he worked on problems connected with rocket

During 1951, 1952 and 1953, he was given leave of absence, to participate in the two preparatory Himalayan Expeditions which culminated in the successful one in 1953. Since that time he has been engaged fully on his rocket work and has made a notable contribution to our understanding of the phenomena of combustion of solid propellants. Although primarily a skilled experimental physicist, he possessed considerable practical engineering ability which stood him in good stead when acting as project officer responsible for the overall development of particular rocket motors. His work at Westcott portrays those innate characteristics which were so ably demonstrated in his mountaineering achievements, namely, scrupulous attention to detail, careful deduction and intellectual honesty.

No doubt Bourdillon will be remembered as a mountaineer first and foremost; but among his colleagues at Westcott there will remain the respect for a man of great personal integrity and a genuine

He leaves a widow, Jennifer, who shared fully his interests in mountaineering, and two young children.

J. E. P. DUNNING

## Mr. and Mrs. John Nicol

MR. JOHN NICOL, officer-in-charge of the Ibadan Sub-station of the West African Cocoa Research Institute, died from injuries received in the air disaster at Kano, Northern Nigeria, on June 24; his wife, Mrs. Bessie Nicol, was killed instantly. They were travelling on leave and to a re-union with their only child, Sheila, who is at school in Scotland.

The details of Nicol's complete career at present

available to his colleagues in West Africa are meagre;

but records reveal that he was born in 1911 and he graduated at the University of Aberdeen with a B.Sc. degree in forestry. After working for some years with the Department of Scientific and Industrial Research in the United Kingdom on the pests of stored products, he came out to the West African Cocoa Research Institute, Gold Coast, a few weeks after its inception in 1944. He was afterwards promoted to senior entomologist and was posted as officer-in-charge of the sub-station in Nigeria of the Institute in December 1954.

John Nicol's early work in West Africa was concerned with measures for the control of cacao capsids. Later, he became associated with trials concerned with the possibilities for controlling the spread of cacao swollen shoot virus by attack on the mealybug vectors with systemic insecticides.

As a founder member of the staff, John Nicol had much to do with fostering the social life at Tafo, and with these activities, later extended to Ibadan, Bessie Nicol must be closely identified. The construction of the club, the tennis courts and the golf course (the latter being coupled with a malaria-control project) were all, in considerable measure, due to his enthusiasm.

'Nick', as he was widely known, was a talented photographer, his ability being recognized by election to the associateship of the Royal Photographic Society. Many of his photographs of cacao, its pests and its diseases have been published in technical papers by himself or his colleagues.

As officer-in-charge of the Ibadan Sub-station, John Nicol was faced with many difficulties. His gift for making friends and marshalling facts into convincing arguments enabled him to make considerable progress in establishing and equipping a new laboratory and staff accommodation. His untimely death is a severe blow to the progress of cacao JAMES LAMB research in Nigeria.

## NEWS VIEWS a n d

Physical Chemistry in the University of Sydney: Prof. A. E. Alexander

PROF. A. E. ALEXANDER has been appointed professor of physical chemistry in the University of Sydney. Prof. Alexander was educated in the Universities of Reading and Cambridge. He began research in Cambridge in association with Sir Eric Rideal and quickly became well known for his contributions to surface and colloid chemistry. During 1939 he worked with Prof. T. Teorell, of Upsala, with a Rockefeller travelling fellowship. return to Cambridge he became a Fellow of King's College and, in 1944, assistant director of research in the School of Colloid Science. Prof. Alexander went to Sydney in 1949 as the foundation professor and head of the School of Applied Chemistry in the New South Wales University of Technology, in which he is now dean of the Faculty of Science. He has taken a full part in the scientific life of Australia, having been president of the New South Wales Branch of the Royal Australian Chemical Institute, and of the Sydney University Chemical Society. He is a trustee of the Australian and New Zealand Association for the Advancement of Science, which selected him as the Liversidge Lecturer for 1954, and one of the two representatives in Australia of the Chemical Society

of London. He has established excellent relations with the Commonwealth Scientific and Industrial Research Organization and Australian chemical industry. Prof. Alexander's many research papers and books on surface and colloidal science have brought him well-deserved international recognition. His present range of scientific interests—the pure physical chemistry of problems underlying various biological actions—will add welcome strength to the University of Sydney.

## Electronics in Armament Research and Develop-Mr. E. W. Chivers ment:

Mr. E. W. CHIVERS, who has been appointed principal superintendent of the Electronics Division of the Armament Research and Development Establishment, graduated in physics (special) with honours in 1927 at Queen Mary College, London. After a short period of postgraduate research, he entered Government service in 1928 and went to the Research Department, Woolwich, where he was engaged on acoustical research in connexion with sound ranging. In 1931 he was transferred to the Searchlight Department at the Air Defence Experimental Establishment, Biggin Hill. His work there was concerned with physical problems associated with searchlights and