

Editor's note: With regret we report the passing of Dr. Alan Prince, who was Editor-in-Chief, Higher Order Systems, ASM/NIST Alloy Phase Diagram Program.

I first met Alan in 1975 at a phase equilibria meeting at NIST (then the U.S. Bureau of Standards). This was a period when funding for research in the United States was severely truncated. At the banquet following the meeting, a vice president from Ford Motor Company spoke. This gentleman served on the board responsible for overseeing the NIST program. His talk extolled past work at NIST and was full of platitudes and banalities. At the end he asked for questions. Alan arose and asked why a board member should dwell on the past when the present staff was well qualified and sorely in need of funds to support the ongoing program. His comments were succinct, to the point, and emphasized that the responsibilities of the directing board included the securing of requisite financial support. U.S. citizens in the audience were in complete agreement. In a much later discussion, I asked Alan why he had made the remarks at that time. He said the stimulus was appropriate and that he saw his comments as a way of helping American research since, as a British National, he was free to say these things while an American would be inhibited from doing so.

This example is typical of the Alan Prince that I came to know. He was a true gentleman, loyal friend, and a man of honest and inciteful opinions. He abhorred slipshod work and was not loath to express his view but he was equally capable of praising quality work. He himself was as critical of his own work as he was of the work of others and he always strove to render the best. I was privileged to chat with him a number of times during the intervening years. On a personal basis he demonstrated a broad range of interests, and his views were based on thoughtful and logical thinking. His scientific and technical accomplishments are highlighted in the comments that follow and reflect the insights of people who knew him well. Alan's contributions to our field will be long lasting.

J.F. Smith

Editor, Journal of Phase Equilibria

In Memoriam

Alan Prince, D Met, F Eng FIM

Alan Prince passed away on Monday, 19 October 1998, aged 71, after a series of health problems spanning some years.

Alan was a metallurgist of the highest quality, graduating from Sheffield University with first class honors in 1948. He joined ICI, working at plants in Widnes and Billingham, then became a lecturer in metallurgy at the University of Southampton in 1953. Three years later he joined the General Electric Company, Simon Carves Atomic Energy Group, and was appointed chief metallurgist GEC, Hirst Research Centre, Wembley, in 1961. Alan became manager of the Materials Science and Engineering Research Laboratory and assistant director of Research (Materials) in 1980. Following retirement from GEC in 1987, he was professor associate in the Department of Materials Technology, Brunel University. Alan was elected Fellow of the (then) Institution of Metallurgists in 1965 and was President for the year 1972-73. He was the first recipient of the Institute's Hume-Rothery Prize in 1979.

Alan had a particularly fruitful career. His prime professional interest was phase equilibria for multicomponent alloy systems. He was concerned with the experimental determination and critical assessment of phase diagrams, but had a much wider vision concerning their practical use to industry and commerce.

Alan's publications include three related volumes of immense value to re-



searchers—*The Constitutional Diagrams of Alloys: A Bibliography* (1956), *Multi-component Alloy Constitution Bibliography 1955-1973* (1978), and *Multi-component Alloy Constitution Bibliography 1974-1977* (1981), all published by The Metals Society. His most important publication is the classic textbook *Alloy Phase Equilibria* (1966).

Alan took a leading role in the organization of APDIC (Alloy Phase Diagram International Commission) from its inception, first as editor-in-chief for higher-order systems, and subsequently as technical advisor. During this period he made innumerable contributions to publications produced under the auspices of APDIC, co-authoring, e.g., *Phase Diagrams of Ternary Gold Alloys* (Institute of Metals, 1990), and the ten-volume set

Handbook of Ternary Alloy Phase Diagrams, (ASM International, 1995). He made immense contributions to publications in this field emanating from the Max-Planck-Institut für Metallforschung, Stuttgart, and The Indian Institute of Metals. Alan was a doyen of phase diagram determination and assessment and set standards that serve as ideals for others to achieve.

Alan would go to extremes in order to help his colleagues and friends, and would unstintingly assist and train students, conveying his great enthusiasm for their work. He had the most delightful sense of humor—if a little wicked—and was regarded (initially) by some at Wembley as a terrifying ogre who appeared in a cloud of smoke in the heat treatment lab early in the morning, demanding matches to light his pipe, then disappearing in a swirl of blue vapor to his office—but they quickly learned to appreciate his encouragement and guidance.

Alan was a particularly dedicated family person, delighting in everyday life and holiday travels with his wife Sheila, daughter Christine, four sons Neil, Ian, Simon, and Howard, 10 grandchildren, and his dog Smokey. He will be sadly missed by his family and many friends and colleagues.

Tim G. Chart,
Chair, APDIC

Alan Prince made his mark in science in the area of phase diagrams of alloys. Not too many people work in this area, so most of them knew Alan personally, or knew of his work. He was both an excellent researcher and a very good judge of quality. If Alan judged someone's work was good—it was good!

Early in his career he realized that in order to understand phase diagrams and phase equilibria, one had to understand thermodynamics of alloy systems and the strict connections between phase stability, phase boundaries, and the Gibbs energy. This creates some rules of what is possible and what is not, and Alan knew them well and used them consistently in his work. His book *Alloy Phase Equilibria* has always been praised as a most reliable and clearly stated guide to the

understanding of basic principles and to effective work in this field.

When the phase diagram re-evaluation program was initiated in the U.S., Alan was immediately willing to provide a guiding hand and a clear exposition of what had to be done. We joined forces in many meetings, decisions, and committees, he as editor of the higher-order systems, and I as editor of the binary systems, supporting one another when quality was at stake. Alan made invaluable and lasting contributions. I can give no better praise to this good and unique friend than to quote from a letter Alan wrote to me with his typical modesty and courage just a few weeks before his death:

"Life can deal some awful cards at times. I reflect that those I have been dealt have been considerably better than for

many a fellow creature. I also think I have contributed something to the phase diagram assessment field and this may warrant a footnote in future. I have certainly enjoyed the work immensely and it has been a constant source of inspiration to work with marvelous friends from 'round the world. I have a special affection for my relations with all at ASM, but especially for Ray Putnam and Ed Langer for their backing and hard work for the programme, and to Bill Scott and Hugh Baker for their longstanding championship of the International Programme."

We shall all miss Alan very much.

Thaddeus (Ted) B. Massalski
Professor of Materials Science and Engineering, and Physics
Carnegie-Mellon University

ASM International Resolution of the Board of Trustees to honor Dr. Alan Prince, FASM

October 14, 1998

Whereas, Dr. Alan Prince is known worldwide as a distinguished and honored scientist, engineer, author, and educator in the field of metallurgy, particularly in the field of multicomponent phase equilibria and the application of alloy phase diagrams in solving metallurgical problems,

Be it resolved that the officers and members of ASM International commend his outstanding work to the entire metallurgical profession;

And, whereas, on this the 20th anniversary of the signing of the agreement between ASM International and the U.S. National Institute of Standards and Technology, the officers and members of ASM International wish to afford the highest possible recognition of, and honor to, Dr. Alan Prince for his tireless effort in leading the ternary and higher-order segment of the International Data Program for Alloy Phase Diagrams to critically assess the existing data relating to alloy phase diagrams,

Be it resolved that the Board of Trustees of ASM International, through this proclamation, publicly declares its thanks and recognition to Dr. Prince for his service to this society and to the metallurgical profession.

Signed

Hans H. Portisch
President

Michael J. Dehaemer
Managing Director



Dr. Alan Prince

On the occasion of the 20th anniversary of the signing of an agreement between ASM International and the U.S. National Institute of Standards and Technology, the ASM Board of Trustees wishes to commend you for your tireless efforts in leading the ternary and higher order segment of the International Data Program for Alloy Phase Diagrams, and for your continuing work to encourage and promote the study and practical use of phase diagrams by the metallurgical profession.

This certificate is provided as a tangible recognition of the formal resolution appearing in the minutes of the ASM International Board of Trustees of October 14, 1998.

HANS H. PORTISCH
PRESIDENT
MICHAEL J. DEHAEMER
MANAGING DIRECTOR

October 14, 1998

