

The Leopoldina German Academy of Sciences :

Elections

THE Deutsche Akademie der Naturforscher Leopoldina, Halle, recently elected the following new members, in the sections indicated: *Mathematics*, Prof. Emil Artin (Hamburg); Prof. I. R. Safarevic (Moscow); Prof. B. L. van der Waerden (Zurich). *Pathology and Anatomy*, Prof. Günter Bruns (Halle); Prof. Hermann Chiari (Vienna); Prof. Wilhelm E. Ehrlich (Philadelphia); Prof. Andreas Werthemann (Basle). *General Biology*, Prof. Th. Dobzhansky (New York); Prof. Ake Gustafsson (Stockholm); Prof. Herman J. Muller (Bloomington); Prof. I. I. Schmalhausen (Moscow); Prof. Josef Straub (Cologne). *Zoology*, Prof. Robert Mertens (Frankfurt on Main).

Indian Institute of Science : Golden Jubilee

ON glancing through the Golden Jubilee Research Volume of the Indian Institute of Science (Bangalore, India, 1959), one is agreeably impressed by the diversity and range of scientific endeavour in India. As one would expect in a country developing its technology, applied science is given certain emphasis. There are articles on mineral flotation and extraction, turbomachines, silkworm nutrition, alloys, electronics research, soil fungi and concrete curing. But in more fundamental areas, too, research has been contributed—organic chemical syntheses, chemical kinetic investigations, derivation of expressions for compressible fluid-flow in the presence of magnetic fields, Hermite orthogonal functions and so forth. Science in India appears to have a character of its own—somewhat refreshing in this world of fading individuality. One article, for example, describes research on an Ayurvedic medicinal preparation called 'draksahasava'. This fermentation product has been of wide popularity in the country for a long time. It is claimed to cure a range of maladies like indigestion, cholic, insomnia, loss of appetite, phthisis and 'excessive debility'. An elegant microbiological evaluation of the drug was carried out. It was found only to support the growth of the micro-organism, *Saccharomyces cerevisiae*. Also, addition of vitamins and amino-acids did not stimulate growth. Except for sugars and trace elements, the drug did not contain essential growth factors—its only tonic effect appeared to be due to its alcoholic content. Pharmacological examination would be required to reveal the presence of very small quantities of ingredients which do cause the healing properties claimed. Nevertheless, establishing the use of microbiological technique in this way does provide scope for probing into these age-old medicines and disclosing their mysteries.

Mathematics in South Asia

THE report of the Second Conference on Mathematical Education in South Asia, held at Bombay in January 1960, has now been issued (Pp. xxiii + 205; Tata Institute of Fundamental Research, Bombay; September 1960). Prof. Chandrasekharan, of the Tata Institute, presided over the Conference, and in his presidential address he urged the Conference not to think entirely of technical problems but to remember also that the great need in South Asia is the construction of a social and educational environment conducive to the growth of creative scholarship. In the report, the invited addresses are published in full, and the proceedings of the working parties are summarized. The accounts of the progress of mathe-

matical education in Malaya, Indonesia, Thailand, Pakistan and Ceylon show what efforts have been made to implement the suggestions put forward by the first Conference (February 1959).

While emphasizing the vastness and complexity of the task, the addresses are optimistic, confident that in a short time significant progress towards national mathematical education culminating in vigorous schools of research will have been made. The other invited addresses, by mathematicians from Europe, North America and Asia, deal mainly with algebra and geometry, in the upper school, at the undergraduate-level, and in the first postgraduate year. Generally, stress is laid on the axiomatic approach and the basic importance of modern linear algebra, founded on a school knowledge of the elements of vector algebra and of sets of linear equations. Several of the addresses advocate an earlier introduction, in the universities, of modern abstract and general methods, on the grounds that students of to-day are not afraid of abstractions and can thus derive full advantage from an early acquaintance with general methods. The reports of the working groups preserve the flavour of lively and provocative discussions.

The Manchester Literary and Philosophical Society

VOLUME 102, 1959-60, of the *Memoirs and Proceedings of the Manchester Literary and Philosophical Society* well justifies Sir Cyril Hinshelwood's commendation of the Society in opening its new buildings in September (Pp. 81 + xliii. (Manchester: Manchester Literary and Philosophical Society, 1960.) 31s. 6d.). It includes the presidential address of Mr. C. E. Young on the growing importance of organo-metallic chemistry; Dr. G. E. R. Deacon's Clayton Memorial Lecture on the scientific exploration of the oceans; Prof. R. D. Waller's lecture on Danilo Dolci and his sociological work in Sicily and southern Italy; Sir Gordon Sutherland's lecture giving some comparisons of British and American Universities; and Prof. C. F. Carter's assessment of the practical value of the economist in government and in business in which he suggests that the Minister for Science should encourage a joint technical and economic appraisal of the opportunities for State-encouraged scientific development.

Irregularities in Spelling

BACKWARDNESS in the basic subjects has been the subject of considerable unfavourable comment by industrialists and others since the War. Among the causes of backwardness in reading, English spelling has long figured as an important factor. Spelling reform has been increasingly mooted since George Bernard Shaw's bequest for this purpose, and recently, the National Foundation for Educational Research in England and Wales in conjunction with the University of London Institute of Education agreed to undertake research into the alphabet form. An important preparatory step has been Dr. W. R. Lee's scientific study of the part played by spelling irregularity as a contributory cause of backwardness in reading. The results of his investigations have now been published under the title "Spelling Irregularity and Reading Difficulty in English" (Occasional Publication, No. 2: Pp. i + 74. London: National Foundation for Educational Research in England and Wales, 1960. 10s.). It has been maintained that, if each sound were always represented by the same