

**3rd International Conference on Advanced Engineering Materials and Technology (AEMT 2013)**

**May 11-12, 2013, Zhangjiajie, China**

**A) Background**

We are looking forward to meet you at the beautiful city of Zhangjiajie on May 11th - 13th, 2013. ICAEMT 2013 is co-organized by Hebei United University, Korea Maritime University, Hong Kong Industrial Technology Research Centre., which is aiming at strengthening international academic exchange and cooperation, encouraging the interdisciplinary fusion and promoting the development of Advanced Engineering Materials and Technology.

<http://www.icaemt.org>

**B) Paper refereeing and publication**

All accepted papers will be published by *Advanced Materials Research Journal* (1022-6680), Indexed by **El Compendex** and **Thomson ISI (ISTP)**.

Selected excellent papers will be published in international reputation journals

**C) Important Dates**

Paper submission due: **March 30, 2013**

Acceptance notification: **2-3 weeks after submission**

## Table of contents

**Periodical:**

**Advanced Materials Research**

**Volume:**

**Materials Processing and Manufacturing III**

**Papers published in this volume:**

**Effects of Process Parameters on Wall Distribution Homogeneity during Hot Power Backward Spinning for 7075 Cast Aluminium Alloy Tube**

*Gang Yao Zhao, San Jun Tu, Ran Yang Zhang, En Le Wang, Ping Fang*

p.179

**Effects of Process Parameters on Elongation during Hot Power Backward Spinning for 7075 Cast Aluminium Alloy Tube**

*Ran Yang Zhang, En Le Wang, Gang Yao Zhao, Shan Jun Tu, Zheng Hua Guo*

p.183

**The Research on the Influence Cause of Boron Steel Sheet Size Precision Based on Automobile Light Quantizing**

*Zhan Jun Liu*

p.187

**Evaluation of Variation Mechanical Properties in AZ91D Magnesium Alloy Processed by Extrusion and ECAP**

*Bao Zhi Xie*

p.191

**Tolerance Prediction for Forming Force of Upsetting-Extruding Process by Using Points of Monomial Cubature Rules**

*Dong Lai Wei, Su Zhao, Rui Yang Ni, Tao Wang, Ye Jun Jin, Jing Wang, Ming Li Zhai*

p.195

**Effect of Nonuniform Water Convection on Laminar-Flow Cooling**

*Shen Bai Zheng, Peng Jie Zhang, Xi Yue Li, Yin Ping Zhu, Hui Ma*

p.199

**Surface Roughness in Incremental Sheet Metal Forming of AA5052**

*On Uma Lasunon*

p.203

**Interface Microstructure and Mechanical Properties of Copper/Aluminum Composite Material**

*Bao Yi Yu, Qing Wang, Qiang Li, Yu Juan Wu, Yan Chen*

p.207

**A Study on Gear Tooth Metal Flowing Law and Process Optimization of Spiral Bevel Gear Forging**

*Zhen Shan Gao, Xiao Zhong Deng, Fu Xiao Chen*

p.215

**A Distribution Medium Considered Resin Flow Simulation Model for Vacuum Infusion Molding Process**

*Rui Yang, Long Tao Li, Yan Xin Zhao*

p.221

**Paper Title:****Interface Microstructure and Mechanical Properties of Copper/Aluminum Composite Material**

<b>Periodical</b>	<a href="#">Advanced Materials Research</a> (Volumes 753 - 755)
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<b>Authors</b>	<a href="#">Bao Yi Yu</a> , <a href="#">Qing Wang</a> , <a href="#">Qiang Li</a> , <a href="#">Yu Juan Wu</a> , <a href="#">Yan Chen</a>
<b>Keywords</b>	<a href="#">Cu/Al Composite</a> , <a href="#">Interface</a> , <a href="#">Microstructure</a> , <a href="#">Peel Strength</a>

**• Abstract**

The composite was produced by pouring melt Al into solid Cu pipe. Microstructure, mechanical properties and Cu-Al composition distribution in Cu/Al composite interface were studied in the paper. The experimental results show that Cu and Al diffuse to each other, which the Cu/Al interface zone is formed. Moreover, there are lots of Cu-Al phase appearing in the Cu/Al interface zone. Furthermore, the influences of annealing temperature on the peel strength of Cu/Al interface were tested, in which the peel strength of the Cu/Al interface zone reaches the highest point to 15 MPa at 350°C and then decreases with the annealing temperature increases. In addition, the width of the diffusing layer and the average grain size of the Cu/Al interface zone increase with the annealing temperature increases.