

## **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