Dr George F. Bloomfield

THE CAREER OF Dr George Bloomfield, who died on 16 May 1997 age 87, spans the history of research on natural rubber in Britain from the early days of basic research in the 1930s to the integration of this work into the activities of the former Malaysian Rubber Research and Development Board (MRRDB) throughout the 1960s. He played a key role in this evolution, first as a skilled research chemist with an international reputation, later as a prime mover in helping to establish an international technical service to advise consumers on the use of natural rubber.

Dr G.F. Bloomfield

After completing his PhD at Imperial College London, Dr Bloomfield joined a research team at the former Imperial Institute in 1932, working with the late E.H. Farmer, FRS on chemical modifications of natural rubber. There were several such teams in Britain at that time, financed by the Rubber (now Tropical) Growers' Association: these were integrated into the British Rubber Producers' Research Association (BRPRA) which was formed in 1938. Over 1935-1938 he worked at the British Xylonite Company where he married a co-worker, Margaret, who survives him. Given his experience with natural rubber he was obviously interested in joining the new BRPRA which offered him a job in March 1939 on the recommendation of Dr Farmer who described him as 'a very energetic chemist, capable in experimental work and possessed of initiative and resourcefulness'.

Over 1948 to 1951 he made his first visit to Malaysia, at the height of the anti-terrorist 'Emergency' when life was somewhat insecure, to say the least. His activities at the Rubber Research Institute of Malaysia covered the characterization of natural rubber hydrocarbon, biosynthesis in the tree and clonal differences in the chemical properties of natural rubber. After his retirement he was fond of saying that his greatest contribution to natural rubber was that, during that visit, he recruited a young graduate assistant, B.C. Sekhar, subsequently to become Controller of Research and Chairman of MRRDB and a world leader in the industry. Dr Bloomfield returned to Britain as head of the Applied Chemistry Group.

His research studies covered a prodigious range of interests – the chemistry of rubber oxidation, halogenation, vulcanization, chemical modifications. He was much involved with development of the first commercial modification of natural rubber – cyclized rubber – and with a subsequent one – Heveaplus MG, a natural rubber/polymethyl methacrylate graft copolymer. He discovered how to epoxidize natural rubber, some 40 years before the process was reinvented. During his long research career, he developed an encyclopaedic knowledge of the science of rubber and was always ready to share his knowledge and experience with others. The volume of work that he produced is illustrated by the fact that he was author or co-author of some 60 published papers. He received the Colwyn Medal of the former Institute of the Rubber Industry in 1964 for his services to the industry.

During the 1960s, as the newly-formed MRRDB started to widen its activities, Dr Bloomfield became increasingly involved with the setting up of a world-wide technical service, aimed to improve the competitive status of natural rubber in the face of savage competition from the synthetic rubbers. He and his wife lived in Frankfurt in 1966 to set up the first European office of the MRRDB: this, one understands, stretched his 'chemist's German' to its limits. Additionally, he helped to co-ordinate the work of the offices in the USA, France, Germany, Italy, Australia and New Zealand.

He retired in 1970 and in the following year his extensive contributions to the Malaysian rubber industry were marked by the award of the Johan Setia Mahkota in the birthday honours list of the Yang DiPertuan Agong. During his long retirement he devoted himself to his many interests, notably amateur radio (his call sign 'G2NR' indicates that he had held a transmitting licence for a very long time), wine making, and gardening.

Dr Peter Allen

Dr Kurt F. Heinisch

IT IS WITH great saddeness that we learn of the death of Dr Heinisch. Kurt F. Heinisch, Dipl Ing, Dr Nat Sc, Dr Techn Sc, FPRI, was born in Vienna in 1921. He studied at the Technical Universities in Brno, Czechoslovakia, and Vienna, and graduated in 1944 as an engineer obtaining his doctorates in 1945 at Brno and in 1947 at Vienna.

After a short period at the Technical University in Vienna he joined the Indonesian Rubber Research Institute at Bogor in 1949 as a chemist. In 1954 he was appointed head of the Chemistry and Technology Department of the Sumatra Planters' Association (AVROS) at Medan, Sumatra. Under his charge were a rubber testing station, an experimental rubber factory and a general analytical laboratory. In 1958, following the nationalization of Dutch-owned enterprises, he became head of the Chemistry and Technology Department of the Rubber Research Institute of Ceylon.

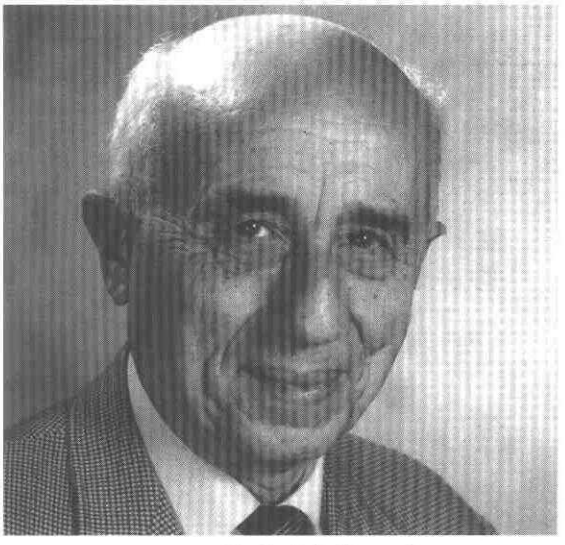
On return to Europe in 1963 Dr Heinisch joined the Malayan Rubber Fund Board with the task of extending technical advisory service activities into continental

Europe. He established, in close liaison with the Malaysian Rubber Producers' Research Association, the first continental Malaysian Rubber Bureau at Frankfurt/Main, West Germany, in 1963. The great interest in natural rubber in the whole of Europe, particularly in Eastern Europe, led to the establishment of an office in Vienna in 1966. Dr Heinisch spoke several languages including English, German, Dutch, French, Czech, and Slovak and also understood Polish, Russian, Yugoslavian and Malay. This linguistic ability greatly assisted in managing the Vienna office.

Dr Heinisch had written over 100 papers, most of them on rubber production and the improvement of natural rubber. He was author of the German Kautschuk-Lexikon, first published in 1966, and the Dictionary of Rubber, published in 1974. He retired in 1981, but continued to translate for *Rubber Developments* until the abstracts in German were no longer published.

Mr K.P. Jones

Dr Adolf Schallamach



Dr A. Schallamach

DR ADOLF SCHALLAMACH died on the 22nd June 1997 aged 91 after a long illness. He was born in Poznan, Poland in 1905 and was educated at various grammar schools in Germany. He read for a degree in electrical engineering at technical high schools in Zurich and Breslau graduating as a Diplom Ingenieur in 1929. His postgraduate work at Breslau resulted in the award of a Doctorate.

He joined the staff of the Davy Faraday Laboratory of the Royal Institution in London in 1934 working there for nine years mainly on crystal structure at low temperatures. During this period he was joined by his future wife Lotte – although she was persuaded to escape from Germany all of her family subsequently died during the Nazi persecution of Jews. They both loved small children and were always delighted to entertain them at their home in Barnet, with Adolf playing the piano – which he enjoyed – to accompany their songs. Unfortunately they were denied the privilege of having children of their own as a result of Lotte working as a radiologist before joining Adolf in London.

At the suggestion of Sir Eric Rideal he joined the then British Rubber Producers' Research Association (subsequently the Malaysian Rubber Producers' Research Association and now the Tun Abdul Razak Research Centre) in 1943 as a physicist to work on the dielectric properties of rubber. But it was not until 1948 that he was asked to direct his efforts towards the friction and wear of rubber. This proved to be pioneering work demonstrating his flair in devising apparently simple experiments to elucidate the complex behaviour of rubber in abrasive wear. He published many scientific papers which provided great insight into the mechanics of tyre traction including understanding of tyre wear and resulting in the production of accelerated wear test trailers. He discovered sliding contact detachment waves which bear his name. His work rapidly earned international recognition and in 1970 he was awarded the Colwyn Medal, the most prestigious award of the Institute of Rubber Industry for outstanding services to the science and technology of rubber. This was followed by the awards in 1982 of the Charles Goodyear Medal of the Rubber Division of the American Chemical Society and in 1989 the Tribology Silver Medal, which is the UK's highest national award in the field of tribology.

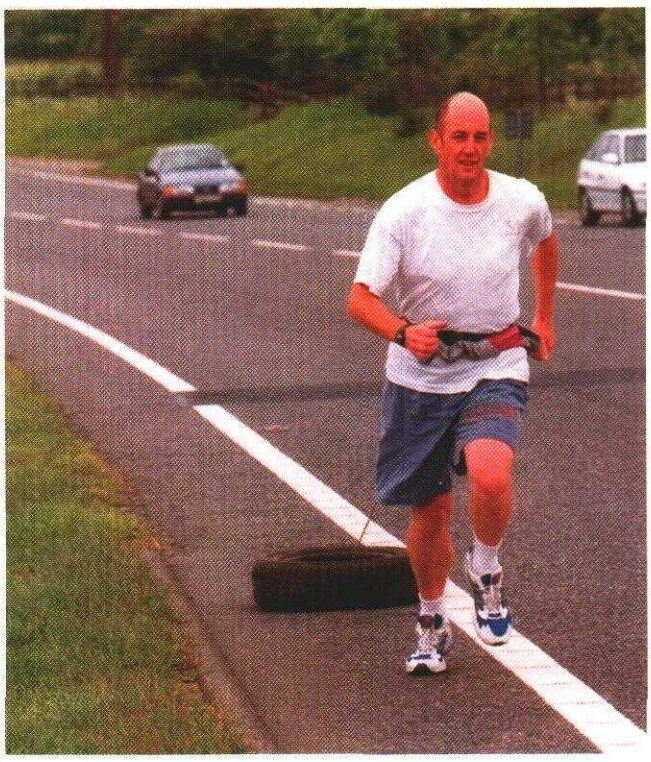
He retired from the Association in 1970, but continued to take an active interest in tribology, acting as a consultant for the next 20 years.

Dr Schallamach was a kindly, sensitive, considerate and erudite man of great charm who had a fund of apposite quotations from classical literature to embellish most discussions. One episode reflecting his generous spirit was the recruitment in 1955 of a German ex-prisoner of war who had stayed in London after his release and married an English girl. His thoughtful and thorough training of his assistant resulted in a life-long friendship, and fittingly his recruit is now established as a world-wide authority on the wear and friction of rubber.

Dr L. Mullins

It is with deep sadness that at the time of going to press, we have heard of the death of Dr Leonard Mullins, Director of Research from 1962 to 1983 of the Malaysian Rubber Producers' Research Association. A full obituary will appear in the next issue of Rubber Developments.

A new use for that old tyre!



Photograph: Richard Rayner courtesy North News and Pictures

THE MAN PICTURED *pulling the tyre along a busy road in the UK is Rob Lambert, training for the Hi-Tec Badwater 146 in the USA which took place in July - a race of 150 miles on a surface as hot as 93°C and climbing to almost 15,000ft through Death Valley. The race was originally staged in 1987 by a shoe company to test the durability of is trainers and is now claimed to be the most demanding race in the world. It was Rob Lambert's third race: unfortunately he was forced to retire from the race when one of his back-up team began to suffer from severe altitude sickness.*

BOOK NOTICE:

RUBBER A Pictorial Technical Guide for Smallholders

Michel Delabarre and Dante Benigno, CIRAD-CP France, 171 pages, ISBN 2-87614-148-5

THIS ATTRACTIVELY ILLUSTRATED rubber technology book is the English translation of book produced in 1990 for smallholder farmers in Indonesia. The book presents in sequential order all the activities required for the establishment and maintenance of a rubber plantation. It is divided into 10 chapters with the various tasks being illustrated on the right hand page with supporting text on the matching left hand one. There are 62 pages of full colour photographs with most pages containing at least six photographs on each page. The Annex contains a further 19 pages of black and white illustrations. The book will mainly be of interest to those involved in extension work and in agricultural education.

DIARY OF EVENTS FOR 1997/98

7th Congress of Rubber Technology

With Expobor '97 & Recau Fair '97: business & retread. November 4-6, Brazil. Contact Brazilian Rubber Technology Association.
Tel: (011) 287 6212
Fax: (011) 289 7084

Rubber injection moulding '97

With table top exhibition. November 13, Shrewsbury, UK. Contact Rapra Technology.
Tel: +44 (0)1939 250383
Fax: +44 (0)1939 251118
http://www.rapra.net

Plastics & Rubber Machinery

December 2-5, Yangon, Myanmar. Contact CP Exhibitions.
Tel: +852 25117427
Fax: +852 25119692

Carbon Black '97 - Perspective in Asia-Pacific

December 8-10.
Tel: +66 35 611 421
Fax: +66 35 611 316

RubberTech China '98

International conference and exhibition. The first-ever truly international rubber event in China. An ideal place to get in contact with leading executives and decision makers of the Chinese rubber industry. March 24-26, Shanghai Exhibition Center, China. Contact Crain Communications for further information.
Tel: +44 (0)171 457 1400
Fax: +44 (0)171 457 1440
E-mail: PMitchell@crain.demon.co.uk

IRC 98 – International Rubber Conference

12-14 May, Centre de Congrès of the CNIT, Paris La Défense, France. Contact Société de Chimie Industrielle, 28 rue Saint-Dominique, F 75007 Paris.
Tel: (0)1 53 59 02 10
Fax: (0)1 45 55 40 33