

## LIST OF PUBLICATIONS

1. **“Fast hydriding Mg–Zr–Mn–Ni alloy compositions for high capacity hydrogen storage application”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, T. P. Govindan.

*International Journal of Hydrogen Energy*, **37** (2012) 3671 – 3676.

2. **“Synthesis & Reaction Kinetics of an Mg–Ni–Fe–Mn Alloy System for Hydrogen Storage”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, T. P. Govindan.

*Journal of Chemical Engineering Communication* (Accepted).

3. **“Synthesis, Characterization and Reaction Kinetics of Nano–Structured Mg–V–Ni Composites for Solid–State Hydrogen Storage”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, T. P. Govindan.

*International Journal of Energetic Materials and Chemical Propulsion*  
(Communicated).

4. **“Synthesis of a V–Ni Alloy with Low Temperature Hydriding Characteristics for Hydrogen Energy Storage”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, T. P. Govindan.

*International Journal of Green Energy* (Communicated).

5. **“Rationalization for Use of Ideal Gas Law Analysis in Optimizing Solid State Alloys for Hydrogen Storage”**

Kanti G. Bambhaniya, Gurpreet S. Grewal, Vagish Shrinet, Nand Lal Singh,  
Neelamkumar J. Buch.

*International Journal of Applied Chemistry* (Communicated).

**6. “Study on Synthesis and Reaction Mechanisms of Doped Mg based Nano-Structured Solid State Hydrides”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh.

*Proceeding of 2011 World Congress on Engineering and Technology*, Oct. 28 – Nov. 2, 2011, Shanghai, China, Published by IEEE, **04** (2011) 172 – 175.

**7. “Synthesis and Characterization of a Nano Structured Mg–Zr–Mn–Ni Composition for Hydrogen Storage for Stationary Energy Systems”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, T. P. Govindan.

*International Conference on Applications of Renewable and Sustainable Energy for Industry and Society*, December 16–18, 2010, Osmania University, Hyderabad, India (Oral presentation).

**8. “Development of Optimized Magnesium Alloys with Enhanced Charging Kinetics for Efficient Hydrogen Storage”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, T. P. Govindan.

*International Conference on Emerging Technologies in Renewable Energy*, August 18–21, 2010, Anna University Chennai, India (Poster presented).

**9. “Kinetic Study of Nano-Structured Mg<sub>2</sub>Ni Alloy for Safe Hydrogen Storage”**

K. G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, T. P. Govindan.

*International Conference and Workshop on Nanostructured Ceramics and Other Nanomaterials (ICWNCN–2012)*, March 13–16, 2012, University of Delhi, India (Poster presented).

**10. “Study the Kinetics of Absorption and Desorption of Hydrogen in Magnesium Based Alloys for Hydrogen Storage Application”**

Kanti G. Bambhaniya, G. S. Grewal, V. Shrinet, N. L. Singh, A. K. Singh.

*National Seminar on Renewable Energy Sources in India: Challenges & Strategies*, February 20–21, 2009, University of Rajasthan, Jodhpur, India (Oral presentation).

**Award:**

*Technical Excellence Award for the best technical paper given by Electrical Research & Development Association (ERDA), Vadodara.*

Fast Hydriding Mg–Zr–Mn–Ni Alloy Compositions for High Capacity Hydrogen Storage applications

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