



UNIVERSITY OF DHAKA

Citation for Razzaq-Shamsun Research Prize for the year 2001

The Syndicate of the University of Dhaka is pleased to award for the year 2001 the research prize for the Razzaq-Shamsun Research Scholarship/Prize Fund in the form of a

Professor Dr. Md. Anwar Hossain

for his outstanding contributions to the theory of convective flow of fluid including variable viscosity and other physical effects.

Natural convective flow from a vertical surface for a fluid with temperature dependent viscosity is encountered in many heat transfer devices such as flat plate solar collectors and flat plate condensers in refrigerators. Similar problems of real fluid flow are not only of technical importance as for example in the design of reactors but they are also of great theoretical importance as they involve intricate mathematical questions for theoretical solutions of the equations of the theory.

Dr. Hossain has with his collaborators published about 12 excellent papers in this year in international journals like the International Communication in Heat Mass Transfer (28,1137, 2001), Acta Mechanica (151,1,2001), Z. Angew. Math. Mech. (81,699,2001), Applied Mechanics and Engineering (4,2001), Heat Mass Transfer (12,162,2001), International Journal of Thermal Science (40,366,2001), *ibid* (40,437,2001), *ibid* (40,389,2001), *ibid* (40,115,2001), and *ibid* (40,11,2001).

From these papers, it is clear that Dr. Hossain and his collaborators from England, Romania and of course from Bangladesh have achieved considerable success in the study of the effects of magnetic field as well as temperature dependent viscosity on the unsteady flow and heat transfer for a viscous laminar incompressible and electrically conducting fluid due to an impulsively started rotating infinite disc.

The University of Dhaka and the Trustees of the Razzaq-Shamsun Research Scholarship/Prize Fund are therefore happy to recognise their significant research work by the award of this prize to Professor Dr. Md. Anwar Hossain of the Department of Mathematics, University of Dhaka.

List of Publications :

Natural convective flow along a vertical circular cone with uniform surface heat flux in a thermally strained medium, Int. J. Numerical Heat fluid flow, Vol. 12(3) pp. 290-305 (2002).

M.A. Hossain, S.C. Paul and A.C. Mandal

Effect of inertia on free convective plumes in porous media, Int. Comm. Heat Mass transfer, Vol. 28 (8) pp 1137-1142 (2001).

D.A.S. Rees and M.A. Hossain

P. T. O.