

## OBITUARY

### IN MEMORY OF EDMOND A. BRUN



PROFESSOR Edmond A. Brun died on 4 November 1979 after a short illness during which he hardly reduced his activities.

An article on his work was published on the occasion of his eightieth birthday (*Int. J. Heat Mass Transfer*, Vol. 22, pp. 1–4, 1979). Always conscious of others, he allowed his successor at the University of Paris complete control in deciding the future of the laboratory he himself had set up. At the Académie des Sciences de Paris, he was a champion of the history and the importance of the science of heat and mass transfer.

Professor E. A. Brun was basically an expert in thermodynamics whose first research was into aerodynamic heating and followed on the work of others distinguished experts in thermodynamics J. P. JOULE and W. THOMSON. This led him on, understandably, to study the thermal boundary layer, in depth.

Gifted with a sure analytical mind, he knew how to adapt experimental methods of investigation to the object of the study. He was always ready to acknowledge with pleasure a successful experiment carried out by someone else which he would have been proud to have completed himself.

As an Academician, Professor E. A. Brun took the opportunity to recall the work of some of the great scientists of the nineteenth century. When he was lecturing on Louis Cailletet (1832–1913), it was moving to draw the parallel with his own life. Through the work done by Cailletet on the liquefaction of presumed

'permanent gases', he rediscovered what had inspired his love for thermodynamics and the perfect experiment. Moreover, L. Cailletet had been interested before him in the upper atmosphere, inventing an automatic device for taking samples of air at 15 000 m altitude (1897), an altimeter (1898), an automatic camera mounted on a balloon (1900), and an oxygen mask which operated at 15 500 m (1901). Like him, Cailletet studied aerodynamics. Furthermore, Cailletet and Professor Brun are linked by a love of plants which they studied close up while analysing the transfer of mass in vegetation under the action of wind and solar energy.

To illustrate the quality of Cailletet's work, we need only recount that the Royal Society of London granted him the Davy medal jointly with RAOUL PICTET in 1878 (one year after BUNSEN and KIRCHHOFF) for their work carried out independently but concurrently on the condensation of supposedly permanent gases.

In memory of Professor E. A. Brun, we herein publish an excerpt of what he wrote about L. Cailletet on the occasion of the centenary of the liquefaction of oxygen (2 December 1877). Fate dictated that the state of his health prevented him from reading this text publicly himself which he had prepared with such great delight.

J. GOSSE