In Memoriam:
Professor John G. Daunt
(1913–1987)

Professor John G. Daunt died suddenly at his summer home on June 19, 1987. John was the Founding Editor of the Journal of Low Temperature Physics and had an illustrious career as a low-temperature physicist since 1935.

John Daunt was born in Ireland in 1913, was educated in England, and received his B.A., M.A., and Ph.D. from Oxford University. After a three-year period as Research Associate in the Clarendon Laboratory, Oxford University, he became Lecturer in Physics at Exeter College, Oxford, and University "Demonstrator in Physics" in the period 1940–1946. During this time he also served the British Admiralty in research and development work on microwave radar and infrared physics. In the fall of 1946 he went to Ohio State University, where he became Professor in 1950 and remained until 1965. In 1965 he was appointed Professor of Physics and Electrical Engineering at Stevens Institute of Technology, where in 1967 he became Founding Director of the Cryogenics Center. From 1975 to the present he has been Professor of Physics at Queen's University and Honorary Professor at the Royal Military College in Canada.

John was an extensive traveler—being Guggenheim Memorial Fellow at the University of Amsterdam in 1953, Guggenheim Memorial Fellow at Harvard in 1954, and again Guggenheim Fellow in 1958, Visiting Professor at the University of São Paulo, Brazil (1961), at Columbia University (1965), at the City College of New York (1964), at the University of Rio de Janeiro (1974), and at Queen's University (1974-1975). Over the past decade he made numerous shorter visits to various low-temperature laboratories around the world. He participated directly in the establishment of the Low Temperature Laboratory at São Paulo University in Brazil.

He was the recipient of many honors and awards, including Medallist for Physics at the University of Bruxelles in 1955, Duddell Medallist of the Physical Society of London in 1956, Ottens Award for Research, Stevens Institute of Technology, in 1971, and the Alexander Von Humboldt Prize in 1979; also, in 1979 he was appointed Honorary Fellow of Exeter College,
Oxford, and in 1983 was elected to membership in the Brazilian Academy of Sciences.

He served the low-temperature physics community in many ways. In addition to his founding and editorship of this journal, he had chaired or convened LT9 in Columbus in 1964, conferences on Thin Helium Films at Stevens Institute in 1970 and 1973, on Liquid and Solid $^3$He at Ohio State University in 1957 and 1960, and LT5 in Madison, Wisconsin, in 1957. He was the first chairman and co-founder of the Fritz London Award Committee in 1957, President of the Commission for Very Low Temperature Physics (IUPAP) 1960-1966, Vice-President (Commission I/II) of the International Institute of Refrigeration, Advisory Editor of *Physics of Condensed Matter* (1962-1974) and of *Physics Letters* (1962-1973), Member of the NSF Advisory Panel for Physics (1951-1954 and 1960-1963), Member of the Office of Naval Research Advisory Committee on Millimeter Wave Communications (1950-1952), and consultant to various companies and organizations including: Cryotronics Inc., Battelle Memorial Institute, Aeronautical Research Laboratories (WPAFB), IBM Research Laboratories, Los Alamos Scientific Laboratory, A. D. Little Corp., and Oak Ridge National Laboratory.

While he was at the Clarendon Laboratory, Oxford University, he carried out research on the superfluid properties of $^4$He and made pioneering and definitive experiments on the flow properties of superfluid helium films. After going to Ohio State University in 1946 he devoted his major research efforts to the field of the then newly discovered isotope of helium, $^3$He, and made the first experiments on superfluid flow and on osmotic pressures of mixtures of $^3$He and $^4$He and on low-temperature methods of separation of the isotopes. In the 1960s, he made experimental investigations of phase separation in quantum solids and discovered the phase separation occurring in solid $^3$He-$^4$He mixtures. Since 1965 he pioneered in work on two-dimensional quantum systems at low temperatures by investigations on $^3$He monolayer and submonolayer films. Most recently, he developed the Millikelvin Facility in Kingston and had been working on superfluid $^3$He film flow.

In addition, he carried out a great deal of experimental work in superconductivity, paramagnetism at low temperatures, nuclear orientation, electronic properties of metals, and infrared detectors, and published numerous articles in these fields. Also, he published numerous papers on the techniques of very low temperatures. Among the most significant were the first development of a superconducting thermal valve (1949) and the creation of a continuously operating magnetic refrigerator for maintaining temperatures below 1 K (1953).