

"SUDDENLY, pear blossom on every tree/As though the wind of Spring came upon us last night." With these words so welcome to a people that has just passed a long and dreary Winter in science (see *Nature*, 274, 834; 1978), a new Chinese journal, *Ziran Zazhi*, greets the world.

Ziran Zazhi means simply 'Nature Magazine'. It is a monthly of about 60 pages and its first issue came out in May. Its aims are: to get better acquainted with Nature, to remould Nature and to exact greater freedom from Nature. Its editorial policy is to "let scientific truth develop and grow through contention". It covers both physical and biological sciences and is very much like this Journal in having as its main content Articles, Research Letters and Nature Information. In addition, it has two more popular sections, Explorations in Nature and Riddles in Nature.

The Research Letters at the moment account for only 10% of the pages, but they are given pride of the place. Compared with the Letters of this Journal, they are somewhat shorter, just as technical, and cover as wide a spectrum, except perhaps for a slight bias toward particle physics and systems analysis in the issues so far published. Arguably the most original Letter so far is a report of some experimental results on the physical basis of the traditional *yunqi* therapy—the curing of disorders through the passing of *qi* (pneuma) from doctor to patient without bodily contact. Though not as well-known as acupuncture, this form of therapy has its believers and followers among

Nature: Chinese style

from T. Kiang

the Chinese people. It goes something like this: the doctor does a sort of breathing exercise; a few minutes later, he has a feeling of congestion (stage 1) which may last a couple of minutes; he then has a feeling of release (stage 2) lasting another couple of minutes. The traditional 'theory' is that, during stage 2, the doctor's *qi* is emitted through certain specific points called *xuwei* and enters the patient's body through some other specific *xuwei*, effecting the desired cure. What the experimenters found was that, during stage 2 but not during stage 1, the far infrared radiation at 1.2 cm from the active *xuwei* of the doctor showed a slow (down to 0.05 Hz) modulation of large amplitudes (up to 80%). They also found abnormalities in body electricity near the *xuwei* during both stages. Furthermore, from chemical analysis of tissues from a number of corpses, they found that the tissues at the *xuwei* points had a marked excess of nickel. These findings have all the hallmarks of pioneer work and their preliminary character makes the Research Letter their perfect vehicle.

The Articles form the mainstay of *ZZ*. Each covers in depth a certain topic—Mössbauer spectrometry, the red tide and laser chemistry have been covered amongst others — and is written by an acknowledged expert in the field. In regard to the degree of

technicality, the Articles of *ZZ* resemble more their counterparts in *Endeavour* than those in this Journal.

Nature Information consists of extracts of articles from other current scientific periodicals, notably, *New Scientist*, *Science News*, *Science* and *Physics Today*. Here, as with Articles and Research Letters, astronomy and astrophysics have their due share, but these are even more prominent in the Explorations in Nature section. In one form or another, readers have been informed of recent findings made in China and abroad on the origin of the Solar System, black holes, gamma-ray bursts, neutron stars, rings of Uranus and quasi-stellar objects that are at the same time double radio sources. For many of the Chinese investigations, the full-length papers are now available in English in the translation journal *Chinese Astronomy*.

The Riddles in Nature which have appeared so far have dealt with the life-span of single cells, magnetic monopoles and the μ -particles. I, as a professional astronomer, found the first most intriguing—which the editors of the multidisciplinary *Ziran Zazhi* may feel gratified to know.

The appearance of *Ziran Zazhi* is a heartening event. Just how heartening can perhaps be appreciated only by the Chinese scientific community. It is one of the signs that the country has begun her 'New Long March' towards modernisation through science and technology. □

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reaching billions of dollars in the USA alone. Two hundred electron accelerators and 60 industrial ^{60}Co units are already in use throughout the world. It is clear that academic workers in the radiation science area are ill informed on the industrial possibilities; for example, well publicised applications to the synthesis of detergents seem to have failed whereas the radiation-induced crosslinking of rubber for tyres has apparently been very successfully applied by the Goodyear Company in the USA. Discussion revealed caution and open scepticism from many delegates about the current state of such technology, although specific and restricted areas of application, sterilisation for example, are undoubtedly extremely useful. Industrial application depends crucially on detailed investiga-

tions and these were exemplified by papers on polyethylene/SiO₂ composites, polystyrene sterilisation, and electrical insulation. J. Rabani's (Hebrew University, Jerusalem) interesting paper on solar energy exploitation was more of hope and problem definition than achievement. Photoelectron transfer effects which are probable mechanisms for achieving the formation of H₂ and O₂ from solar irradiation of water are likely to be enhanced by polyelectrolytes, ion exchangers and micelles. The use of polyelectrolytes seems to offer many significant advantages since they inhibit back electron transfer reactions and help fulfil the requirements of energy storage.

The interest in cellular and sub-cellular radiobiology is largely centred on the effects of radiation on DNA, and the effect of oxygen was the main theme of the presentation. The difficulties of experimentation in this clinically important field were highlighted by the

paper of B. M. Cullen and J. W. Boag (Hammersmith Hospital & Institute of Cancer Research, Sutton, UK) which showed how errors of technique can provide misleading results. Photoelectrons formed in higher yields when argon was used instead of nitrogen as deoxygenating atmosphere caused reductions in cell survival.

The still incomplete knowledge on reactions of the biochemically significant O₂⁻/HO₂ system was also examined. The paper by G. Czapski (Hebrew University, Jerusalem) showed the increasing involvement of physical chemists in problems of radiation biology. The interdisciplinary approach is proving seminal, the previously accepted so-called Haber-Weiss reaction is discounted but an alternative explanation remains to be found.

No enzyme has attracted the radiation scientist more than superoxide dismutase. The reasons are its selectivity towards the O₂⁻/HO₂ system and

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