

## TABLE OF CONTENTS

**Volume 2 Number 3**

**September 2012**

### **Preparation, Characterization and Catalytic Activity of Palladium Nanoparticles Embedded in the Mesoporous Silica Matrices**

- N. A. Ivashchenko, W. Gac, V. A. Tertykh, V. V. Yanishpolskii, S. A. Khainakov, A. V. Dikhtierenko,  
S. Pasieczna-Patkowska, W. Zawadzki.....117

### **Electron Emission of Graphene-Diamond Hybrid Films Using Paraffin Wax as Diamond Seeding Source**

- D. Varshney, C. V. Rao, F. Mendoza, K. Perez, M. J.-F. Guinel, Y. Ishikawa, B. R. Weiner, G. Morell.....126

### **Keggin Structure and Surface Acidity of 12-Phosphotungstic Acid Grafted Zr-MCM-48**

#### **Mesoporous Molecular Sieves**

- Z. Q. Wang, J. Navarrete.....134

### **Low Temperature Formation of Silver and Silver-Copper Alloy Nano-Particles Using Plasma Enhanced Hydrogenation and Their Optical Properties**

- Z. Kiani, Y. Abdi, E. Arzi.....142

### **A Study on Synthesis and Characterization of Biobased Carbon Nanoparticles from Lignin**

- P. Gonugunta, S. Vivekanandhan, A. K. Mohanty, M. Misra.....148

### **Modified Scherrer Equation to Estimate More Accurately Nano-Crystallite Size Using XRD**

- A. Monshi, M. R. Foroughi, M. R. Monshi.....154

### **Tunable Bending Stiffness, Buckling Force, and Natural Frequency of Nanowires and Nanoplates**

- H. X. Zhu, Z. B. Wang, T. X. Fan, D. Zhang.....161

---

The figure on the front cover is from the article published in World Journal of Nano Science and Engineering, 2012, Vol. 2, No. 3, pp. 126-133 by Deepak Varshney, *et al.*