Professor Thomas F. Irvine, Jr. on the occasion of his 70th birthday



PROFESSOR Thomas F. Irvine, Jr. celebrates his 70th birthday this year. In honor of this anniversary, we wish to take this opportunity to applaud his many outstanding contributions during his distinguished career in the fields of heat transfer and fluid mechanics.

Professor Irvine was born on 25 June 1922 in New Jersey and raised near Pittsburgh, Pennsylvania. He attended college at the Pennsylvania State University where he received his Bachelor of Science degree in electrical engineering in 1946. From there he went on to the University of Minnesota where he studied mechanical engineering under Professor E. R. G. Eckert. It was at Minnesota that he received both his Master's degree and his Doctoral degree in mechanical engineering. After completing his Ph.D. thesis in 1956 entitled, "A New Method for the Experimental Determination of Prandtl Numbers and Thermal Conductivities of Gases; Results for Air", he joined the faculty of the Mechanical Engineering Department of the University of Minnesota, first as an Assistant Professor from 1956 to 1958, then as an Associate Professor from 1958 to 1959. In 1959, he joined the faculty of the Mechanical Engineering Department of the North Carolina State University as Professor of Mechanical Engineering, where he remained until 1961. In 1961, he accepted an appointment as Professor of Engineering and the first Dean of the College of Engineering of the newly formed State University of New York at Stony Brook. It was under his leadership that the fledgling College of Engineering got its start, and construction of the facilities and staffing of the academic departments were accomplished. He held the position of Dean of Engineering from 1961 to 1972, at which time he relinquished his administrative duties, stepping down as Dean to return to full-time teaching and research activities which he has continued until the present.

Professor Irvine's scientific contributions have been published in over 100 refereed papers in the international literature. His published works range from novel techniques for the measurements of thermophysical properties, experimental studies in boiling heat transfer and two-phase flow and heat transfer, to fluid mechanical and heat transfer characteristics of rheological fluids. In addition to his interests in fundamental research, he has also pursued the practical applications of such phenomena. Among these patented pursuits are the development of a concept for continuous flow electrophoresis, development of a precision falling needle viscometer, and recent activities to develop a high temperature, liquid metal viscometer. Besides his many lasting contributions in the scientific literature, Professor Irvine has edited several books, including Steam and Air Tables in SI Units (with J. P. Hartnett, Hemisphere (1976)), Heat Transfer Reviews, 1953-1969 (with E. R. G. Eckert, Pergamon Press (1971)), Heat Transfer Reviews, 1970-1975 (with E. R. G. Eckert, Pergamon Press (1977)), Steam and Gas Tables with Computer Equations (with P. E. Liley, Academic Press (1984)), and Heat Transfer Reviews, 1976-1986 (with E. R. G. Eckert, R. J. Goldstein and J. P. Hartnett, Wiley (1990)).

Professor Irvine has been a pioneer in creating and maintaining a variety of publications for the dissemination of scientific information. He was the first

editor of the Journal of Heat Transfer of the ASME, serving in that capacity from 1960 to 1963. He has been the co-editor of the Academic Press monograph series Advances in Heat Transfer since its inception in 1964 until the present (22 volumes). He was co-editor of the Pergamon Press textbook series Pergamon Unified Engineering Series from 1967 to 1974 (18 volumes). He was the co-editor of the graduate textbook series by Hemisphere/McGraw-Hill entitled Series in Fluids and Thermal Engineering from 1972 to 1982 (24 volumes). In addition, he is the founding and current editor of Heat Transfer-Soviet Research (Wiley, 1972 to present), Heat Transfer-Japanese Research (Wiley, 1974 to present), and Previews of Heat and Mass Transfer (Rumford, 1976 to present), all of which serve to gather scientific contributions from around the world and publish them in a coordinated and accessible format. He also serves on the Editorial Advisory Boards of the International Journal of Heat and Mass Transfer and the International Communications in Heat and Mass Transfer.

Professor Irvine has been very active in a number of domestic and international scientific organizations for many years. He has actively participated in many important functions of the Assembly for International Heat Transfer Conference, UNESCO of the United Nations, and the International Center for Heat and Mass Transfer, to name just a few. He was a member of the founding committee for the International Center for Heat and Mass Transfer, and is currently an ASME representative to the Scientific Council of the ICHMT. He has been a Member of the American Society of Mechanical Engineers for 33 years and has been elected Fellow of that society. He presently serves on the K-7 Thermophysical Properties Committee and the Admissions Committee of the ASME. He is also a Fellow of the American Association for the Advancement of Science.

His many international friends and colleagues provide evidence of his tireless efforts to promote open international scientific exchange between many nations, particularly during politically disadvantageous times, most prominently with the People's Republic of China, the Republic of China, South Korea, Japan, and the former Soviet Union. He has enjoyed Visiting Professorships and Visiting Research Scientist positions abroad at the Technical University of Munich, University of Belgrade, AERE Harwell, and the University of Florence, to name a few. He has lectured extensively around the world in these countries, as well as in Turkey, Germany, Yugoslavia, Czechoslovakia, Romania, Poland, and India.

Professor Irvine has developed and maintained close relationships with his professional colleagues and his present and former students. Now it is our turn to express appreciation to Professor Irvine for his many contributions over the past four decades, both personal and professional. We wish him well on his seventieth birthday and many happy returns of the day.

> G. A. GREENE W. J. LEONHARDT N. A. PARK J. P. HARTNETT W. J. MINKOWYCZ E. HAHNE