

## **Table of Contents**

### **Preface**

#### **Fabrication of Vesicular Drug Delivery of Niosomal Topical Formulation for the Effective Treatment of Osteoarthritis**

S. Nagalakshmi, T. Sandeep and S. Shanmuganathan 1

#### **An Experimental and Simulation Studies on Sound Absorption Coefficients of Banana Fibers and their Reinforced Composites**

M.K. bin Bakri, E. Jayamani, K.H. Soon, S. Hamdan and A. Kakar 9

#### **Adsorptive CuO/CuAl<sub>2</sub>O<sub>4</sub> Nanoparticles for the Separation of Aqueous Methyl Orange**

S.G. Menon, K.S. Choudhari, S. Kulkarni and C. Santhosh 21

#### **Folding-Refolding of Ferritin as Template in Design of Nanoclusters of Copper and Manganese Oxides**

H. Subramanian, M. Jaganathan and A. Dhathathreyan 33

#### **Fabrication of Piezoelectric Polyvinylidene Fluoride (PVDF) Polymer-Based Tactile Sensor Using Electrospinning Method**

N. Manikandan, S. Muruganand, K. Sriram, P. Balakrishnan and A. Suresh Kumar 42

#### **Highly Efficient Yttrium Based Metal Organic Framework for Removal of Pollutant Dyes**

B. Singh, H. Sharma, B. Kaur, J. Singh, G. Singh, N. Singh and D. Kukkar 51

#### **The Study of Change in Optical Properties of Highly AgNO<sub>3</sub> Doped Poly Vinyl Alcohol Hydrosol**

T.K. Vaghasiya 57

#### **Fabrication of an Enzymatic Biosensor Based on Gold Nanoparticles Modified Electrochemical Transducer for the Detection of Organophosphorus Compounds**

R. Grace, K. Sundar, N. Mohan, D. Selvakumar and N.S. Kumar 67

#### **Synthesis of Iron Based Biocompatible Metal Organic Frameworks for Microencapsulation of Docetaxel**

T. Sharma, H. Kaur, A. Kaur, M. Singh, N. Kaur, M. Kanwar and D. Kukkar 74

#### **Electron Microscopy Analysis of CdSe-CdS Quantum Dot-in-Rods Coated *Mimosa pudica* Fibre**

S.R. Patra, B. Mallick, S.K. Samal, S.C. Mishra, P. Pattojoshi and T.N. Tiwari 79

#### **Studies on Control of Erratic Release of Ketoprofen from Commercial Patches for Sustained Pain-Relief Using Silica Microparticles**

S. Gaware, P. Bala, S. Dhabale, A. Joshi, N. Wagh, K. Pal and S.N. Kale 88