

CONTENTS

Preface	ix
Acknowledgements	xiii
Inaugural Address Maheshwar Dayal	1
National Research and Development Programme in the Field of Hydrogen Energy J. Gururaja	9
Electrolytic Hydrogen Production M.P.S. Ramani	15
Hydrogen Production Through Photoelectrolysis G. Prasad, N.N. Rao and O.N. Srivastava	31
Hydrogen Production by Microorganisms K.C. Khandelwal	53
Ocean Thermal Power for Hydrogen Production M.V.C. Sastri	59
Solid State Materials for Hydrogen Storage K. Ramakrishna, S.K. Singh, A.K. Singh and O.N. Srivastava	81
Thin Film Hydrogen Storage System I.P. Jain and Y.K. Vijay	111
Cryogenic Storage of Hydrogen Sunil Sarangi	123
Liquid Hydrogen as a Fuel for Ground, Air and Naval Vehicles E.V.S. Namboodiry and V.N. Krishnamurthy	133
Hydrogen Fuelled Internal Combustion Engines H.B. Mathur	159
Utilisation of Hydrogen for Domestic, Commercial and Industrial Applications R.P. Dahiya and Ami Chand	179

Fuel Cells: Past, Present and Future H.M. Sonawat, R.S. Phadke and G. Govil	195
Enzyme Electrodes - a Prelude to Utilizing Hydrogen or Hydrogen Rich Fuels in Biochemical Fuel Cells H.M. Sonawat	201
Analysis of H ₂ -O ₂ Powered Magneto-hydro-dynamic Generators Ami Chand, R.P. Dahiya and M.S. Sodha	209
Energy Technology Characterisation and Assessment using Input-Output Structure: A Case for Hydrogen U. Nagchoudhuri and P.S. Satsangi	225
Panel Report	231
Author Index	235
Subject Index	239

