18733 EN, 312pp., JRC, European Commission, Italy 1999
- * **The “Seveso II” Directive: Guidance and fine-tuning**, N. Mitchison, pp.23-36, Journal of Hazardous Materials, Guest Eds. A. Amendola & K. Cassidy, Vol. 65 - 1/2, March 1999
- * **Safety Management Systems Under Seveso II: Implementation and Assessment**, N. Mitchison & G.A. Papadakis, pp. 43-51, Journal of Loss Prevention in the Process Industries, Vol. 12 No. 1, Jan. 1999
- * **Guidelines on a Major Accident Prevention Policy and Safety Management System, as required by Council Directive 96/82/EC (SEVESO II)**, Eds. N. Mitchison & S. Porter, 33pp., EUR 18123 EN, JRC, Italy 1998
- * **Safety Management Systems in the “Seveso II” Directive**, N. Mitchison & C. Clementé, pp. 121-125, Safety and Reliability, S. Lydersen, G.K. Hansen & H.A. Sandtorv, (Eds.), Balkema, Rotterdam 1998
- * **Chemical Hazards in Ports and Marshalling Yards/ Rischi Chimici in Porti e Scali Ferroviari**, Eds. N. Mitchison & S. Caprioli, 242pp., EUR 17745 EN, Joint Research Centre of the European Commission, Italy 1998
- * **Safety and Runaway Reactions**, Eds. N. Mitchison & B. Smeder, 228pp., EUR 17723 EN, JRC, Italy 1997
- * **Quelles Approches de l'Analyse Quantitative des Risques dans l'Union Européenne**, A. Amendola & N. Mitchison, *in* Analyse Quantitative des Risques, Proceedings of Seminar, Sept./Oct. 1997, Euroforum, Paris
- * **Major Accident Hazards - European Initiatives in Prevention, Mitigation, and Response**, N. Mitchison, pp. 3-18, Proceedings of TIEMEC Conference 1996, Ecole des Mines de Paris, 1996
- * **Safety Management Systems in the Process Industry**, Eds. P.C. Cacciabue, I. Gerbaulet, & N. Mitchison, 206pp., EUR 15743 EN, Joint Research Centre of the European Commission, Italy 1994
- * **The Role of the Goal Tree - Success Tree Model in the Real-Time Supervision of Hazardous Plant**, J-P. Nordvik, N. Mitchison & M. Wilikens pp. 345-360 Reliability Engineering and Safety Systems 44, Elsevier, New York 1994
- * **FORMENTOR: Real-Time Expert Systems for Loss Control**, M. Wilikens, J-P. Nordvik & N. Mitchison: pp. 225-238, "Sicherheit ist Wirtschaftlich!", IVSS Sektion "Chemie", Heidelberg 1993
- * **A Real-Time Expert System for Risk Prevention: the FORMENTOR Project**, N. Mitchison, A. Poucet, J-P. Nordvik & M. Wilikens: pp. 797 - 808, Safety and Reliability Assessment - an Integral Approach, (Eds. P. Kafka & J. Wolf), Elsevier, Amsterdam 1993
- * **Knowledge-Based Systems and Machine Learning for Enhancing Plant Safety**, A. Poucet, J-P. Nordvik & N. Mitchison *in* Proceedings of 13th IMACS World Conference on Computing and Applied Mathematics, Dublin 1991
- * **Trì Dàin** (poetry), Gairm 133, 1985