

Weather report: outlook fair

T.M.L. Wigley

Journal of Climatology. Editor S. Gregory. 4/yr. (Wiley.) £48.50 UK, \$97.50 elsewhere.

ONLY a few decades ago climatology was seen as a purely descriptive part of meteorology, at best a rather poor second cousin to a true scientific subject. Today few would argue that climatology has emerged as a separate (and expanding) discipline, one having wide ramifications in other fields such as meteorology, hydrology, agriculture, geology, oceanography and astronomy. It is partly because of this breadth of contact that there are few journals which are devoted exclusively to the subject.

In recent years many interesting studies which impinge on climatology have been published in specialist journals in other disciplines, largely because they were directed to those particular specialist audiences. A broad-spectrum climatologist may say, "Ah ha, another paper in my field. No doubt, therefore, of the need for a new journal to gather these contributions together". This is, however, a specious argument, for many such papers merely use the language and, perhaps, some of the techniques or results of climatology.

The *Journal of Climatology*, a journal of the Royal Meteorological Society, does not



cast its net so far, although it has a wide mandate: global and regional studies of climate, local and micro-climatological investigations, changes of climate (past, present and future), and the application of climatological knowledge to a wide range of human activities. The need for such a journal is beyond dispute.

The journal is meant to be international and comprehensive. In the first of these aims it succeeds exceptionally well with an impressive geographical spread of authors in all issues to date and, presumably, a correspondingly international readership. Comprehensive it is not. The majority of contributions in Vol. 1 are synoptic, descriptive studies which largely fall into the old school of climatology. These competent, albeit pedestrian papers certainly warrant publication somewhere, but it is to be hoped that in future issues of the journal the emphasis will shift to a broader front — indeed there is evidence that this is happening. In spite of this criticism of content, the quality of the papers has been uniformly high. This is the main criterion which determines the future

success or failure of a journal and on these grounds success is guaranteed.

The only rival journal is Reidel's *Climatic Change* (for review see *Nature* 293, 362; 1981). While there is some overlap, *Climatic Change* is more multi-

disciplinary and the two journals neatly complement each other. The publishers of the newcomer can learn from *Climatic Change* in one respect, however: the latter offers a low, personal subscription rate to all, whilst the *Journal of Climatology* so favours only members of the Royal Meteorological Society. □

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The prospect of PCH

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PhysicoChemical Hydrodynamics. Editor-in-chief D.B. Spalding. 4/yr. (Pergamon.) £60, \$68.50.

Physico-chemical (or, as the publisher of this new journal chooses to write it, "PhysicoChemical") hydrodynamics may be defined roughly as fluid mechanics with a dash of physical chemistry — phase changes, solute diffusion, interface effects, intermolecular forces, electrokinetic phenomena etc. The term stems from the title of a pioneering book by B.G. Levich (who is chairman of the editorial advisory board of the journal) first published in the USSR in 1952 and republished in English in 1962. This book recorded Levich's own many contributions to the subject, and, more importantly, it made us aware of a new and interesting group of phenomena and processes. The problems in question are essentially fluid dynamical in nature, but the physical chemistry involved puts them outside the competence of many fluid dynamicists.

This is not a coherent field but, as with any interdisciplinary subject, it has a small group of followers identified by their interest and expertise in two different areas. Is this an adequate basis for the launching of a new journal? A vain question, the answer to which would have no bearing on whether *PhysicoChemical*

Hydrodynamics will continue to exist or on whether yet more journals will be established.

The layout of editorial material is messy, with five pages at the front and two more at the back in addition to the information



carried on the front cover. There are earnest proclamations ("We have no desire to compete with existing journals, which cater for the narrower specialist" — narrower?); an abundance of good resolutions ("Only SI units will be allowed" — although centimetres, fortunately, and inches, unfortunately, have already made their appearance); and rousing talk about the subject "PCH". A large number of specialist "topic editors" are named, and papers may be submitted directly to them.

No dates of receipt of papers were printed in Vols 1 and 2, but they are appearing in Vol. 3. There are four nominal parts to each (yearly) volume, all dated only with the year; sometimes two parts are merged. The subscription price is about \$1 for three pages — not cheap. The mix of contributions so far is roughly as expected from the title, although there are also some papers on straight H, without the PC, for example on turbulent flow. The editors organize a conference on physico-chemical hydrodynamics every two years, and the papers presented at these conferences are filling up some of the issues.

One can have little idea of the role a new journal will play and the impact it may have, but the decent thing to do is to express a welcome and hope for the best. For *PhysicoChemical Hydrodynamics* it can be said that the prospects are reasonably favourable. □

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Autumn Books

The next review supplement to be published in *Nature* is Autumn Books.

Among the reviewers will be J.W. Cornforth, Stuart Sutherland, Martin Gardner, Michael Ruse, Eric Ashby, Stephen Hawking and Richard Lewontin.

Books to be reviewed include A.G. Cairns-Smith's *Genetic Takeover*, B. Gal-Or's *Cosmology, Physics and Philosophy*, Abraham Pais's *Subtle is the Lord: The Science and Life of Albert Einstein*, John Maynard Smith's *Evolution and the Theory of Games*, Nancy Stepan's *The Idea of Race in Science* and P.B. Medawar's *Pluto's Republic*.

The supplement will appear in the issue of November 11th.