

2012 年制造科学与工程 国际学术会议

The 3rd International Conference on
Manufacturing Science and Engineering



ICMSE 2012

Xiamen, China

March 27-29, 2012

Co-organized by:

Fujian University of Technology, China

Xiamen University, China

Fuzhou University, China

Huaqiao University, China

University of Wollongong, Australia

Fujian Mechanical Engineering Society, China

Hong Kong Industrial Technology Research Centre

CONFERENCE MAP GUIDE

Xiamen, China



Xiamen International Conference & Exhibition Center



Any question, please contact the secretariat: +86-13539987185; +86 13533523123

The 3rd International Conference on Manufacturing Science and Engineering

Co-organized By:

Fujian University of Technology, China
Xiamen University, China
Fuzhou University, China
Huaqiao University, China
University of Wollongong, Australia
Fujian Mechanical Engineering Society, China
Hong Kong Industrial Technology Research Centre

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Associate Prof. Qianting Wang, Fujian University of Technology

Associate Prof. Yonglu Chen, Fujian University of Technology

Conference Website

<http://www.icmse.net>

SCHEDULE OF THE CONFERENCE

March 27 (Tuesday)

10:30—21:00

Registration, Sequence Hall, Hualin Hotel

12:00—13:00

Lunch, Hall, Fengyuan Restaurant (凤缘渔港), 1/F

18:00—19:30

Dinner, Hall, Fengyuan Restaurant (凤缘渔港), 1/F

March 28 (Wednesday)

8:30—9:00

Open Ceremony, International Conference Hall, 4/F (国际会议厅)

9:00—10:20

Keynote Speeches

10:20—10:40

Tea Break

10:40—12:00

Keynote Speeches

12:00—

Lunch, Hall, Fengyuan Restaurant (凤缘渔港), 1/F

14:00—16:00

Keynote Speeches

16:00—16:20

Tea Break

16:20—17:40

Keynote Speeches

18:00—

Dinner, Hall, Fengyuan Restaurant (凤缘渔港), 1/F

SCHEDULE OF THE CONFERENCE

March 29 (Tuesday)

8:30—10:00

Session (A,B,C,D,E)

10:00—10:20

Tea Break

10:20—12:00

Session (A,B,C,D,E)

12:00—

Lunch, Hall, Fengyuan Restaurant (凤缘渔港), 1/F

14:00—15:30

Session (A,B,C,D)

15:30—15:50

Tea Break

15:50—17:30

Session (A,B,C,D)

18:00—

Dinner, Hall, Fengyuan Restaurant (凤缘渔港), 1/F

Morning, March 28, 2012

Plenary Session (8:30 AM—12:00 AM)

International Conference Hall, 4/F (国际会议厅)

Chairmen:

Prof. Wenzhe Chen, Fujian University of Technology, China

Prof. Zhengyi Jiang, University of Wollongong, Australia

8:30—9:00 Opening Speech

Hosted by Prof. Pinqiang Dai, Fujian University of Technology, China

9:00—9:40 Keynote Speech

Academician Prof. Yu Zhou, Harbin Institute of Technology, China

9:40—10:20 Keynote Speech

Academician Prof. Qunpeng Zhong, Beijing University of Aeronautics & Astronautics, China

10:20—10:40 Tea Break

10:40—11:20 Keynote Speech

Prof. Qing Liu, Chongqing University, China

11:20—12:00 Keynote Speech

Prof. Shandong Tu, East China University of Science and Technology, China

12:00— Lunch

Afternoon, March 28, 2012

Plenary Session (14:00 PM—17:40 PM)

International Conference Hall, 4/F (国际会议厅)

Chairmen:

Prof. Xipeng Xu, Huaqiao University, China

Prof. Xingjun Liu, Xiamen University, China

14:00—14:40 Keynote Speech

Prof. Jun Sun, Xi'an Jiaotong University, China

14:40—15:20 Keynote Speech

Prof. Yuefeng Gu, National Institute for Materials Science, Japan

15:20—16:00 Keynote Speech

Prof. Luchang Qin, University of North Carolina at Chaper Hill, USA

16:00—16:20 Tea Break

16:20—17:00 Keynote Speech

Prof. Nabil Gindy, University of Nottingham Ningbo

17:00—17:40 Keynote Speech

Prof. Han Huang, University of Queensland, Australia

18:00— Dinner

Morning, March 29, 2012

8:30 AM—12:00 AM

Session A: Automation Equipment and Systems

2/F 204 Meeting Room (204 会议室)

Chairmen: Prof. Yuan-Horng Lin, National Taichung University of Education,
Taiwan

Prof. Kadhim F. Alsultani, Babylon University, Iraq

Prof. Viorel Sandu, National Institute of Materials Physics,
Magurele, Romania

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. A Modified Finite Element Model for Electromagnetic Tube Compression Process (V7860)
M. Sedighi, M. Khandaei, M. A. Liaghat
2. A New Test Part for Detecting Processing Accuracy of Five Axis CNC Machine Tools (V4236)
Rongbo Shi, Jiming Yan, Zhiping Guo, Zhiyong Song, Zhijun Peng
3. A Novel Force Sensor Based Multi-Function Take-Off Board (V6684)
Pei Chen, Yulong Zhao, Baojin Wang, Shanping Chen, Zhenlong Yan
4. A Study of Flow-Induced Noise in the Volute of Pump Based on Sysnoise (V4100)
Jianping Yuan, Aixiang Ge, Wei Sun, Yanxia Fu, Fei Xue
5. An Approach to Lumbar Vertebra CT Image Segmentation Using Contourlet Transform and ANNs (V7104)
Junmin Deng, Haiyun Li, Hao Wu
6. An Innovative Design for High Performance Control Valve by Using the Synergy of QFD and TRIZ Methods (V5811)
Chang-Ming Hu, Chi-Hao Yeh, Jay C.Y. Huang
7. Application of Fuzzy Clustering and FSM to Represent Graphic Concept Structures on Assessment Database (V4154)
He-Kai Chen, Yuan-Horng Lin
8. CoNb₂O₆ Ceramic with Geometric Frustration (V7931)
Viorel Sandu, Mirela Sidonia Nicolescu, Marian Gabriel Banciu, Stelian Popa, Mihai Burdusel
9. Design the Information System of the Locating and Tracking Harbor Tug Based on the Web (V6142)
Tingting Cui, Hanbin Xiao

10. Effects of Tin on Aluminum – Zinc Alloy as Sacrificial Anode to Protect Underground Oil Pipeline in Al- Mahawil Regional (V4186)
Khadim F. Al-Sultani, Jnan Nasser Nabat
11. Experimental Study on the Performance of a Natural Gas Engine (V6571)
Xiaona Sun, Hongguang Zhang, Guoyong Zheng
12. Fatigue Crack Growth of Ti-15V-3Cr-3Sn-3Al Alloy (V6773)
S. T. Chang, W. J. Li, L. W. Tsay
13. Forecasting the Exchange Rate Using the Improved SAPSO Neural Network (V8306)
Li Meng, Lijun Dong
14. Genetic Algorithm for Material Cost Minimization of External Strengthening System with Fiber Reinforced Polymer (V4110)
Md. Moshir Rahman, Mohd Zamin Jumaat, Md. Akter Hosen
15. Improving the Communication Performance in Multi-Agent Systems for Distributed Manufacturing Process Control (V8059)
Qiang Yang, Wenjun Yan
16. Integration of S-P Chart and OT for Cognition Diagnosis on Fundamental Mathematics (V7857)
Chin-Chun Chen, Yuan-Horng Lin, Jeng-Ming Yih, Yen-Kuei Yu
17. Magnetic Assisted Roller Burnishing and Deburring of Flat Metal Surfaces (V7702)
Janos Kodacsy, Janos Liska
18. Optical 3D Scanning of Small Parts (V4217)
Ladislav MOROVIČ, Peter POKORNÝ

Morning, March 29, 2012

8:30 AM—12:00 AM

Session B: Advanced Manufacturing Technology

2/F, 215 Meeting Room (215 会议室)

Chairmen: Prof. Jung Dong-Won, Jeju National University, Korea

Prof. Zhongxia Liu, Zhengzhou University, China

Prof. Joon Hwang, Chungju National University, Korea

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. A Methodology of Multi-objective Dynamic Liquid Level Measurement Based on Wireless Transmission Technology (V7124)
Baiqiang You, Tianzeng Huang, Jianhua Zhou, Yuhan Chi, Tao Zhou, Huiliang Liu
2. A Novel Composition Forecasting Model Based on Choquet Integral with Respect to L-Measure and O-density (V8081)
Hsiang-Chuan Liu, Bai-Cheng Jeng, Yen-Kuei Yu, Shang-Ling Ou, Yih-Chang Ou, Hsien-Chang Tsai
3. An Assessment of Cutting Force for Dental Implant Drilling (V8198)
Joon Hwang, Eui-Sik Chung, Yong-Kyu Lee
4. Application of Radial Basis Function Neural Network to Support Concept Evaluation (V7252)
Qingwei Yang, Naichao Wang, Lin Ma
5. Control and Optimizing of Unstable State in Continuous Casting Process with Automatic System (V6559)
Zhizheng Yang, Yanfeng Wang, Jiangping Rao, Zhugang Peng
6. Development of a Three-Degree-of-Freedom Parallel Workpiece Table for Ceramic Grinding (V7886)
Jianzhong Hu, Min Wang, Tao Zan, Desheng Li
7. Development of An Adaptive Mobil Front-Lighting System Using Multi-functional Sensors (V9830)
San Shan Hung, Hsing Cheng Chang, Chia Yu Yi
8. Differential Roll-Scanning Technology for Accuracy Measurement of Fine-Pitch Gears (V5565)
Huakun Xie, Ying Fu, Gang Feng
9. Drilling of Glass Fibre Reinforced Plastic (V7990)
Liska János, Kodácsy János
10. Finite Element Analysis Of Grinding Temperature Field With Water Vapor As Coolants (V7053)

Jialong Ren, Ligang Zhao, Yan Wang, Chunyan Zhang, Xirong Tian

11. Formability Predictions of Deep Drawing Process for Aluminum Alloy A1100-O Sheets by Using Combination FEM with ANN (V5518)
Nguyen Duc-Toan, Kim Young-Suk, Jung Dong-Won
12. Fuzzy Control of Printing Color Quality Based on Genetic Algorithm (V6529)
Junjing Yang, Hongyan Chu, Ligang Cai, Lei Su
13. Influence Analysis of Linear Data Distribution on Different Clustering Results (V5978)
Yuchen Song, Xiaoliang Jia, Haidong Meng
14. Integrated Production-Inventory Model in a Multi-Echelon Closed-Loop Supply Chain with Product Returns (V7330)
Zarina Abu-Hassan, Lee Luong, Sang-Heon Lee
15. Investigation of the Microgeometry after Hard Turning and Diamond Burnishing (V7988)
Liska Katalin, Kodácsy János, Liska János
16. Effect of Mechanical Stresses on the Coercive Force of the Heterophase Non-interacting nanoparticles (V9881)
Leonid Afremov, Yury Kirienko
17. Investigation to Self-Piercing Riveting of Wrought Magnesium AZ31 Sheets (V5209)
Zhongxia Liu, Peichung Wang, Junwei Wang
18. Machining Sequencing Optimization Based on Simulated Annealing Algorithm (V8510)
Quanwei Hu, Lihong Qiao, Hongwei Zhang
19. Numerical Simulation of Peak Overpressure and Positive Pressure Time of Explosion Shock Wave in the Air (V5315)
Chao Liu, Zhijian Hu, Yunyang Wang, Tao Dai
20. Experimental Study on Limiting Temperatures of Circular Hollow Sections (V7712)
In Kyu Kwon, Heung Youl Kim, Hyung Jun Kim
21. Wear Behavior of Diamond+SiCp-Reinforced Metal Matrix Composite by Taguchi Method (V8381)
Y.Şahin, K.Emre Oksüz, M.Şimşir

Morning, March 29, 2012

8:30 AM—12:00 AM

Session C: Advanced Materials and Materials Processing

2/F, 226 Meeting Room (226 会议室)

Chairmen: Prof. Osama Abuzeid, UAE University, United Arab Emirates

Prof. TzuenRong Yang, National Taiwan Normal University, Taiwan

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. Abrasion Behavior of WC Reinforced Cast Iron Surface Composite Fabricated by Cast-Infiltration Method (V5412)
Guojian Cao, Erjun Guo, Yicheng Feng, Liping Wang
2. Calculation Model of Mass Action Concentrations for CaO-MnO-FeO-SiO₂-MgO-Al₂O₃ Slags Based on the Ion and Molecule Coexistence Theory (V5582)
Xiaohong Yang, Xiaochun Ma, Chengchuan Wu, Guoguang Cheng
3. Correlation between NDT and Tensile Strength of Structural Larch Sawn Lumber (V7575)
Chen Yong, Shen Shijie, Li Weina, Wang Xijun
4. Dynamic Modeling and Acceleration Control of Electric Vehicles (V4372)
Xiaolong Liu, Shaopeng Zhu, Daofei Li, Zhijun Wu
5. Effect of Alloy Addition on Mechanical Properties and Decarburization Sensitivity of Spring Steel (V6413)
Peng Jun Tian, Shun Xue, Guoguang Cheng, Guozhi Zhou
6. Effect of Corrosion Inhibition on the Stress Corrosion Cracking of UNS S31603 Austenitic Stainless Steel (V4374)
O. A. Abuzeid, A. I. Aljoboury, M. Abou Zour.
7. Effects of Substrate Bias on the Microstructure and Properties of a-C:H Films Deposited by MFPUMST (V5313)
Haiyang Dai, Fengxiao Zhai, Xuerui Cheng, Lei Su, Zhenping Chen
8. Electrorheological Properties of Ni-Group Nano Particles and Multilayer Compound Polar Molecule Modify (V7787)
Suokui Tan, Xiaoping Song, Song Ji, Hong Zhao, Min Wu, Hongyan Guo
9. GIS-Based Environmental Sensitivity Evaluation for Supporting Scenic Area Planning: Case Study of Lushan-Xihai International Art Park (V4298)
Zhe Yang, Wenxian Xin, Yuan Li
10. Modeling the Welding Process of the Low Alloy Ferritic Steels T/P23 and T/P24 (V4399)

Jose Adilson de Castro, Carlos Roberto Xavier, Luciano Pessanha Moreira, Yasushi Sasaki

11. Optimization of Flow Control Devices in a Stainless Steel Tundish (V7400)
Chao Chen, Guoguang Cheng, Haibo Sun, Xinchao Wang, Jiaquan Zhang
12. Optimization of Weir & Dam with Drain Holes in Continuous Casting Slab Tundish (V7166)
Chao Chen, Guoguang Cheng, Haibo Sun, Xinchao Wang, Jiaquan Zhang
13. Point Clouds Based Dynamical Representation for Heterogeneous Objects (V4410)
Jingbo Li, Jiquan Yang, Jianping Shi
14. Preparation and Characterization of TiO₂ Photocatalytic Thin Film Prepared by Sol-Gel Dip Coating (V6836)
JiaoJiao Wang, Kai Zheng, Christian Rüssel, Wen Liang
15. Reducing Thermal Conductivity of Polymer Derived SiC Ceramics via Microwave Sintering Processing (V4341)
Xiaoyi Han, Xin Xing, Haifeng Cheng, Jun Wang
16. Simulation of First Mode Crack Propagation in a Viscoelastic Solid System Fuel Structure Using Crack Length-Temperature Superimposition (V4379)
Muhammad Omair, Khalid Pervaiz, Muhammad Azam
17. FIR Spectroscopy Studies of modes behavior and transport properties Of InAs_{1-x}N_x Alloys (V4408)
TzuenRong Yang, C. W. Hsu, W. K. Hung, H.H. Lin, Zhe Chuan Feng
18. Chloride Penetration Resistance of Concrete Structures under Compressive Load (V8828)
Fuxiang Jiang, Yutian Wang, Tiejun Zhao, Liangliang Liu
19. Investigation on the effect of silica fume on shrinkage characteristics of Portland cement-silica fume paste (V8270)
Bui Le Anh-Tuan, Chen Chun-Tsun, Hwang Chao-Lung, Fondly Reymont Kurniawa, Cheng Hsiao-Li

Morning, March 29, 2012

8:30 AM—12:00 AM

Session D: Manufacturing Processing and System

2/F, 201 Meeting Room (201 会议室)

Chairmen: Prof. Tong Lin, Deakin University, Australia

Prof. Mao-chien Chi, Wufeng University, Taiwan

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. Comparison on the Compositions, Microstructure and Hardness of Super Large Section Prehardened Steels for Plastic Mould Block (V7340)
Yi Luo, Jun Wu, Xiaochun Wu, Yong'an Min, Hongbin Wang
2. Tool-Workpiece Temperature for Continuous and Interrupted Cutting of ASSAB 760 Steel with Dry Machining Process (V4337)
M. Azuddin
3. Optimization of Air Cooling Ribs for 1.5MW Wind Rotor Based on CFD (V8549)
Mingwei Ge, Wenjiang Shi, Shancai Xiao
4. Power Generation from Randomly Oriented Electrospun Nanofiber Membranes (V8580)
Jian Fang, Xungai Wang, Tong Lin
5. Preparation and Characterization of CdS by Evaporation and Cu₂S Complex Photoelectric Thin Films (V8768)
Shengnan Sun, Shi Liu, Feng Xu, Lifen Cao, Jiajia Cao, Jing Wang, Limin Ma, Haining Cui
6. Pure Statistical and Multi-Level Industrial Pairs Trading: Bridged by Statistical Characters (V4549)
Susheng Wang, Yongguan Mai
7. Strengthening and Toughening Efficiency of Calcium Carbonate Whisker-Reinforced Portland Cement with or without Silica Fume (V8437)
Mingli Cao, Cong Zhang
8. A Novel Hybrid Clustering Method for Multi-Attribute Decision-Making Datasets (V9436)
Kai-Ping Liu, Wen-Chin Chen, Ting-Cheng Chang
9. An Investigation Regarding Cram School Managers and the Percentage of them Achieving Government Employment (V9586)
Wei-Feng Kao, Chin-Hsin Chiu, Li-Hsing Ho
10. An Optimization Design in the HV nLDMOS by Taguchi Method (V9621)
Shen-Li Chen, Tzung-Shian Wu, Yun-Ru Chen, Hung-Wei Chen, Chun-Hsing Shih, and H.H. Chen

11. City Council Candidates Apply Innovative Management Models in Five Taiwanese Cities (V9073)
Hsuan-Yi Chen, Ming-Tsai Hsu, Chin-Hsin Chiu, Li-Hsing Ho
12. Dynamic Characteristics of Gear Transmission System for Wind Turbine Gearbox (V8984)
Yinxin Yu, Huiqun Yuan, Zhimin Huang
13. Effectiveness Observed by Passengers Taking the Taiwan High Speed Railway Service: Especially their Observation of Overall Quality and Satisfaction (V9389)
Chin-Hsin Chiu; Hsuan -Yi Chen; Liang, Chii-Hwa; Ho, Li-Hsing
14. Effects of Inoculation on Microstructures and Mechanical Properties of Resistance Spot Welded Magnesium Alloy Joints (V8943)
Haixuan Sun, Daqian Sun, Xinzui Wang
15. Experimental Study on Application of Cold-welding Technology in Engine Remanufacturing Field (V9691)
Qingzhong Xu, Fangyi Li, Tao Ding, Jinzhi Chen
16. Fast Prediction of Temperature by FEM in Hot Strip Rolling (V9314)
Ruibin Mei, Ban Cai, Changsheng Li, Xianghua Liu
17. Effect of Alkali-Activators on the Strength Development and Drying Shrinkage of Alkali-Activated Binder (V9659)
Mao-chien Chi, Jiang-jhy Chang, Ran Huang
18. Preparation and Impact Properties of Epoxy/ Epoxidized Palm Oil Blend Glass Fiber Reinforced Composite Systems (V9409)
Siti Nur Liyana Mamaud, Mohd Hanafiah Abidin, Ahmad Zafir Romli

Morning, March 29, 2012

8:30 AM—12:00 AM

Session E: Advances in Mechanical Design

2/F, 203 Meeting Room (203 会议室)

Chairmen: Prof. Huiqun Yuan, Southeastern University, China

Prof. Yunn-Lin Hwang, National Formosa University, Taiwan

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. Aerodynamic Analysis in Time Domain of a Cable-Stayed Bridge (V6712)
Chern-Hwa Chen, Yuh-Yi Lin, Cheng-Hsin Chang, Shun-Chin Yang, Yung-Chang Cheng and Ming-Chih Huang
2. Application of Multi-Monitoring Information for Bridge Safety Evaluation (V6713)
Yen-Jen Lee, Jet-Chau Wen, Chern-Hwa Chen
3. Concept and Framework of Reconfigurable Intelligent Optimization Algorithm (V7954)
Yi Long Liu, Fei Tao, Yue Zhang, Lin Zhang.
4. Modal Analysis of Gear Considering Temperature Based on ANSYS (V8909)
HuiQun Yuan, CholNam Ri
5. Coupled Thermal-Structural Analysis of Mechanical Seal (V7470)
Liang Liu, Zhenglin Liu, Engao Peng, Yongchao Cheng
6. Design and Analysis of Hydraulic-Driven Bionic Joint for Undulating Thruster (V6911)
Haijun Xu, Cunyun Pan, Daibing Zhang, Xiang Zhang
7. Design and Simulation of 3D Layout for MID Based On Open CASCADE (V6146)
Yong Zhuo, Yanjun Wu, Juan Peng
8. Experimental Study on Temperature Characteristics of Water Lubricated Rubber Bearing (V7459)
Yongchao Cheng, Zhenglin Liu, Yan Dai, Engao Peng, Liang Liu
9. Melioration of Pyroelectric Cells for Power Conversion (V7079)
Chun-Ching Hsiao, Chin-Yu Chang, An-Shen Siao and Jing-Chih Ciou
10. Parameter Identification of LuGre Friction Model for Robot Joints (V6095)
Yaqing Zheng
11. Stability Analysis of a Transverse Cylindrical Grinding Process (V5975)
Yao Yan, Jian Xu

12. Study on Dynamic Performance of Tower Crane Based on ADAMS Multi-Flexible-Body (V8637)
Chunhua Zhao, Shijun Chen, Jin Zhang, Xianyou Zhong, Nu Yan
13. The 3D Incompatible Element Modeling of Flexible Body in Multibody System Dynamics (V8719)
Dazhi Cao, Zhihua Zhao, Gexue Ren, Hongfu Qiang
14. Adaptive Fuzzy Cerebellar Model Articulation Controller for Two-Wheeled Robot (V9111)
Jen-Yang Chen, Kuei-Chih Lin, Pu-Sheng Tsai, Chuan-Hsi Liu, Jing-Ming Ouyang
15. Design of the Temperature Control System of the Giant Magnetostrictive Actuator (V9729)
Fan Zeng, Jingjun Lou, Shijian Zhu
16. Effect of Solid Particle on TEHL under Line Contact with Solid-Liquid Lubricant (V9767)
S.Rattapasakorn, M. Mongkolwongrojn
17. Integration of OT and IRS to Explore Structure of Statistics Concepts (V9407)
Yuan-Horng Lin, Jeng-Ming Yih, Jui-Yu Ko
18. Using Nonlinear Recursive Formulation for the Kinematic Analysis of Human Biomechanical Systems (V9540)
Yunn-Lin Hwang, Wei-Hsin Gau, Wen-Huang Lin, Shen-Jenn Hwang, Chien-Hsin Chen
19. Optimized Design of the Horn of Ultrasonic Roll Welding (V9568)
Kuen-Ming Shu, Yu-Guang Li, Chun-Chi Chan
20. On the Design and Analysis of Acoustic Horns for Ultrasonic Welding (V9816)
Kuen-Ming Shu, Wen-Hsiang Hsieh, Chi-Wei Chi

Afternoon, March 29, 2012

14:00 PM—17:30 PM

Session A: Automation Equipment and Systems

2/F, 204 Meeting Room (204 会议室)

Chairman: Prof. Jian Chen, Guangdong University of Technology, China

Prof. Jia-Shing Sheu, National Taipei University of Education,
Taiwan

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. Modal Analysis of Flip Chip for Solder Bump Defect Detection (V6771)
Junchao Liu, Tielin Shi, Ke Wang, Miao Zeng, Guanglan Liao
2. Nano-AAO-Based Microsensor for Monitoring Process Carbon Monoxide (V4118)
Hsing-Cheng Chang, San-Shan hung, Chi-Chih Lai, Ya-hui Chen, I-Nan Chang, Jung-Chih Lin, Tze-Chun Lin
3. Novel Acoustic Source Localization Method in WSN Based on LSSVR Regression Modeling (V4072)
Xiaoping Zhang, Yang Wang
4. Numerical Simulation Research on Vortex Characteristics of Centrifugal Pump Inlet Recirculation (V4087)
Jianping Yuan, Wei Sun, Longyan Wang, Yun Liang
5. Effect of Nitrogen Addition on Microstructure and Mechanical Property of alloy 690
Shuo Li, Bo Chen, Yingzhe Ma, Ming Gao, Kui Liu
6. Observation of Dislocations Configuration of TiAl Alloy during Fatigue Tests at Elevated Temperatures (V4117)
Hongfu Xiang, Anlun Dai, Hui Li, Shouxin Li, Yuyou Cui, Rui Rang
7. Optimal Design of a Non-Overload Centrifugal Pump (V4090)
Bo Hu, Shouqi Yuan, Weigang Lu, Li Lei
8. Research on Novel Self-Spinning High Speed on/Off Valve Based on Fuzzy-Logic Parameter Self-Tuning PID Controller (V7686)
Jian Chen, JianPing Shu, Mian Li, Qi Zhou, ZhuMing Su
9. Springback Analysis of TC4 Titanium Alloy Complex Part with Double Curvature under Single Point Incremental Forming Process (V4210)
Fenqiang Li, Jianhua Mo
10. Study and Selection of Working Fluids for Organic Rankine Cycle (ORC) Using Engine Waste Heat Energy (V6606)

Kai Yang, Jian Zhang, Hongguang Zhang, Yan Chen, Bin Liu, Yuting Wu, Wei Wang

11. Study on the Photocatalytic Properties of Nano -CdS Crack-Free Thin Films for Removal of Rhodamine B (V8637)
Aimiao Qin, Hainian Chen, Kunpeng Jiang, Lei Liao
12. The Double-bridge Beam Structure with Slots for Microaccelerometer (V6707)
Lu Sun, Yulong Zhao, Yan Liu, Xinhao Gao
13. Two- Stage Evaluation of Life Insurance Industry in Taiwan Using Data Envelopment Analysis (V6825)
Hsien-Ta Lin
14. Which Rust Deposition Model Should Be Used in Predicting Concrete Cover Cracking due to Reinforcement Corrosion? (V5406)
Roger Zou, Frank Collins
15. Study on Instant Original Characteristic Calculation and Matching Method for Torque Converter Test Automation (V9546)
Jin Li, Wei Wei, Qingdong Yan
16. Implementation of Indoor Wireless Positioning System in an Omni-Wheel Robot Based on Gyroscope (V9175)
Jia-Shing Sheu, Yi-Shiang Wang, Tsong-Liang Huang
17. Synchronous Decoupled Motion Control for Power-Wheelchairs (V8907)
Fu-Yun Yang, Mi-Ching Tsai

Afternoon, March 29, 2012

14:00 PM—17:30 PM

Session B: Advanced Manufacturing Technology

2/F, 215 Meeting Room (215 会议室)

Chairmen: Prof. Chang-Chou Hwang, Feng Chia University, Taiwan

Prof. Jiang Zhu, Tokyo Institute of Technology, Japan

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. Optimization of Enzymatic Skinning of Catfish Nuggets Using Response Surface Methodology (V7457)
Pramuk, Dja-Shin Wang, Juan Silva, Taejo Kim, Tong-Yuan Koo
2. Optimization of Process Parameters using DOE, RSM, and GA in Plastic Injection Molding (V8082)
Wen-Chin Chen, Denni Kurniawan, Gong-Loung Fu
3. Optimization on Selective Fiber Laser Sintering of Metallic Powder (V7767)
Hsin-Te Liao, Le Manh Trung
4. Phase Transitions in Systems with Finite Number of Atoms (V9880)
Leonid Afremov, Yury Kirienko
5. Plasma Nitriding of 20CrMo Steel with Nanostructured Surface Layer (V6834)
Jian Sun, Jing Zhang, Weiping Tong, Liang Zuo, Jicheng He
6. Polytomous Item Relational Structure Theory Based on Empirical Distribution Critical Value (V8014)
Hsiang-Chuan Liu, Wei-Sung Chen, Hsien-Chang Tsai
7. Properties of ZnS Thin Films Prepared by Chemical Bath Deposition under Different Concentration of Complexing Agent (V9793)
Jie Liao, Haifang Zhou, Shuying Cheng
8. Registration of 3-D Shape with Free-form Surface Using Imageware and Genetic Algorithm (V8236)
Xiaoyi Wang, Jing Chen, Jiang Zhu, Yoshio SAITO, Tomohisa TANAKA
9. Research on Calculation Method of the Cutter Setting Angle in Screw Surface Form Milling (V7302)
Qian Tang, Di Yan, Yaokun Bi
10. Study on Electrophoretic Deposition Characteristics of Ultra-Fine Diamond Powder (V7486)
Xianyan Mao, Jing Lu, Hua Guo

11. Study on Method of Planning the Plane Maintainability Test Based on the Development Test (V7688)
Cong Xia, Lin Ma
12. Study on the Machining of Iron-Based Thermal Spray Coating for Sleeveless Engine Cylinder (V7887)
Ding Kan, Sasahara Hiroyuki
13. The Development of Novel Electrolyte Membrane with High Proton Conductivity at Medium Temperatures (V7147)
Xuedan Wang, Lebin Yang, Jiabin Liu, Yuexiang Huang, Hangyan Shen, Kangying Shu
14. The Fabrication and Inspection of a Microball Made of Optical Fibre for Micro-Nano Coordinating Measuring Machine (V9777)
Jian Zhao, QiangXian Huang, Shuai Huang
15. The Influence of Compressive Pressure in the Thickness Direction on Spring-Back for Aluminum Alloy (V7962)
Hong Lu, Wen Huang
16. Tribological Performances of Active Screen Ion Sulphurized Layer under Epinoc Grease Lubricating (V7378)
Chunhua Hu, Feng Jiang, Zhenduo Zheng, Jun Cao, Yulin Qiao, Xiaofeng Sun
17. Optimal Design of an IPM Motor for Machine Tool Applications (V9809)
Chang-Chou Hwang, Chia-Ming Chang, Shih-Ping Cheng
18. Actuator Fault Detection and Isolation for Robot Manipulators with the Adaptive Observer (V9132)
Shaocong Guo, Mohan Yang, Zirui Xing, Yi Li, Jiqing Qiu
19. Application of Offline Programming in CMM Automatic Measurement (V6755)
Wei He, Yanhui He
20. Sub-surface Cutting for Rapid Prototyping (V8579)
Yonghua Chen, Jianan Lu
21. Fabrication and Characterization of ZnO-based Nano Hetero Structure by Using a 2-Step Hydrothermal Growth Method (V4369)
Tron-Min Chen, Kai-Ming Uang, Shu-Kuo Lin

Afternoon, March 29, 2012

14:00PM—17:30 PM

Session C: Advanced Materials and Materials Processing

2/F, 226 Meeting Room (226 会议室)

Chairman: Prof. Changsheng Li, Northeastern University, China

Prof. Chun-Tao Chen, National Taiwan University of Science and
Technology, Taiwan

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. Structural Characteristics of A New Original Bamboo Structure Composite Boards (V6661)
Chuan He, Jiyuan Wang, Leifeng Zhao, Yu Liu
2. Studies of Ti-15V-3Cr-3Al-3Sn after Thermohydrogen Processing (V8064)
R. T. Huang, P. C. Tsay, W. H. Chen
3. Study on High Quality Polycrystalline Silicon P/n Films Fabrication through Recrystallization by RTP (V5243)
Liwei Zhang, Xinli Mei, Jingxiao Lu, Rui Zhang, Shiyong Chu, Shutang Wen
4. Study on the Interface Parameters of Composite Materials with Consideration of the Effect of Thermal Stresses (V7414)
Zhimin Xie, Yanyan Weng, Shouwu Pu
5. Sustainable Performance of Limestone Cement (V4329)
Chun-Tao Chen, Jiang-Jhy Chang, Wei-Chung Yeh, Shun-Ting Chang
6. The Deduction and Application of Correction Formulas of Three-Dimensional Residual Stress with Layer Stripping Method (V7929)
Huiru Huang, Xiaoyang Li
7. Thermodynamic Application of Predicting the Effect of Trace Element of Ag on Reinforced in-Situ Particles in Al-Cu/TiB₂ Composites (V7313)
Dier Yu, Zhiyi Liu, Yanxia Gu, Linyan Xia, Yundong Zhou, Li Wen
8. Using Mahalanobis Clustering Algorithm for College student Learning Fundamental Mathematics (V7865)
Chin-Chun Chen
9. Direct Synthesis and Characterization of Carbon Nanotube Films Prepared by Premixed Ethanol Flame (V4519)
Jianglei Lu, Guanglong Wang, Lianfeng Sun, Fengqi Gao, Fang Yu, Haiqing Zhou, Gang Wang

10. Effect of Ball Milling on Reaction Mechanism between Ti and B₄C and Subsequent Densification (V8779)
Huihua Wang, Shuchen Sun, Deyong Wang, Ganfeng Tu
11. Effects of Passive Backup Force on Delamination in Drilling Composite Materials Using Twist Drill (V8740)
Chung-Chen Tsao
12. Experimental Research on Non-Magnetic Steel 30Mn27Al4V (V8574)
Changsheng Li, Xinfang Xu, Biao Ma, Changgui Yao, Min Wang
13. Charge Transport and Ultrasonic Properties of La_{1/3}Sr_{2/3}Fe_{0.95}Co_{0.05}O₃Perovskite (V8929)
Hui Kong, Wei Dai, Shuai Shao
14. Fabrication of Conductive Polypyrrole/polyurethane Composite Fibers for Large Strain Sensing (V9525)
Xiaolin Zhang, Zongyi Qin, Long Chen
15. Iron ore sintering process based on alternative gaseous fuels from steelworks (V9837)
Jose Adilson de Castro, Vagner Silva Guilherme, Alexandre Bôscaro França and Yasushi Sasaki
16. Effects of Material Properties and Thickness of Die Attach on Package Delamination of IC Packages (V7448)
Chia-Lung Chang, Cheng-Lun Chang, Ying-Long Wang
17. Optimization of Resinification of Liquefied Products from Trash Antiseptic Wood (V8665)
Fang Ding, Yingying Qiu, Zhigao Liu, Qihui Zhang
18. Sustainable Performance of Limestone Cement (V4329)
Chun-Tao Chen, Jiang-Jhy Chang, Wei-Chung Yeh, Shun-Ting Chang
19. Microstructure and mechanical characteristics of the CrN/Si₃N₄ multilayered films prepared by sputtering (V7009)
Chien-Cheng Liu, Kuang-I Liu, Hao-Tung Lin, Yung-Mao Cheng

Afternoon, March 29, 2012

14:00 PM—17:30 PM

Session D: Manufacturing Processing and System

2/F, 201 Meeting Room (201 会议室)

Chairmen: Prof. Yuqing Xiong, Lanzhou Institute of Physics, China

Prof. Yusheng Zhou, Changsha University of Science & Technology,
China

(12 minutes for each presentation, including 2-3 minutes of answering questions)

1. Internal Model Control Based on Interval Arithmetic for Suspension Systems (V9696)
Hao Liu, Yongqing Su, Yanming Wang, Jiguang Yue, Shihui Luo
2. Kinetics Study of Aluminum Deposition on Inner Wall of Pipes by Atomic Layer Deposition (V9500)
Heng Liu, Yuqing Xiong, Jizhou Wang
3. Microstructure Refinement in Low Carbon High Manganese Steel through Ti-Mg deoxidation (V9636)
Hui Kong, Wei Dai, Shuai Shao, Jiangxing Zhu, Hucheng Yao, Binzheng Gan
4. Nanocrystallization of Fe-based Amorphous Alloys Fe_{73.5}Cu₁Nb₃Si_{13.5}B₉ by Yb-doped Fiber Laser Overlapping Irradiation (V9486)
Qianli Ma, Yong Bao, Guorui Zhang, Limeng Yu, Lingfei Ji, Yijian Jiang
5. Pilot Protection Applied in Distribution Network with DG (V9744)
Yusheng Zhou, Yi Yang, Pan Zheng, Jianwu Zheng
6. Research on the Model of the Internet of Things Servers Group Automatic Expandability Management and Control (V9062)
Hongyao Ju, Xin Wang
7. Retained Austenite Amount Determination Comparison in JIS SKD11 Steel Using Quantitative Metallography and X-Ray Diffraction Methods (V9542)
Yang-Yu Su, Liu-Ho Chiu, Tao-Liang Chuang, Chien-Lung Huang, Cheng-Yen Wu, Kuan-Chueh Liao
8. Temperature Field Simulation on The Connecting Rod of High Speed Press (V9527)
Min Tang, Fang Jia
9. The Design of the FBG Sensor System for Strain Monitoring Specific to the Key Stratum in Casing Annulus (V9351)
Jun He, Huijuan Dong, Renbing Liu, Hongliang Pan, Yong Cai
10. The Development of the Free Shuttle Bus Policy in Hsichu, Taiwan (V9214)

Ming-Tsai Hsu, Chin-Hsin Chiu, Hsuan-Yi Chen, Li-Hsing Ho

11. The Impact of Parameters of Hyperlens with Artificially Engineered Metamaterial on Sub-Diffraction Imaging (V8948)
Weiping Wang, Guoxing Zheng
12. Video Steganalysis Exploiting Motion Vector Calibration-Based Features (V9420)
Yu Deng, Yunjie Wu, Linna Zhou
13. New Fault Isolation Method during Functional Test in Manufacturing (V6187)
Lee Lini, Phuah Yee Fei
14. A Novel Hybrid clustering Method for Multi-attribute Decision-Making Datasets (V9436)
Kai-Ping Liu, Wen-Chin Chen, Ting-Cheng Chang
15. Modeling and Analysis of Manufacturing Variables in the Transesterification Process for Refined Biodiesel Fuels (V5185)
Tsair-Wang Chung, Yi-Jen Chen, Kuan-Ting Liu



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