

Timothy John Pedley

Department of Applied Mathematics and Theoretical Physics
University of Cambridge, Cambridge, UK

EDUCATION:

BA (1963) MA, PhD (1967), ScD (1982) Cambridge University

PROFESSIONAL EXPERIENCE:

2000–Present Head of Department, DAMTP, Cambridge University
1996–Present G.I.Taylor Professor of Fluid Mechanics, DAMTP, Cambridge University
1990–1996 Professor of Applied Mathematics, Leeds University
1973–89 Lecturer, then Reader (1989), DAMTP, Cambridge University
1968–73 Lecturer, Dept. of Mathematics, Imperial College, London
1966–68 Post-doctoral Fellow, Johns Hopkins University

HONORS:

2004 President, Institute of Mathematics and its Applications
2002 Chair, World Council for Biomechanics
2000 Fellow, American Institute of Medical and Biological Engineering
1999 Foreign Associate, US National Academy of Engineering
1995 Fellow of the Royal Society of London
1995 EPSRC 5-year Senior Fellowship
1992 Congress Committee, IUTAM (Secretary, 2000–present)
1977 Adams Prize, Cambridge University

CURRENT RESEARCH SUPPORT:

Eng. and Physical Science Research Council (UK), Natural Environment
Research Council (UK), and European Commission

SELECTED PUBLICATIONS:

1. Metcalfe, A.M. & Pedley, T.J. Bacterial bioconvection: weakly nonlinear theory for pattern selection. **J. Fluid Mech.**, **370**: 249–270, 1998.
2. Pedley, T.J. & Hill, S.J. Large amplitude undulatory fish swimming: fluid mechanics coupled to internal mechanics. **J. exp Biol.**, **202**: 3431–3438, 1999.
3. Lewis, D.M. & Pedley, T.J. The influence of turbulence on plankton predation strategies. **J. Theor. Biol.**, **210**, 347–365, 2001.
4. Metcalfe, A.M., Pedley, T.J. & Thingstad, F. Incorporating turbulence into a plankton foodweb model. **J. Marine Systems**, **49**, 105–122, 2004
5. Vladimirov, V.A., Wu, M.S.C., Pedley, T.J., Denissenko, P.V. & Zakhidova, S.G. Measurement of cell velocity distributions in populations of motile algae. **J. Exp. Biol.**, **207**, 1203–1216, 2004