

## **PUBLICATIONS IN SCIENTIFIC JOURNALS**

1. Solvent Free Synthesis of Coumarins Using Environment Friendly Solid Acid Catalysts, **Applied Catalysis A: General**, **453** (2013) **219-226**.
2. A Green and Efficient Route to Synthesis of Diacetals with Pentaerythritol Using Solid Acid Catalysts, **International Journal of Advanced Technology in Engineering and Science**, **2(12)** (2014) **340-353**.
3. Green Routes to Synthesis of Anthraquinone Derivatives via Friedel-Crafts Reaction Under Solvent Free conditions Using Solid Acid Catalysts, **International Journal of Engineering Research and Science & Technology**, **4(1)** (2015) **97-115**.
4. A comparative study on catalytic activity of solid acid catalysts towards microwave assisted synthesis of coumarin derivatives under solvent free conditions, **International Journal of Science and Research**, **4(1)** (2015) **1933-1939**.
5. Friedel-Crafts Alkylation and Acylation of Aromatic Compounds under Solvent Free Conditions using Solid Acid Catalysts, **International Journal of Chemical Studies**, **2(5)** (2015) **27-34**.
6. An Alternate Green Route to Synthesis of Mono and Diesters using Solid Acid Catalysts, **Research Journal of Chemical Sciences**, **5(2)** (2015) **48-58**.

## **AWARD**

- Awarded **first prize for “Best Oral Presentation”** for paper entitled, “Synthesis of Mono-esters using eco-friendly solid acid catalyst- Zirconium Phosphotungstate (ZrPW)”, presented at XXIV-Gujarat Science Congress, held at Gujarat University, Ahmedabad, organized by Gujarat University and Gujarat Science Academy, held on 21<sup>st</sup> March 2010.

## **ATTENDED SYMPOSIA FOR SELF DEVELOPMENT**

- Symposium on “**Emerging Trends in Catalysis**” organized by Catalysis Society of India, Baroda Chapter, 25-26 September 2009.

## **PAPERS PRESENTED AT NATIONAL/INTERNATIONAL CONFERENCES**

1. "Synthesis of Mono-esters using eco-friendly solid acid catalyst – Zirconium Phosphotungstate (ZrPW)" presented at XXIV-Gujarat Science Congress, organized by Gujarat University and Gujarat Science Academy, held at Gujarat University, Ahmedabad, 21<sup>st</sup> March 2010.
2. "Environment benign synthesis of diesters using a solid acid catalyst – Zr(IV) Phosphotungstate" presented at 3<sup>rd</sup> International Symposium on Materials Chemistry, organized by Society for Materials Chemistry & Chemical Division Bhabha Atomic Research Centre Mumbai, India, held at Bhabha Atomic Research Centre, Mumbai, 7<sup>th</sup> – 11<sup>th</sup> December 2010.
3. "Synthesis and characterization of some novel materials possessing inherent and induced acidity and their application as environment friendly solid acid catalysts in some esterification reactions" presented at National Conference on Recent Trends in Materials Science, organized by Department of Physics, Jaypee University of Information Technology, held at Jaypee University of Information Technology, Waknaghat, Solan, H. P., 8<sup>th</sup> – 10<sup>th</sup> October 2011.
4. "Solvent free synthesis of coumarins using environment friendly solid acid catalysts possessing inherent and induced acidity" presented at 15<sup>th</sup> National Workshop on Catalysis, organized by National Center for Catalysis Research (NCCR), IIT Madras, Chennai, held at IIT Madras, Chennai, 11<sup>th</sup> - 13<sup>th</sup> December 2011.
5. "Synthesis of coumarins via Pechmann condensation using M(IV)-Phosphotungstates as solid acid catalysts" presented at National Seminar on Catalysis for Sustainable Development, organized by Catalysis Society of India (Baroda Chapter) and Department of Chemistry, The M. S. University of Baroda, held at Department of Chemistry, The M. S. University of Baroda, Vadodara, 27<sup>th</sup> – 28<sup>th</sup> January 2012.