

Professor Dorrik Stow FRSE

*Emeritus Professor, Heriot-Watt University, Edinburgh, Scotland. Email: d.stow@hw.ac.uk
Distinguished Professor, China University of Geoscience, Wuhan, China*

Professor Stow is a leading sedimentologist, geologist and oceanographer of international renown with an extensive record of scientific publications, including over 300 scientific papers and reports, numerous books and edited volumes. He specialises in the deep sea and on deep-sea deposits now thrown up onto land. In pursuing this scientific quest, he has sailed on all the world's major oceans, visited or worked in more than 50 countries and lectured extensively throughout the world. He has worked in and with the oil industry, led major international missions for scientific drilling into the deep Indian Ocean seafloor and as co-chief scientist for IODP Leg 339 on Mediterranean Outflow research linked to climate change. He maintains strong interest in international development and capacity building, especially concerning the environment and energy sectors, hazard mitigation, geoscience education and marine management. His enthusiasm for the popularisation of ocean and earth sciences is expressed through lectures, writing and broadcast.

University education, qualifications and awards

BA (1974) University of Cambridge, England (Natural Sciences Tripos)

MA (1976) Exhibitioner, Sidney Sussex College, Cambridge, President Sedgwick Club

PhD (1977) Dalhousie University, Canada, Commonwealth Scholar, Dalhousie Graduate Scholar

FRSE (2012) Fellow of the Royal Society (Edinburgh)

Royal Institution Australian Science Scholarship (1969), Royal Society John Murray Traveling Fellowship (1978), NERC Postdoctoral Research Fellowship (1980-82), Royal Society of Edinburgh Research Fellowship (1982-84), Geological Society William Smith Fund (1989), Association of Geoscientists for International Development Life Membership (1996), Royal Society Industrial Research Fellowship (1998-2000), National Teaching Fellowship (2003), Spanish Mobility Award for Visiting Scientists (2006), Fellow of the Royal Society of Edinburgh (2012), Distinguished Professor at the China University of Geoscience (2019-25), Leverhulme Emeritus Research Fellow (2022-25), Japan Society Promotion of Science Visiting Scientist (2022).

Employment and external appointments

1977-1980 Exploration Geologist, then Senior Sedimentologist, BRITOil

1980-1984 Postdoctoral Research Fellow, University of Edinburgh

1984-1985 Visiting Professor, University of Bordeaux, France

1984-1989 Lecturer then Reader in Geology, University of Nottingham

1989-2000 Reader in Sedimentology, University of Southampton

1998-2000 Royal Society Industrial Research Fellowship, BP Research, Sunbury, UK

2000-2008 Professor of Ocean & Earth Science, National Oceanography Centre, Southampton

Head of Academic Studies (2002-05), SOES, University of Southampton

2006-2007 Visiting Professor, Spanish Institute of Oceanography, Malaga, Spain

2008-2012 ECOSSE Chair and Director, Institute of Petroleum Engineering, Heriot-Watt

2011-2012 Director of Research, Institute of Petroleum Engineering, Heriot Watt Univ.

2012-2017 Head of Institute, Institute of Petroleum Engineering, Heriot Watt University

2017-2021 Professor of Geoscience, Institute of Geo-Energy Engineering, Heriot-Watt

2019-2025 Distinguished Visiting Professor (P/T), Chinese University of Geoscience, Wuhan
2021-2022 JSPS Visiting Fellow, Tokyo Gakugei University, Japan (P/T)
2022-2025 Leverhulme Emeritus Research Fellow (P/T)
2021 current Emeritus Professor, Heriot Watt University, Edinburgh
2023 current Special Adviser, Larus Energy

External Examiner for BSC, MSc and PhD degrees at universities throughout the UK, France, Norway, Netherlands, Spain, India, Pakistan, South Africa (1980-present)
External Assessor for senior appointments at various universities in UK and overseas
External Adviser Academia Finland Panel Member (2013-21), Russian Science Foundation (2014-19)
Science Foundation Ireland Panel Member for Research Centres (2013-14)

Research activities

Publications: Very extensive publication record over the past 40 years, including over 300 scientific peer-reviewed articles, 10 books (authored or edited), 8 thematic issues of refereed journals (edited), over 250 scientific book reviews, and 350 conference abstracts. A full list is available on request.

PhD supervision: 50 students supervised to successful PhD's

Research grants: Over 50 successful applications for research monies (over £25 million), extensive collaboration nationally and internationally on a variety of land-based, industrial-focused and marine research projects. Specialist in deep ocean sedimentary systems.

Continuing Professional Development: regular short course provision for industry, government and university sector across the world. Specialist topic: Deepwater Sedimentary Systems. General topics: Petroleum Geoscience; Sedimentary Environments, Sedimentary Basins

National and International Conferences and Symposia: over 15 convened/co-organised

In-service training courses

Organisation and delivery of regular in-service training short courses and field courses for the oil industry, university and for national geological surveys. Currently a NEXT Schlumberger instructor for a variety of courses, and EAGE instructor for Masterclasses in deepwater sedimentary systems (see below). Former instructor with UNISTRAT and OPUS.

Joint Industries Courses, Trondheim, Norway (annually, 1984 -1988)

Joint Association for Petroleum Exploration Courses, UK (1990, 1998)

Japanese Geological Survey, Tokyo, Japan (1992)

Shell Oil, UK (field course, Sicily, 1996)

Sri Lankan Geological Survey, Kandy, Sri Lanka (1996)

Natural Hazards Centre, Tezpur, Assam (1998)

Kashmir Natural Hazards and Highways Department, Jammu, Kashmir (1999)

Petrobras, Rio de Janeiro, Brazil (2000)

Petronas, Kuala Lumpur, Malaysia (2002)

Nexen Oil, UK (field course, Cyprus, 2004)

North African Research Group/British Gas (field course, Sicily, 2006)

Anadarko Oil, UK and Algeria, (field course, Tunisia, 2007)

Maersk Oil, Denmark (2008)

University of Tunis, Tunisia (2008, 2010)

Heriot Watt University, Edinburgh, Dubai, Malaysia, Russia (2008-2021)

SINOPEC and CNOOC, China (2023, 2024)

JNOC, Japan (2022)
KNOC, South Korea (2024 and 2025)

NEXt (Schlumberger) industry courses – classroom, field-based, and core lab: (1) deepwater exploration and production, (2) sedimentary systems overview, (3) sequence stratigraphy; and *EAGE Specialist Masterclass courses* in Deepwater Sedimentary Systems Courses held: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2017, 2018, 2019, 2020, 2022, 2023, 2024 in UK, Egypt, Malaysia, Russia, India, China, South Africa, Norway, Thailand, Australia, Dubai, Spain, Oman

National and International Committees

Research Assessment UK: REF 2021 External Review Panel (Sub-Panel 7) for Glasgow University (2017), Durham University (2018), Manchester University (2019), Royal Holloway University London (2020), Sheffield University (2020); REF 2014 Sub-Panel 07 Member – Earth Systems & Environmental Sciences (2013-14); Research Assessment Exercise (RAE) 2008: Specialist Advisor, Panel E, Marine Geology (HEFCE)

Scotland: Industry Leadership Board (2013-18), Energy Technology Partnership Oil & Gas Lead (2012-15)

Edinburgh Science Triangle, Oil & Gas Representative (2013-2017)

Natural Environment Research Council: Oil & Gas Catalyst Panel (2013-17), NERC Peer College (2010-2015); LINK initiative (1998), Ocean Drilling Program (1988-92), Basin Dynamics Advisory Committee (1986-88)

International Geological Correlation Programme: Project 619 (2012, Coordinator), Project 432 (Coordinator and UK representative, 1998-2002), Royal Society Earth Resources Committee (1998-2004)

Integrated Ocean Drilling Program: Site Survey Panel, UK representative (2004-2008), ODP Sediment and Geochemistry Panel (1988-1992); Co-Chief Scientist ODP Leg 116 (1988) and IODP Expedition 339 (2011-12)

International Union of Geological Sciences: Commission on Geoscience Education and Training: Secretary-Treasurer (1990 -1996)

Professional Societies: Joint Association of Geoscientists for International Development: Chairman (1986 -1990), Association of Geoscientists for International Development: Vice-President (1980-88), Editor (1988-96), International Association of Sedimentologists: Vice-President (1986-90), British Sedimentology Research Group: Chairman (1986 -1987), Geological Society Council (1984-88), Chairman Promotions (1988-92)

Editorial Boards: Series Editor-in-Chief, Springer Briefs: Petroleum Engineering & Geoscience (2016-21),

Consultant Editor with Usborne, Dorling Kindersley, Oxford University Press, Toucan Press (2000 - present).

Association of Geoscientists for International Development Editor-in-Chief (1988 -1996), Associate Editor Sedimentary Geology (1990-98), Journal Sedimentary Petrology (1975 -1987), Energy Geoscience (current)

Popular science activities

Enthusiastic proponent of popularising science through numerous talks, lectures and articles. Recent books include *Encyclopedia of the Oceans (Oxford University Press 2004)* – a popular-style, illustrated family reference, and *Sedimentary Rocks in the Field: A Colour Guide (Manson Publishing 2005)* – an undergraduate student text; *Vanished Ocean (Oxford University Press 2010)* and *Oceans: A Very Short Introduction (Oxford University Press 2017)*. Two books in progress. *Regular radio* interviews and some television experience.

Public lectures: to large public audiences at the Royal Institution, the Royal Geographical Society, the Geologists' Association, the Edinburgh Lecture Series, the International Science Festival, Edinburgh, and as a widely requested speaker at many smaller venues around the country.

Invited lectures: Regular invitation as keynote speaker at IAS, IGC, AAPG, EAGE congresses as well as regional geological and sedimentological conferences (e.g. Argentina, Chile, Brazil, Sri Lanka, India, Spain, France, South Korea, Japan, Malaysia, China, Australia, USA, Thailand, Morocco)

Enrichment lectures: popular talks on cruise ships (Transatlantic 2024, Southeast Asia/Vietnam 2025, Iceland 2025)

NOTE: A full bibliography is available on this site together with PDFs for free download.