

# **10<sup>th</sup> International Congress on Thermal Stresses**

## **TS2013**

Organized by



State Key Laboratory of Mechanics and Control of Mechanical Structures, NUAU

***<http://ts2013.nuaa.edu.cn/>***

**May 31- June 4, 2013  
Nanjing, China**



# Conference Program

**TECHNICAL PROGRAM**

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**PLENARY LECTURES**

1. Lars-Erik Lindgren, A Lundbäck, M Fisk, Thermo-mechanics and Microstructure Evolution in Manufacturing Simulations.
2. Tong-Yi Zhang, Grain Boundary Segregation and Stress-Induced Solubility in Nanograined Materials.
3. Michele Ciarletta, Stan Chirita, Some Non-standard Problems Related with the Mathematical Model of Thermoelasticity with Microtemperatures.
4. Erasmus Carrera, M. Cinefra, Fiorenzo Adolfo Fazzolari. Some Results on Thermal Stress of Layered Plates and Shells by Using Unified Formulation.
5. Weiqiu Chen, General Solution for Magneto-electro-thermoelasticity and Its Applications.

**REGULAR SESSIONS**

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- S1: Thermo-elasticity and Viscoelasticity (I)  
S2: Thermal Stresses and Deformations (I)  
S3: Thermal Induced Fracture of Materials and Structures (I)  
S4: Experimental Studies on Thermo-mechanics Problems
- S5: Thermal Stresses in Smart Materials and Structures (I)  
S6: Analysis of Stresses in Thermal Structures (I)  
S7: Thermal Vibration and Shock  
S8: Optimization of Thermal Structures
- S9: Launching Ceremony of Books (Springer)
- S10: Computational Methods in Thermo-mechanics  
S11: Thermal Instability and Localization  
S12: Thermal Stresses and Deformations (II)  
S13: Thermal Induced Fracture of Materials and Structures (II)
- S14: Thermo-elasticity and Viscoelasticity (II)  
S15: Analysis of Stresses in Thermal Structures (II)  
S16: Thermal Stresses in Smart Materials and Structures (II)  
S17: Thermal Stresses in Plate Structures

## Program Overview

Time		Conference Program	Venue
May 31	10:00-22:00	Registration	Lobby of Yuyuan Hotel
	18:00-20:00	Reception	1 <sup>st</sup> Floor of Yuyuan Hotel
June 1	08:00-	Registration	Y.F. Hall
	09:00-09:40	Opening Ceremony	Lecture Room, Y.F. Hall
	09:40-12:00	Plenary Lectures	Lecture Room, Y.F. Hall
	12:00-14:00	Lunch	Taoliyuan (3 <sup>rd</sup> Floor)
	14:00-18:00	Parallel Sessions	Room A-B, Y.F. Hall
June 2	08:00-12:00	Parallel Sessions	Room A-B, Y.F. Hall
	12:00-14:00	Lunch	Taoliyuan (3 <sup>rd</sup> Floor)
	14:00-15:40	Plenary Lectures	Lecture Room, Y.F. Hall
	15:40-17:30	Launching Ceremony of Books	Lecture Room, Y.F. Hall
	18:00-20:30	Banquet	Grand Metropark Hotel(3 <sup>rd</sup> Floor)
June 3	08:00-12:00	Parallel Sessions	Room A-B, Y.F. Hall
	12:00-13:00	Lunch	Taoliyuan (3 <sup>rd</sup> Floor)
	13:00-18:00	City Tour	Nanjing City
	18:00-19:30	Dinner	Restaurant near Confucius Temple
June 4	08:00-11:40	Parallel Sessions	Room A-B, Y.F. Hall
	11:40-12:00	Closing Ceremony	Room A
	12:00-13:00	Lunch & Farewell	Taoliyuan (3 <sup>rd</sup> Floor)

# **Conference Program**

## **June 1, Saturday**

**June 1, Saturday**

<b>09:00-09:40</b>	<b>Opening Ceremony&amp; Photo (Venue: Lecture Room, Y.F. Hall)</b> <b>Chairman: Ji Wang</b>	
	<b>Plenary Lectures (Venue: Lecture Room, Y.F. Hall)</b>	
<b>09:40-10:20</b>	<b>Plenary Lecture 1:</b> Thermo-Mechanics and Microstructure Evolution in Manufacturing Simulations Speaker: <u>Lars-Erik Lindgren</u> (Luleå University of Technology)  <b>Chairman: Richard B. Hetnarski</b>	
<b>10:20-10:40</b>	<b>Coffee Break</b>	
<b>10:40-11:20</b>	<b>Plenary Lecture 2:</b> Grain Boundary Segregation and Stress-Induced Solubility in Nanograined Materials Speaker: <u>Tong-Yi Zhang</u> (Hong Kong University of Science and Technology)  <b>Chairman: Naotake Noda</b>	
<b>11:20-12:00</b>	<b>Plenary Lecture 3:</b> Some Non-standard Problems Related with the Mathematical Model of Thermoelasticity with Microtemperatures Speaker: <u>Michele Ciarletta</u> (University of Salerno)  <b>Chairman: Fumihiro Ashida</b>	
<b>12:00-13:00</b>	<b>Lunch</b>	
	<b>Sessions (Venue: Rooms A-B)</b>	
	<b>S1: Thermoelasticity and Viscoelasticity (I)</b> <b>Room A</b> <b>Chairmen: C.K. Chao &amp; Masayuki Ishihara</b>	<b>S2: Thermal Stresses and Deformations (I)</b> <b>Room B</b> <b>Chairmen: Yongzhong Huo &amp; Junhui Hu</b>
<b>14:00-14:20</b>	Coupled Thermoelasticity-Problem for A Space  <u>Richard B. Hetnarski</u>	One-Dimensional Unsteady Thermal Stresses in Sheet Glass Bonded With Heat-Ray Absorbing Film  <u>Yoshitaka Iyama</u> , Yoshihiro Obata
<b>14:20-14:40</b>	Potential Method in the Theory of Thermoelasticity with Microtemperatures for Microstretch Solids  <u>Merab Svanadze</u> , Antonio Scalia	MAC Models in Thermoelasticity  <u>Igor Neygebauer</u>
<b>14:40-15:00</b>	Transient Thermoelastic Analysis for a Functionally Graded Hollow Circular Disk with Piecewise Power Law due to Asymmetric Heating  Yoshihiro Ootao, <u>Masayuki Ishihara</u>	Temperature-dependent Elastic Properties of Single-walled Carbon Nanotubes with Arbitrary Chirality  <u>S. Ahmad Fazelzadeh</u> , Esmaeal Ghavanloo

<b>15:00-15:20</b>	<p>Thermoviscoelastic Analysis of Stress in Composite Structures- a Micro-to-structural Approach</p> <p><u>Liri Ben-Porat</u>, Jacob Aboudi, Rami Eliasi, David Livshits</p>	<p>Effect of Fuel Particle Sizes on the Thermo-mechanical Behaviors in the Rod-Type Dispersion Nuclear Fuel Elements</p> <p><u>Yi Cui</u>, Xinchun Ni, Shurong Ding, Yongzhong Huo</p>
<b>15:20-15:40</b>	<p>General Solutions of Three-dimensional Thermo-elastic Problems for Two-dimensional Quasicrystals</p> <p>Lianzhi Yang, <u>Yang Gao</u></p>	<p>Measuring the Thermal Deformation of the Thermal Protection Structure</p> <p><u>Ding Chen</u>, Junhui Bu Peng Liu, Hongqiang Ma</p>
<b>15:40-16:00</b>	<p>One-Dimensional Unsteady Thermal Stress In Heat-Ray Absorbing Sheet Glass - Influence of a Sudden Weather Change</p> <p><u>Tomohiko Hachiya</u>, Yoshihiro Obata</p>	<p>Thermoelastic Bending and Buckling Behaviors of Nanobeams</p> <p><u>Zhi-Qiao Wang</u>, Jian-Guo Lv Ya-Pu Zhao, Si Li</p>
<b>16:00-16:20</b>	<b>Coffee Break</b>	
	<p><b>S3: Thermal-Induced Fracture of Materials and Structures (I), Room A</b> <b>Chairmen: Yuriy Tokovyy &amp; Yang Gao</b></p>	<p><b>S4: Experimental Studies on Thermo-Mechanics Problems, Room B</b> <b>Chairmen: Yoshihiro Obata &amp; Chaofeng Lü</b></p>
<b>16:20-16:40</b>	<p>Effect of Microstructure on Fatigue Properties of Bi-brass Material at Various Temperatures</p> <p>S. Ishihara, S. Yamamoto, <u>K. Masuda</u> Y. Kousaka, T. Okada</p>	<p>Experimental Research of the Steady and Transient Heating Effects on the Structure Modal Characteristics</p> <p><u>Hao Cheng</u>, Hai-bo Li, Wei Zhang Zhen-qiang WU, Jing Guo</p>
<b>16:40-17:00</b>	<p>Thermal Stress Analysis of a Cracked Half-plane under Thermal Shock using the Dual-phase-lag Theory</p> <p><u>Zengtao Chen</u>, Keqiang Hu</p>	<p>Experimental Investigation of Pre-loaded Aluminum Alloys Irradiated by CO<sub>2</sub> Laser Beam</p> <p><u>Lianchun Long</u>, Liting Liu Tingting Wang, Rongshi Xiao</p>
<b>17:00-17:20</b>	<p>Influences of the Thermomechanical Properties on the Thermal Intensity Factors in Nonhomogeneous Materials</p> <p>Fengnan Guo , Licheng Guo, Hongjun Yu, <u>Kai Huang</u></p>	<p>A New Method on Temperature/Heat Flux Measurements</p> <p><u>Xuejun Zhao</u>, Chang Zhao, Yuanhong Ma</p>

<b>17:20-17:40</b>	Effect of Electrical Boundary Condition of Crack on the Nonlinear Electromechanical Behavior of Ferroelectric Single Crystal  <u>Hong-liang Gu</u> , Jie Wang	Numerical and Experimental Procedure for Measuring Transient Heat Transfer between Fluid and Control Rod Surface  Artur Cebula, <u>Jan Taler</u>
<b>17:40-18:00</b>	Crack Arresting of Alloy Steel 40CrNiMo by Discharging Pulse  Yuming Fu, <u>Junli Wang</u> , Lijuan Zheng	A Theoretical and Experimental Study of the Thermal Buckling Behavior of the Fully-clamped Sandwich Panel with Metal-truss Core  Wu Yuan, Xi Wang <u>Hongwei Song</u> , Chenguang Huang



# **Conference Program**

## **June 2, Sunday**

**June 2, Sunday**

	<b>Sessions (Venue: Rooms A-B)</b>	
	<b>S5: Thermal Stresses in Smart Materials and Structures (I), Room A</b> <b>Chairmen: Zengtao CHEN &amp; Licheng Guo</b>	<b>S6: Analysis of Stresses in Thermal Structures (I), Room B</b> <b>Chairmen: Baolin Wang &amp; Jan Taler</b>
<b>08:00-08:20</b>	Control of Transient Thermal Stress in a Smart Piezo-composite Disk  <u>Fumihiro Ashida</u> , Sei-ichiro Sakata Sei-ichiro Sakata, Tsuyoshi Yamada	Three-dimensional Thermal Stresses in a Solid Elastic Cylinder of Finite Length  <u>Yuriy Tokovyy</u> , Chien-Ching Ma
<b>08:20-08:40</b>	Finite Element Simulation on Thermal Fatigue of a Turbine Blade with Thermal Barrier Coatings  <u>Y. C. Zhou</u> , L. Yang, Q. X. Liu W. G. Mao, C. Lu	Temperature-responsive Bending of Multilayer Elastomeric Gels  <u>Takuya Morimoto</u> , Fumihiro Ashida
<b>08:40-09:00</b>	Pyroelectric Effect on Dynamic Response of Coupled Distributed Piezothermoelastic Composite Plate  <u>Fariborz Heidary</u>	Thermal Stress Analysis for Nonlinear Composite Panel  <u>Yu E Ma</u>
<b>09:00-09:20</b>	Nonlinear Coupling Between Heat and Moisture Diffusion in One-dimensional Porus Media in a Steady State  <u>Masayuki Ishihara</u> , Yoshihiro Ootao Yoshitaka Kameo	A Method for Modifying the Thermal Stress of a Composite Structure  <u>Ying Wang</u> , Ding Chen, Fengjing Shen Yan Zhang, Hongqing Ma
<b>09:20-09:40</b>	Nanoscale Thermocapillary Flows for Creating Semiconducting Arrays of SWCNTs  <u>Chaofeng Lü</u>	Thermal Analysis of the Langevin-type Ultrasonic Transducer with a Heat Dissipation System  <u>Hanmin Peng</u> , Jinjuan Zhou, Junhui Hu
<b>09:40-10:00</b>	Ambient Temperature Effects on Characteristics of Piezoelectric Motors  <u>Xiaolong Lu</u> , Junhui Hu Lin Yang, Chunsheng Zhao	Optimum Temperature Changes During Heating of Pressure Components with Holes  <u>Jan Taler</u> , Piotr Dzierwa
<b>10:00-10:20</b>	<b>Coffee Break</b>	

	<b>S7: Thermal Vibration and Shock (I) Room A Chairmen: Xuejun Zhao &amp; Tingfeng Ma</b>	<b>S8: Optimization of Thermal Structures Room B Chairmen: Takuya Morimoto &amp; Haopeng Song</b>
<b>10:20-10:40</b>	Finite Element Analysis of Frequency-temperature Relations of SC-cut Quartz Crystal Plates with the Corrected Mindlin Plate Theory  <u>Ji Wang</u> , Guijia Chen, Wunjun Wang Jianke Du, Huimin Jing, Lihong Wang	Optimization of Material Composition to Minimize Thermal Stresses in a Functionally Graded Hollow Sphere with Piecewise Power Law  Yoshihiro Ootao, Akihiro Kakiuchi <u>Yoshitaka Kameo</u> , Masayuki Ishihara
<b>10:40-11:00</b>	Thermally Included Parametric Vibration of Graphene Sheets via Bi-Helmholtz Nonlocal Elasticity  <u>Andrzej Tylikowski</u>	Heuristic Design Optimization for Thermal Error Reduction Using Thermal Modes  <u>E.C. Hooijkamp</u> , J. Dugge F. van Keulen, J. van Eijk
<b>11:00-11:20</b>	Analysis of Structural Vibration Characteristics with the Influence of Thermal Stresses  <u>Song Wu</u> , Buyun Zhang Xudong He, Huaihai Chen	Optimization of Transient Thermal Regimes in Thermosensitive Solids under Plastic Deformation Constrains  Roman Kushnir, Anatoliy Yasinskyy, <u>Yuriy Tokovyy</u>
<b>11:20-11:40</b>	Thermal Stress Analysis of Electro-thermal Anti-ice System Embedded in Helicopter Composite Rotor Blade Undergoing Vibration Load  <u>Dongdong Cao</u> , Yong Liu	Optimal Design of Actively-cooled Panels Strengthened with Various Cellular Materials  <u>Mingjun Li</u> , Hongwei Song Chenguang Huang
<b>11:40-12:00</b>	Mechanical Properties of Multicrystal Semiconductor after Thermal Shock  <u>Yoshihito Ozawa</u> , Le Thanh Thien Vu Daisuke Fujii, Kazuhito Koshimizu	Free Vibration Analysis in Axisymmetric Functionally Graded Thermoelastic Spheres  <u>J N Sharma</u>
<b>12:00-14:00</b>	<b>Lunch</b>	
	<b>Plenary Lectures (Venue: Lecture Room, Y.F. Hall)</b>	
<b>14:00-14:40</b>	<b>Plenary Lecture 4:</b> Some Results on Thermal Stress of Layered Plates and Shells by Using Unified Formulation Speaker: <u>Erasmus Carrera</u> (Politecnico di Torino)  <b>Chairman: Y.C.Zhou</b>	

<b>14:40-15:20</b>	<p style="text-align: center;"><b>Plenary Lecture 5:</b> General Solution for Magneto-Electro-Thermoelasticity and Its Applications Speaker: <u>Weiqiu Chen</u> (Zhejiang University)</p> <p style="text-align: center;"><b>Chairman: C.K. Chao</b></p>
<b>15:20-15:40</b>	<b>Coffee Break</b>
<b>15:40-17:30</b>	<p style="text-align: center;"><b>Section 9: Launching Ceremony of Books</b></p> <p style="text-align: center;"><b>Chairmen: Li Shen &amp; Richard B. Hetnarski</b></p>
<b>18: 00-20:30</b>	<b>Banquet</b>

# **Conference Program**

## **June 3, Monday**

**June 3, Monday**

	<b>Sessions (Venue: Rooms A-B)</b>	
	<b>S10: Computational Methods in Thermo-Mechanics, Room A</b> <b>Chairmen: Roman Kushnir &amp; Haijing Wang</b>	<b>S11: Thermal Instability and Localization Room B</b> <b>Chairmen: Ryuusuke Kawamura &amp; Tianhu He</b>
<b>08:00-08:20</b>	The Dual Reciprocity Singular Boundary Method for Thermoelastic Problems  <u>Wenzhen Qu</u> , Wen Chen, Xing Wei	Thermoelastic Damping in an Auxetic Plate  <u>B.T. Maruszewski</u>
<b>08:20-08:40</b>	Finite Element Method to a Two-dimensional Generalized Thermoelastic Problem with Diffusion  Tianhu He, <u>Shuanhu Shi</u>	Convective Instability and the Appearance of Structured Flows for Diffusion in Multicomponent Gas Mixtures  <u>V. N. Kossov</u> , O.V. Fedorenko E.A. Dyachenko
<b>08:40-09:00</b>	Direct Simulation of Heat Transfer in Open-cell Foams  <u>Jine Li</u> , Baolin Wang	Thermal Shock Analysis of a Functionally Graded Material Plate with Multiple Cracks  Yanyan Zhang, <u>Licheng Guo</u> , Xiaoming Bai Kai Huang, Yubo Feng
<b>09:00-09:20</b>	Efficient Mathematical Methods for Analysis of Thermoelastic Equilibrium of Homogeneous and Non-homogeneous Solids  Roman Kushnir, <u>Yuriy Tokovyy</u>	Borehole Stability Analysis for Steam Injection Based on Thermo- Hydro- Mechanical Coupling  Shifeng Xue, <u>Haijing Wang</u> , Cun-Fa Gao
<b>09:20-09:40</b>	A Numerical Study of Free Convection Heat and Mass Transfer in a Viscoelastic Flow past an Impulsively Started Vertical Plate with Variable Temperature and Concentration  Rajneesh Kumar, Ibrahim A. Abbas <u>Veena Sharma</u> , Radhe Shyam	Stress Relaxation Analysis of One-Dimensional Structure with Interface Thermal Contact Resistance  Liu Donghuan, Li Dongzhe, <u>Shang Xinchun</u>
<b>09:40-10:00</b>	Variational Finite Element Approach to Study Cold Stress and Tissue Damage in Human Body Peripherals  <u>M. A. Khanday</u>	Effects of Thermo-Mechanical Loads on the Aeroelastic Instabilities of Metallic and Composite Panels  <u>E. Carrera</u> , M. Cinefra, E. Zappino, L. Succi
<b>10:00-10:20</b>	<b>Coffee Break</b>	

	<b>S12: Thermal Stresses and Deformations (II) Room A</b> <b>Chairmen: Yuriy Ivanovich Nyashin &amp; Xiaogeng Tian</b>	<b>S13: Thermal-Induced Fracture of Materials and Structures (II), Room B</b> <b>Chairmen: Keqiang Hu &amp; Yoshitaka Kameo</b>
<b>10:20-10:40</b>	Modeling of Metal Deposition in Ti-6Al-4V  <u>Andreas Lundbäck</u> , Lars-Erik Lindgren Bijish Babu, Corinne Charles	Solutions of Thermoelastic Crack Problems in Tri-material Composite  C.K. Chao, <u>L.M. Lu</u> , A. Wikarta
<b>10:40-11:00</b>	Mathematical Analysis of Plane Axisymmetric Transient Heat Conduction and Thermal Stresses of a Compound Circular Plate Subjected to Concentrated Sunlight  <u>Ryuusuke Kawamura</u> , Yoshinori Nagase Shigeki Tomomatsu, Fumiya Tokumaru	Biomechanical Design of Orthopedic Apparatus for Treatment of the Congenital Cleft of the Hard Palate  <u>V. Lokhov</u> , O. Dolganova
<b>11:00-11:20</b>	Analysis on Thermal Stresses and Deformation of Multi-nozzle Injector  <u>Fengjing Shen</u> , Junhui Bu, Ding Chen Tiejing Wang, Tao Sun	Thermo-Elastic Analysis of a Cracked Functionally Graded Layer under Thermal Impact Loading: Using Hyperbolic Heat Conduction Theory  <u>Keqiang Hu</u> , Zengtao Chen
<b>11:20-11:40</b>	Thermal Stress Analytic Solution and Numerical Simulation of Local Heated Circular Plate  <u>Lianchun Long</u> , Wenwen Qi	Analysis of Crack Problem Based on Polarization Saturation Model in Thermopiezoelectric Materials  <u>Aibing Zhang</u> , Baolin Wang
<b>11:40-12:00</b>	Thermal/Mechanical Analysis of DNA-Microcantilevers  <u>Zou-Qing Tan</u> , Wei-Lie Meng Neng-Hui Zhang	Acoustic Emission Evaluation of Fracture Characteristics in Thermal Barrier Coatings under Bending  <u>L. Yang</u> , Z. C. Zhong J. You, Y. C. Zhou
<b>12:00-14:00</b>	<b>Lunch</b>	
<b>14:00-18:00</b>	<b>City Tour</b>	
<b>18:00-19:30</b>	<b>Dinner</b>	

# **Conference Program**

## **June 4, Tuesday**



**June 4, Tuesday**

	<b>Sessions (Venue: Rooms A-B)</b>	
	<b>S14: Thermo-Elasticity and Viscoelasticity (II) Room A Chairmen: Michal Kuciej &amp; Shifeng Xue</b>	<b>S15: Analysis of Stresses in Thermal Structures (II), Room B Chairmen: Juan Jimenez &amp; Ismail. M. Tayel</b>
<b>08:00-08:20</b>	Plane Harmonic Waves in the Theory of Thermoviscoelastic Materials with Voids  Ciro D'Apice, <u>Stan Chirita</u>	Role of Thermal Stresses in the Degradation of High Power Laser Diodes  <u>J.Jimenez</u> , J.Anaya, J. Souto
<b>08:20-08:40</b>	Influence of Thermoelastic Coupling on Velocities of Generalized Thermoelastic Waves  <u>Xiao-Geng Tian</u> , Qi-Lin Xiong Wei Hu, Yanlong Xu	Prediction Techniques of Transient Radiation Heating Environment during Thermalmechanical Tests for Aero-craft Composite Structures  <u>Liu Baorui</u> , Kong Fanjin, Zhang Wei Wu Zhenqiang, Cheng Hao
<b>08:40-09:00</b>	Thermal Stress and Theorem on Decomposition of Eigenstrain  V. Lokhov, <u>Y. Nyashin</u>	Effect of Thermal Stress on Supersonic Nozzle Structure  <u>Junhui Bu</u> , Ding Chen Fengjing Shen, Tao Sun
<b>09:00-09:20</b>	Some Transient Heat Problems of Friction with Generalized Boundary Conditions  A. A. Yevtushenko, <u>Michal Kuciej</u>	Thermoelastic Thick Plate under Illumination of a Laser Beam with Two Relaxation Times  Ezzat. F. Henain, Amin. F. Hassan Fouad. Megahed, <u>Ismail. M. Tayel</u>
<b>09:20-09:40</b>	Making Applications for Education of Mechanics of Materials by Using a Tablet Computer  <u>Tomoaki Tsuji</u> , Yuta Matsuzawa	3D Elasticity Solutions of Simply Supported Laminated Rectangular Plates in Uniform Temperature Field  <u>Hai Qian</u> , Ding Zhou Weiqing Liu, Hai Fang
<b>09:40-10:00</b>	Study on the Propagation of Finite Thermal Wave in a Functionally Graded thick Plate  <u>M. Kanoria</u> , Abhik Sur	Thermal Stresses in Functionally Graded Euler-Bernoulli Beams  <u>Y D Sharma</u> , J N Sharma
<b>10:00-10:20</b>	<b>Coffee Break</b>	

	<b>S16: Thermal Stresses in Smart Materials and Structures (II), Room A</b> <b>Chairmen: Andras SZEKERES</b>	<b>S17: Thermal Stresses in Plate Structures Room B</b> <b>Chairmen: Gang Yan</b>
<b>10:20-10:40</b>	Hygrothermal Stresses in Magnetoelastoelectric Cylinders  A.H. Akbarzadeh, <u>Z.T. Chen</u>	Elasticity Solution of Simply Supported Laminated Plate Subjected to Uniform Temperature Loading  <u>Hai Qian</u> , Ding Zhou, Weiqing Liu
<b>10:40-11:00</b>	Temperature Dependence of the Coefficient of Friction and Wear Rate in a Pad/Disc Brake System  A. A. Yevtushenko, <u>A. Adamowicz</u> , P. Grzes	The Generalized 2D Thermal-Electro-Elastic Solution for the Cracked-Half-Elliptical-Hole Problem in a Half-infinite Plate  <u>Yongjian Wang</u> , Cunfa Gao
<b>11:00-11:20</b>	Hermo-Hygro-Mechanics (THM) and Engineering  <u>Andras Szekeres</u> , Balazs Fekete Pier Marzocca	Thermal Stress Analysis of a Finite Functionally Graded Material Plate with a Circular Hole Under a Uniform Heat Flow  Quanquan Yang, Cun-Fa Gao, Hao-Peng Song
<b>11:20-11:40</b>	Analytical Thermal Stress Model for Terabyte Volume Holographic Optical Disk  Ephraim Suhir, Claire Gu, <u>Liangcai Cao</u>	In-plane Vibrations in Clamped Thermoelastic Solid Disks  <u>P K Sharma</u> , J N Sharma
<b>11:40-12:00</b>	<p align="center"><b>Closing Ceremony (Venue: Room A, Y.F. Hall)</b></p> <p align="center"><b>Chairman: Zhenhua Qian</b></p>	
<b>12:00-13:00</b>	<b>Lunch and Farewell</b>	