

## TABLE OF CONTENTS

Volume 2    Number 6

June 2010

### **Role of Plasma Surface Treatments on Wetting and Adhesion**

R. Wolf, A. C. Sparavigna.....397

### **Backlash Error Measurement and Compensation on the Vertical Machining Center**

H. L. Liu, X. N. Xue, G. Y. Tan.....403

### **Experimental Investigation and Development of Artificial Neural Network Model for the Properties of Locally Produced Light Weight Aggregate Concrete**

M. A. M. Abdeen, H. Hodhod.....408

### **Isotropic Elastoplasticity Fully Coupled with Non-Local Damage**

M. Almansba, K. Saanouni, N. E. Hannachi.....420

### **A Note on the Effect of Negative Poisson's Ratio on the Deformation of a Poroelastic Half-Space by Surface Loads**

S. Rani, R. Kumar, S. J. Singh.....432

### **Integrated Optimization of Mechanisms with Genetic Algorithms**

J. L. Marcelin.....438

### **A Novel Part-Winding Starting Method for 4-Pole Squirrel Cage Induction Motor**

V. P. Sakthivel, R. Bhuvaneswari, S. Subramanian.....445

### **Influence of Cutting Speed, Feed Rate and Bulk Texture on the Surface Finish of Nitrogen**

### **Alloyed Duplex Stainless Steels during Dry Turning**

D. P. Selvaraj, P. Chandramohan.....453

### **Hydraulic Domestic Heating by Throttling**

M. A. K. Alia, T. Younes, H. Sarhan.....461

### **Energetic Balance for the Flow Induced by a Constantly Accelerating Plate in a Second Grade Fluid**

C. Fetecau, M. Khan, C. Fetecau.....466