

MICHAEL J. BUCKINGHAM: CURRICULUM VITAE

CONTACT DETAILS

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ACADEMIC QUALIFICATIONS

B.Sc. (Honours, 1967), Ph.D. (1971), both in physics from the University of Reading, U.K.

PROFESSIONAL QUALIFICATIONS

Chartered Engineer (U.K.)

CAREER HISTORY

1990-present: Distinguished Professor (Ocean Acoustics), Scripps Institution of Oceanography

1974-1990: Individual Merit Senior Principal Scientific Officer, Radio and Navigation Department, Royal Aerospace Establishment, Farnborough, Hampshire GU14 6TD, U.K.

1982-1984: Exchange Scientist, Naval Research Laboratory, Washington, D.C., U.S.A. (attached to the British Embassy).

1986-1987: Visiting Professor, Department of Ocean Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts, U.S.A. (on leave of absence from the R.A.E.).

1971-1974: Post-Doctoral Research Fellow, J. J. Thomson Physical Laboratory, University of Reading, U.K. (working on the detection of gravitational radiation from interstellar events).

1990-2012: Visiting Professor, Institute of Sound and Vibration Research, University of Southampton, U.K. (Fluid Dynamics and Acoustics).

2010-2015: Visiting Professor, National Key Laboratory of Science and Technology on Sonar, Hangzhou, China.

MEMBERSHIP OF PROFESSIONAL SOCIETIES

1. Fellow of the Institute of Acoustics (U.K.)
2. Fellow of the Institution of Engineering and Technology (U.K.)
3. Fellow of the Acoustical Society of America (U.S.A.)
4. Fellow, Explorers Club (International)
4. Member, New York Academy of Sciences (U.S.A.)
5. Member, Sigma Xi (U.S.A.)
6. Member, American Geophysical Union (U.S.A.)

AWARDS

1972: Clerk Maxwell Premium, Institution of Electronic and Radio Engineers (U.K.) for innovative research on the detection of gravitational radiation.

1982: A. B. Wood Medal, Institute of Acoustics (U.K.).

1984: Commendation for Distinguished Contributions to Ocean Acoustics, Naval Research Laboratory, Washington D. C., U.S.A.

1988: Alan Berman Publication Award, Naval Research Laboratory, Washington D. C., U.S.A.

1997: Science Writing Award for Professionals in Acoustics, Acoustical Society of America, for the article "Seeing underwater with background noise", *Scientific American*, v. 274 (No. 2), 40-44 (1996).

1998: Finalist, Discover Magazine Awards for Technological Innovation (Sight category).

BOOKS

1. M. J. Buckingham, *Noise in Electronic Devices and Systems*, Ellis Horwood (John Wiley), Chichester, pp. 1-372 (1983).
2. M. J. Buckingham and John R. Potter (Editors), *Sea Surface Sound '94*, World Scientific, Singapore, pp. 1-494 (1995).

PUBLICATIONS

Over 200 papers, reports and articles in the scientific literature, and 5 patents.

EXTRAMURAL ACTIVITIES

1988-1992: U.K. national representative, Scientific Committee, MAST Programme, Commission of European Communities, Brussels, Belgium.

1991: Founding member (jointly with Herman Medwin, Van Holliday and David Farmer) of the Acoustical Oceanography Technical Committee, Acoustical Society of America.

1994-1997: Chairman, Technical Committee on Acoustical Oceanography, Acoustical Society of America.

2010-2013: Member Executive Council, Acoustical Society of America.

1997: Technical Program Chair, 134th meeting, of the Acoustical Society of America, San Diego, 1-5 December 1997.

1999: Honorary Chairman, 4th International Conference on Theoretical and Computational Acoustics, Trieste, Italy.

1999-present: Editor-in-Chief, Journal of Computational Acoustics (World Scientific, Singapore).

2004: Technical Program Chair, 148th meeting of the Acoustical Society of America, San Diego, 15-19 November 2004.

2011: General Chair, 162nd meeting of the Acoustical Society of America, San Diego, October/November 2011.

GRADUATED STUDENTS

Broderick Berkhout (Masters, 1992)

Milton Garcés (Ph.D., 1995)

Nicholas Carbone (Ph.D., 1996)

Chad Epifanio (Ph.D., 1997)

Holly Burch (Ph.D., 1998)

Thomas Hahn (Ph.D., 1999)

Thomas Berger (Ph.D., 1999)

Eric Giddens (Ph.D., 2005)

Adam Wadsworth (Masters, 2011)

David Barclay (Ph.D., 2011)

Simon Freeman (Ph.D., 2013)

GRADUATE STUDENT PRIZES

My graduate students have received “Best Student Paper” awards from international conferences on eight occasions:

Thomas Berger for “Low-frequency acoustic emissions of a plunging water jet. Part 1: experiment”, 136th Meeting of the Acoustical Society of America, Norfolk, Virginia, 12-16 October 1998. (1st prize).

Thomas Hahn for “Low-frequency acoustic emissions of a plunging water jet. Part 2: theory”, 136th Meeting of the Acoustical Society of America, Norfolk, Virginia, 12-16 October 1998. (3rd prize).

Eric Giddens for “Sound from a light aircraft for underwater acoustic inversions”, 144th Meeting of the Acoustical Society of America, Cancun, Mexico, 2-6 December 2002. (1st prize).

Eric Giddens for “Geoacoustic inversions in shallow water using Doppler-shifted modes from a moving source”, 148th Meeting of the Acoustical Society of America, San Diego, California, 15-19 November 2004. (1st prize).

David Barclay for “The effect of grain shape on the porosity of marine sediments”, 154th meeting of the Acoustical Society of America, New Orleans, Louisiana, 27 November-1 December 2007. (1st prize).

David Barclay for “Doppler geo-spectroscopy in the Makai experiment”, 155th meeting of the Acoustical Society of America, Paris, France, 29 June-4 July 2008. (2nd prize).

David Barclay for “Ambient noise profiling with Deep Sound”, Underwater Acoustics Measurements Conference: Technologies and Results, Nafplion, Greece, 22-26 June 2009 (Honorable Mention in the Best Student Paper Olympiad)

David Barclay for “Ambient noise in the Mariana Trench”, 2nd Pan American Meeting on Acoustics, Cancun, Mexico 15-19 November 2010 (2nd prize).

AVIATION

Private Pilot (Single Engine Land) with instrument and glider ratings.