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THE AUSTRALIAN NATIONAL UNIVERSITY  
RESEARCH SCHOOL OF PHYSICAL SCIENCES

PHYSICS OF IONIZED GASES UNIT

Annual Report to the Council for 1964

Staff

Professor	Sir Mark Oliphant, K.B.E., F.R.S.
Research Assistant	E. R. Cawthron, B.Sc. (from August).

This Unit was established in mid 1964. Preparations are being made to observe accurately the charge exchange process of protons in atomic and molecular hydrogen, and in other gases and vapours, up to energies of 100 k.e.V. At the same time, the emission of electrons from metal surfaces, due to the impact of protons and other gaseous ions and excited atoms, will be investigated in detail. Great care is being exercised in the design and construction of the all metal and hard glass apparatus to make the observations in the highest possible vacuum, and to use very pure gases.

Publications

- Oliphant, M.L.E. - Peaceful Uses of the Atom Bomb.  
Professional Officers Association  
Chronicle, No. 197, pp. 5-8, 1964.
- Oliphant, M.L.E. - Science as Part of Education.  
Australian Science Teachers Journal,  
10, No. 2, 1964.
- Oliphant, M.L.E. - The Physical Sciences in China.  
Australian Academy of Science, 1964.