

14. Seshachar, B. R., *Curr. Sci.*, 1941, **10**, 282.
15. Smith, S. G., *Sci. Agric.*, 1941, **21**, 244.
16. Fankhauser, G., *J. Heredity*, 1939, **30**, 379.
17. Fankhauser, G., *Q. Rev. Biol.*, 1945, p. 20.
18. Bauer, H., *Naturf.*, 1947, **26**, 63.
19. Crozier, R. H., In: *Hymenoptera animal cytogenetics* (ed.) B. John, Stuttgart: Gebrüder Bornträger, 1975.

---

## NEWS

---

### MEDICAL HI-TECH

A recent addition to the London Stock Exchange is Oxford Instrument Group, a company in the forefront of medical technology whose sales have increased from £750,000 to £26 million in the last decade. The Group's business is the development, manufacture and marketing of high technology products in the fields of scientific, medical and industrial equipment. It has built a leading position in the supply of superconducting magnet systems for scientific and medical applications, including the Nuclear Magnetic Resonance (NMR) whole-body scanner. It also produces a range of advanced instruments and systems for patient monitoring, biomechanics, materials analysis and for the monitoring and control of industrial processes. NMR scanning and spectroscopy which are both noninvasive and harmless to the patient have been described as the most important medical diagnostic advance since the discovery of x-rays. The most critical component of NMR scanners is the magnet for which strength, temporal stability, uniformity of field and bore size are key performance criteria. The Oxford Group's long experience in magnet technology, continuous investment in research and development and quality assurance programmes have made it the undisputed leader in this field.

The principle applications of this technique are the recording of the electro-cardiogram (ECG) and electroencephalogram (EEG) while a person goes about his daily activities. Mediloggs are not only used for everyday monitoring. They have also proved versatile and reliable when used by climbing teams in the Himalayas, by deep sea divers, astronauts, test pilots, polar scientists, racing drivers, life-boatmen, sports referees and for many other unusual applications where doctors wish to find out more about heart and other physiological parameters of the body under stress conditions.

Vicon, a system of infra-red video cameras, instrumentation and photogrammetric software, in use in advanced centres throughout the world, provides three dimensional measurement of movement and can combine this with analysis of the forces and muscle activity required to achieve motion. Precise measurements are complemented by graphic displays describing the movements of the joint centres from which joint reaction forces and movements can be derived. (*The City*, January/February 1984, p. 2; British Information Services, British High Commission, New Delhi 110021).

---

### MICROBES TO FIGHT POLLUTION FAVOURED

The fifteenth International Congress of Genetics has favoured using microbes to monitor and clean up environmental pollution.

The Congress is of the view that there is a great potential for utilizing modern genetic engineering techniques to develop microbial strains for environmental pollutants, such as pesticide residues besides

industrial metal mining. This refers to the work done in this area by Dr Ananda Mohan Chakrabarty of the University of Illinois who has developed microbes which 'eat up' toxic material in oil and break down insecticides and pesticides which persist in the soil for a long time. (*ISI Bulletin*, Vol. 36, March 1984, p. 96.)