Fuel Cell: Efficient Power Sources of 21st Century

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Prof. K.T. Jacob did his B.Sc. in 1964, (University of Mysore); B.E. in 1967, (Indian Institute of Science); D.I.C. in 1970, (Imperial College of Science and Technology, London, U.K.); Ph.D. in 1970, (University of London, U.K.) and D.Sc. (Engg.) in 1986, (University of London, U.K.)

His research interests lies in the areas of Classical, Statistical and Irreversible Thermodynamics of Materials, Materials Extraction and Chemical Processing, Conceptual Design of Processes, Solid State Sensors, High Temperature Corrosion and Phase Equilibria.

He has received several awards and recognitions including the Prof. Rustum Choksi Award for Excellence in Research Engineering, Indian Institute of Science (1997); Prof. Brahm Prakash Memorial Award, Indian National Science Academy, Fellowship of the Indian National Academy of Engineering, Fellowship of the National Academy of Sciences, India, Best Paper Award, The Mining and Materials Processing Institute of Japan, Tokyo, Japan (1998); G.D. Birla Gold Medal of the Indian Institute of Metals, Life Fellow of the Indian Institute of Metals(2000); Best Paper Award of the Japan Institute of Metals for the year 2000 (2001)

He has been appointed as a judge on several occasions such as for the selection of recipients of Acta Metallurgica Gold Medal by the Board of Governors of Acta Metallurgica, Inc. for a period of three years, for selection of Acta Metallurgica Gold Medal (One of 3 Judges selected from all over the World. Prof. Jacob has also been appointed as associate editor and editor of various National and International Journals like: Associate Editor, "Journal of Phase Equilibria", ASM International; Associate Editor, Materials Science and Engineering B; Appointed as Associate Editor, CALPHAD (Computer Calculation of Phase Diagrams) Journal, Elsevier Science; Re-elected, Editor, Materials Transactions, The Japan Institute of Metals.

He is the member of various editorial and advisory boards such as: Member, Editorial Committee, Journal of the Japan Institute of Metals and Materials Transactions JIM, Sendai, Japan; Member, Advisory Board of Zeitschrift fuer Metallkunde; Member of the Editorial Advisory Board of International Journal of Engineering Science for 2002-03.

He is also the Chairman, Programme Advisory Committee (PAC), Department of

Science and Technology DST on Materials, Mining and Mineral Engineering. Prof. Jacob has delivered lectures (Invited Lecture) at the Annual Meeting of the Japan Institute of Metals on High Temperature Solid State Chemical Sensors: Some Highlights and Emerging Trends; and Exploration Structure Thermodynamic Correlations in Oxides Using High-Precision Solid-State Electrochemical Techniques, Gordon Research Conference on High Temperature Materials, Processes and Diagnostics, held during 23-29 July 2000 at Plymouth, New Hampshire, USA.

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