

# INTERNATIONAL JOURNAL OF ADVANCES IN MECHANICAL ENGINEERING

VOLUME 6

NUMBER 1

JANUARY-JUNE 2016

## CONTENTS

- |                                                                                                  |                                                                               |       |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------|
| 1. Chong Cycle, Durability Issues and Accelerated Tests of Bridge Coatings                       | <i>Shuang-Ling Chong &amp;<br/>Ken P. Chong</i>                               | 1-11  |
| 2. Large Deflection of Annular Sandwich Plates                                                   | <i>Ren-huai Liu</i>                                                           | 13-24 |
| 3. Meso-failure Mechanism of Rock under Thermal-mechanical Coupling Effects                      | <i>Heping Xie<br/>Jianping Zuo, Hongwei Zhou<br/>Yang Ju &amp; Xiaojun Wu</i> | 25-35 |
| 4. The Surface Instability of A Graded Thin Film Induced By Interaction with A Rigid Contactor   | <i>Gan-Yun Huang &amp;<br/>Shou-Wen Yu</i>                                    | 37-48 |
| 5. Generalized Hamilton Variational Principles for Non-linear Analyses of Beam-Column Structures | <i>Yuan-Yuan Zhu &amp;<br/>Chang-Jun Cheng</i>                                | 49-58 |
| 6. The Refined theory of Thermoelastic Beams Posting Inside Winkler foundation                   | <i>Min-zhong Wang, Yang Gao &amp;<br/>Bao-Sheng Zhao</i>                      | 59-64 |