

Association of Professional Engineers and Geoscientists
of the
Province of Manitoba

Merit Award

Presented to

MAHESH C. CHATURVEDI

B.Sc. (Met. Eng.), M.Met., Ph.D., P.Eng.

Mahesh Chaturvedi received his Bachelor of Science in Metallurgical Engineering from Banaras Hindu University in Varanasi, India in 1960. He received his Masters in Metallurgy in 1962, and his Doctorate in 1966, both from Sheffield University in the United Kingdom. After graduation, he moved to Winnipeg and became a Post Doctoral Research Fellow at the University of Manitoba. Since then, he has risen in the ranks within the Department of Mechanical Engineering to become a full Professor and culminating in his present position as a Distinguished Professor, a Tier-I Canada Research Chair in Aerospace Materials, and an NSERC Industrial Research Professor.

Professor Chaturvedi has been doing research in several aspects of materials science and materials engineering for the last 35 years. He has done research on processing, microstructures, and properties of nickel based alloys, aluminium alloys, titanium alloys and steels. More recently his research has been focused on weldability and superplastic deformation of aerospace alloys and on solidification of alloys in microgravity. This research has resulted in an improved understanding of the behaviour of metallic materials in general and aerospace alloys in particular, the latter being of prime importance to Canada's aerospace industry.

He has contributed extensively to the published scientific literature through 153 papers in peer-reviewed journals and 46 peer-reviewed conference proceedings. He has also co-authored a text book on Phase Transformation in Materials with Dr. A.K. Jena and holds three patents. Professor Chaturvedi has established a state-of-the-art materials processing and characterization facility at the University of Manitoba, which is widely used by various industries in Manitoba. With the help of this facility Professor Chaturvedi has contributed extensively to the training and education of future scientists. Twelve students have obtained Ph.D. and 21 students have obtained Masters degrees under his supervision. He has also supervised research of 21 post-doctoral research fellows. Seven of his former students are faculty members in various Canadian universities and the rest are working in industrial research laboratories, further improving understanding of science of materials. He has been successful in attracting almost \$10 million in external funding in support of his research.

Professor Chaturvedi has also rendered services to the materials research and industrial community. He has served on the NSERC Grant Selection Committee and the Steacie Memorial Fellowship Committee. He has chaired several site visits for NSERC Major Installation Grant applications and regularly acts as an external examiner of Doctoral theses from Canadian as well as international Universities. He was Chair of an International Conference on Failure Analysis held in Beijing in 1995 and was the Program Chair of the Conference of Metallurgists held in Winnipeg in 1987. He regularly chairs sessions and presents invited talks at several international conferences each year.

For his contributions to materials research, training of graduate students and service to the materials research and industrial community he was awarded a Fellowship of ASM International in 2000. In 2002 he was also a recipient of the Dofasco Award from the Metallurgical Society of the Canadian Institute of Mining and Metallurgy. On 29 May, 2003, the University of Manitoba conferred upon him its highest academic title of Distinguished Professor for his outstanding and sustained contributions to research and teaching in materials science.

The Association is pleased to recognize Mahesh Chaturvedi for his accomplishments and for his many contributions in the area of materials research, training, and service to industry, and feels he is a most deserving recipient of the Merit Award.

March 2, 2004