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The picture on the cover is based on figure 15(b) of 'Buoyancydriven instabilities of miscible two-layer stratifications in porous media and Hele-Shaw cells', by P. M. J. Trevelyan, C. Almarcha & A. De Wit. The JOURNAL OF FLUID MECHANICS exists for the publication of theoretical, computational and experimental investigations of all aspects of the mechanics of fluids.

EDITOR

Prof. M. G. Worster, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Centre for Mathematical Sciences, Wilberforce Road, Cambridge CB3 0WA, UK. FAX 44 1223 765900; mgw.jfm@damtp.cam.ac.uk

DEPUTY EDITORS

Prof. P. F. Linden, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Centre for Mathematical Sciences, Wilberforce Road, Cambridge CB3 0WA, UK. FAX 44 1223 765900; p.f.linden@damtp.cam.ac.uk

Prof. C. Meneveau, Department of Mechanical Engineering and Center for Environmental and Applied Fluid Mechanics, Johns Hopkins University, 3400 N. Charles Street, Baltimore, MD 21218, USA. *FAX* 1 410 516 7254; meneveau@jhu.edu

Editorial Office: FAX 44 1223 325802; JFMproduction@cambridge.org

ASSOCIATE EDITORS

- Prof. D. Barthès-Biesel, Génie Biologique, Université de Technologie de Compiègne, BP 20529, Compiègne 60205, France. FAX 33 3 44 23 79 42; dbb@utc.fr
- Prof. O. Bühler, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, NY 10012-1185, USA. FAX 1 212 995 4121; obuhler@cims.nyu.edu
- Dr C. P. Caulfield[‡], DAMTP, University of Cambridge, Centre for Mathematical Sciences, Wilberforce Road, Cambridge CB3 0WA, UK. *FAX* 44 1223 765900; c.p.caulfield@damtp.cam.ac.uk

Prof. P. A. Davidson, Department of Engineering, University of Cambridge, Trumpington Street, Cambridge CB2 1PZ, UK. FAX 44 1223 332662; pad3@eng.cam.ac.uk

Prof. J. Duncan, Department of Mechanical Engineering, University of Maryland, College Park, Maryland 20742, USA. *FAX* 1 301 314 9477; duncan@umd.edu

Prof. I. Goldhirsch, Department of Fluid Mechanics and Heat Transfer, Faculty of Engineering, Tel Aviv University, Ramat Aviv 69978, Israel. FAX 972 3 640 7334; jfm@eng.tau.ac.il

Prof. M. D. Graham, Department of Chemical and Biological Engineering, University of Wisconsin-Madison, 1415 Engineering Drive, Madison, WI 53706-1691, USA. FAX 1 608 262 5434; graham@engr.wisc.edu

Prof. R. W. Griffiths, Research School of Earth Sciences, Australian National University, Building 61, Canberra, ACT 0200, Australia. FAX 61 2 6257 2737; Ross.Griffiths@anu.edu.au

Prof. É. Guazzelli[†], IUSTI CNRS UMR 6595, Polytech-Marseille, Technopôle de Château Gombert, F-13453 Marseille cedex 13, France. FAX 33 4 91 10 69 69; guazzelli.jfm@polytech.univ-mrs.fr

Prof. D. S. Henningson, KTH Mechanics, SE-10044 Stockholm, Sweden. FAX 46 8 205131; jfm@mech.kth.se

- Prof. O. E. Jensen, School of Mathematical Sciences, University of Nottingham, University Park, Nottingham NG7 2RD, UK. FAX 44 115 951 3837; oliver.jensen@nottingham.ac.uk
- Prof. Y. Kaneda, Department of Computational Science and Engineering, Nagoya University, Chikusa-ku, Nagoya, Aichi 464-8603, Japan. FAX 81 52 789 4546; kaneda@cse.nagoya-u.ac.jp

Prof. D. Lohse, Physics of Fluids Group, Department of Applied Physics, Faculty of Science, University of Twente, PO Box 217, 7500 AE Enschede, The Netherlands. FAX 31 53 489 8068; lohse.jfm@tnw.utwente.nl

Prof. J. Magnaudet, Institut de Mécanique des Fluides de Toulouse, Allée Camille Soula, 31400 Toulouse, France. FAX 33 534 322 899; magnau_jfm@imft.fr

Prof. I. Marusic, Department of Mechanical Engineering, University of Melbourne, VIC 3010, Australia. *FAX* 61 3 9347 8784; imarusic@unimelb.edu.au

Prof. M. Matalon, Department of Mechanical Science and Engineering, University of Illinois at Urbana-Champaign, 1206 West Green Street, Urbana, IL 61801, USA. FAX 1 217 244 6534; matalon@illinois.edu

Prof. N. Peake[†], DAMTP, University of Cambridge, Centre for Mathematical Sciences, Wilberforce Road, Cambridge CB3 0WA, UK. FAX 44 1223 765900; N.Peake@damtp.cam.ac.uk

Prof. J. J. Riley, Department of Mechanical Engineering, Box 352600, University of Washington, Seattle, WA 98195, USA. FAX 1 206 685 8047; rileyj@u.washington.edu

- Prof. P. H. Steen, School of Chemical Engineering, Cornell University, Olin Hall, Ithaca, NY 14853-5201, USA. FAX 1 607 255 9166; phs7@cornell.edu
- Prof. J. S. Wettlaufer[†], Department of Geology and Geophysics, and Department of Physics, Yale University, 210 Whitney Avenue, PO Box 208109, New Haven, CT 06520, USA. FAX 1 203 432 3134; jfm@yale.edu

† Editor handling fast-track papers. ‡ Book Review and Focus on Fluids Editor.

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