

## Prof R Stuart HASZELDINE OBE FRSE School of GeoSciences, Univ Edinburgh Nov 2016

Name: Robert Stuart HASZELDINE  
College: Science and Engineering  
School: School of GeoSciences  
Edinburgh appointment: 12 October 1998 (from University of Glasgow, and previously Strathclyde Univ)  
Promotion in Edinburgh: Reader October 2003 to Personal Professor, regular merit promotions to date

### UNIVERSITY EDUCATION and DEGREES

1974 - 1977 University of Edinburgh BSc (Hons) Geology 2(i)  
1977 - 1981 University of Strathclyde PhD Coalfield sedimentary and tectonic environments.

### CAREER SINCE GRADUATION

1981-84 British National Oil Corporation, then Britoil plc, Research Oilfield Sedimentologist  
1984 - 1989 University of Strathclyde, Lecturer in geology  
1989 - 1993 University of Glasgow, Lecturer in geology  
1993 - 1998 University of Glasgow, Senior Lecturer  
1994 -date Visiting lecturer, Heriot-Watt University, Dept Petroleum Engineering  
1998 University of Glasgow, Reader  
1998 - 2003 University of Edinburgh, Reader  
2003 - 2009 University of Edinburgh, Professor of Sedimentary Geology  
2009- date University of Edinburgh, world's first Professor of Carbon Capture and Storage

### Summary of Appointments + Peer Esteem since 2002

**2016** Appointed **EPRC Advisory Board** on Energy  
**2016** Invited expert **UN report**, water monitoring and quality with unconventional hydrocarbons  
**2015-16** Invited expert Lord Oxburgh **Advisory Committee to Sec of State: Future of CCS in UK**  
**2014 – date** **Zero Emissions Platform**, Advisory Council member - advice to EU Directors general  
**2013 – date** Directorate advisory Board to **Guangdong CCUS Centre**, China  
**2013** Invited evidence to **House of Commons** select Committee, CCS  
**2012** **OBE** appointed for **services to climate change technologies**  
**2011** Geological Society, London **“William Smith Medal”** for **global excellence in applied geology**  
**2009-2013** UK DECC Science Advisory Group to Chief Scientist  
**2010-2013** UK DECC CCS development advisory group  
**2009-date** Adviser to Scottish Government and Energy Minister  
**2008** Invited Tyndall Manchester Research Associate  
**2007-2010** Adviser to UK Minister for Energy: ACCAT Committee Dept Energy & Climate Change  
**2006** UKERC submissions to UK Energy Review and Treasury CCS review  
**2005 – 06** Adviser to House of Commons Select Committee “Carbon Capture and Storage”  
**2005 - 09** UK Energy Research Centre - leader of Carbon Storage theme  
**2005 – date** Science Director Scottish Centre for Carbon Storage, UK's largest CCS Research Centre  
**2005 - 09** co-leader UK carbon Capture and Storage Consortium  
**2004** Appointed Honorary Professor, Heriot-Watt University, Institute of Petroleum Engineering  
**2003** Elected **Fellow of the Royal Society of Edinburgh, Scotland's premier Science Academy**  
**1999** **Scottish Science Prize**, Saltire Society, for best science in Scotland : radioactive waste, hydrocarbons

### Invited Lectures

2016 Invited lectures to : Global 1.5 degrees anniversary meeting (plenary), Oxford University, Carbon Disclosure project, Committee Climate Change,  
World Coal Association, Windsor Energy group (House of Lords)  
2016 Invited Keynote lecture: Mexico Geological Society. Low carbon power, industry, heat  
2016 Invited plenary lecture. Inaugural meeting of UNAM CCS project, Mexico City  
2016 Tekna annual review Keynote Norwegian Research council  
2015 Invited lectures: MIT CCS forum USA, Engineers Ireland  
2015 Tekna annual review keynote Norwegian Research council  
2011 – 16 About 5-20 external each year to Universities, conferences, technical meets, professional societies  
2011 Keynote plenary speaker “CCS” International Association Sedimentologists Annual Meeting

2006-11 Numerous invited lectures on Carbon Capture and Storage to Trade Associations, Industry Groups  
2004 Annual “Boyd Visiting lecturer” (one week) Petroleum Geology: University of Texas at Austin, USA  
2004 CSIC (National Research Institute) Barcelona, Invited Guest speaker  
2003 Invited lecturer CO<sub>2</sub> storage , Institute Francais de Petrole, Paris.

## Summary

Stuart Haszeldine has worked on coal, oil and gas deposits, with a wide interest in fossil fuels, radioactive waste disposal and environmental impact. He is Professor of Carbon Capture and Storage at the University of Edinburgh, and his current research examines geological storage of CO<sub>2</sub>, in the context of climate change and changing energy use. This has rapidly developed as a topic of great scientific and political impact. He was previously first topic leader for the Carbon Management theme of the UK Energy Research Centre [www.ukerc.ac.uk](http://www.ukerc.ac.uk) . He leads the UK's largest university research group for CO<sub>2</sub> storage and capture (at Edinburgh, Heriot-Watt and British Geological Survey at Edinburgh) [www.geos.ed.ac.uk/sccs/](http://www.geos.ed.ac.uk/sccs/). and is co-leader of the academic UK Carbon Capture and Storage Research Centre <https://ukccsrc.ac.uk>. In 1999 he was awarded the Saltire Society and Royal Society of Edinburgh Science Prize for his work on radioactive waste disposal and hydrocarbon geology. In 2003 he was elected Fellow of the Royal Society of Edinburgh. In 2011 he was awarded the global William Smith Medal of the Geological Society for global excellence in Applied Geology. In 2012 he was appointed OBE for services to climate change technologies.

## Publications

166 peer reviewed academic publications, plus presentations and briefing reports. H index = 36; i10 = 92  
[http://www.research.ed.ac.uk/portal/en/persons/stuart-haszeldine\(f84a7f61-f9b4-42d9-8b41-eb033eb4afd6\).html](http://www.research.ed.ac.uk/portal/en/persons/stuart-haszeldine(f84a7f61-f9b4-42d9-8b41-eb033eb4afd6).html)

## Grants

2016 -18 CO<sub>2</sub>-EOR from the North Sea, Industry, £ 435k  
2015 – 16 Collaboration with Guangdong CCS research centre £100k  
2015-18 Frac Risk knowledge of shale gas impact EU £527k  
2014 – 17 MIRECOL Remediation of CO<sub>2</sub> leakage. EU £117k EU 608608  
2013 – 16 Fingerprinting captured CO<sub>2</sub> using natural tracers: £295k EPSRC ep/k036033/1  
2011-13 EU-Trace review of climate engineering options £150,000 (Inst Adv Sustainability Studies, Potsdam)  
2012-17 CCS linked with CO<sub>2</sub>-EOR industry £463k  
2011-16 SFC SCCS; Scottish Centre of excellence in carbon capture and storage £2,000,000  
2010-15 ScottishPower Academic Alliance: CCS research £2,500,000  
2010-13 Co-I £150k of 2,200,000 NERC QICS Marine environmental impacts of CO<sub>2</sub> leakage  
2010-12 UKERC/NERC CCS realizing the potential – technology development Co-I £140k of 400k  
2009-11 SFC£70k, Industry JIP £140k Progressing Scotland CO<sub>2</sub> storage opportunities.  
2009-14 ScottishPower personal Chair in Carbon Capture and Storage £800k  
2009 MUSTANG EU FP7 CO<sub>2</sub> modelling 14 universities €500k to UoE of €8M  
2008 Nov 1<sup>st</sup> 24 months Carbon Capture and Storage Interactive – Edinburgh PPE Proposal  
EP/G02037X £96,425 EPSRC PI Patricia Erskine  
2008- 2011 Euro 614,600 as part of CO<sub>2</sub>SolStock Bio-based CO<sub>2</sub> storage 2,283,345 over 30 months Dr  
Bryne Ngwenya lead. Proposal 226306-2 Collaborative project FP7-ENERGY-FET  
2008 – April 09 UK industry Evaluation of UK CO<sub>2</sub> storage  
2007-2010 £480,000 UK industry Consortium Club Evaluation of world CO<sub>2</sub> production and stores  
2008-2013 EPSRC £4M and SFC, Scott Enterprise £0.9 Carbon capture from power plant and atmosphere  
2008 £ 720,000 EPSRC as part of TSB CASSEM £2.2M study to develop exploration and evaluation  
methods for CO<sub>2</sub> geological storage with coal power plant  
2008 – 09 SFC 75k 15 Industries £225k JIP Scottish regional study of CO<sub>2</sub> sources transport and storage  
2005-09 £563k of £1,400k Oct 05 to 30 Sept 09 Scottish Centre for Carbon Storage Research SCCS  
Scottish Funding Council Ref HR04015  
2005 £115,000 3 years NERC Carbon Capture and Storage Consortium (£2M overall). NERC,  
NE/C516479/1 R39432 01/06/05 to 31/05/08  
2005 £179,449 4 years NERC, via UK Energy Research Centre. Carbon Storage theme leader in Future  
Sources of Energy. NE/C513169/1 R39134 1/10/04 to 30/04/09