

Sunday 26 July 2009

- 16:00-17:30** **WORKSHOP I (TU201)** Chair: Ling Qin
Cheng-Kung Cheng - How to Write Proposals and Grant Applications
- 18:00-19:00** **WELCOME RECEPTION (PQ Podium)**

Monday, 27 July, 2009

- 8:30-9:00** **OPENING CEREMONY (JCA)** Chair: Ming Zhang
Welcome Speech:
Jan-Ming Ko, Vice President, The Hong Kong Polytechnic University
Opening Speech:
Arthur F.T. Mak, President, World Association for Chinese Biomedical Engineers
- 9:00-10:15** **PLENARY SESSION I (JCA)** Chairs: Arthur Mak, K.M. Chan
Roderic Pettigrew - Bioengineering in 21st Century Healthcare
Savio L-Y. Woo - Clinically Relevant Research Laboratories in 2020

Tea Break 10:15-10:45

Session	Regenerative Medicine I	TU101, 10:45 - 12:15, 27 July
T1.1	Chairs: Helen H. Lu, Ying Chau	
10:45	T1.1.1 Regulation of Adult Stem Cell Differentiation for Regeneration Medicine <i>Faye H. Chen</i>	
11:15	T1.1.2 Engineering Stem Cell Niche to Direct Muscle Differentiation <i>Jolena Waddell, Brad Reinholt, Alison Angione, Shihuan Kuang</i>	
11:30	T1.1.3 Effects of Mechanical Strain on Cardiomyogenic Differentiation of Rat Bone Marrow Mesenchymal Stem Cells <i>Yan Huang, Yubo Fan, Ping Li, Xiaoling Jia, Wei Song</i>	
11:45	T1.1.4 Neural Differentiation Directed by Self-Assembling Peptide Matrix Presenting Laminin-Derived Signal <i>Qianqian Li, Ying Chau</i>	
12:00	T1.1.5 Effects of Mechanical Stretch on Growth and Metabolism of Cardiomyocytes in vitro <i>Yong Guo, Yan Wei, Xi-Zheng Zhang, Yu-Xian Yan, Chun Guo, Rui-Xin Li</i>	
Session	Medical Imaging Applications	TU103, 10:45 - 12:15, 27 July
T2.1	Chairs: Ed X. Wu, Chun Yuan	
10:45	T2.1.1 Recent Advances of Medical Imaging in Neuro-psychiatric Illness <i>Qiyong Gong</i>	
11:15	T2.1.2 Disparate Decrease of Blood Perfusion among Femoral Head, Femoral Neck and Shaft in Subjects with Decreased Bone Mineral Density: An MRI Based Study. <i>Yi-Xiang J. Wang, James F. Griffith, Anthony W.L. Kwok, Jason Leung, David K.W. Yeung, Ling Qin, Anil T. Ahuja, Ping Chung Leung</i>	
11:30	T2.1.3 MRI Diffusion Tensor Imaging of Renal Ischemia Reperfusion Injury in Rat Kidney <i>J.S. Cheung, S.J. Fan, A.M. Chow, E.X. Wu</i>	
11:45	T2.1.4 Innovative 3D Dental Scanner to Support the Development of Chinese Tooth Knowledge Based System and Fabrication of Dental Prostheses <i>Bryan Man Kit So</i>	
12:00	T2.1.5 MRI-based Stress Analysis of Human Carotid Atherosclerotic Plaques during Lipid-Lowering Therapy with Atorvastatin <i>Zhi-Yong Li, Tjun Tang, Martin Graves, Jonathan H. Gillard</i>	

* Keynote speech, in bold letter, has 30min

Session	Bone Biomechanics		TU201, 10:45 - 12:15, 27 July
T3.1	Chairs: Yixian Qin, James C.H. Goh		
10:45	T3.1.1	Inhibition of Bone Loss using Dynamic Muscle Stimulation in a Disuse Osteopenia Model <i>Yi-Xian Qin, Hoyan Lam, Murtaza Malbari, Mei-Shu Shih, William Carroll</i>	
11:15	T3.1.2	Effects of Bone Tissue Material Nonlinearity to the Apparent and Tissue Level Mechanical Parameters of Trabecular Bone <i>He Gong, Ming Zhang, Yubo Fan</i>	
11:30	T3.1.3	The Joint Effects of the Mechanical Pressure and Estrogen on the Proliferation and Alkaline Phosphatase Activity of Mandibular Condylar Chondrocytes <i>Min Zhang, Yongjin Chen, Xin Lv, Shun Wu, Yingjie Wang, Minghui Zhu</i>	
11:45	T3.1.4	Effects of Active and Passive Exercise on Preventing Bone Loss Induced by Hindlimbs Unloading in Rat <i>Lianwen Sun, Chao Wang, Xiao Yang, Tian Xie, Yubo Fan</i>	
12:00	T3.1.5	Restraining Anterior Tibial Translation during Impact Compression Does Not Protect the Anterior and Posterior Tibial Osteochondral Regions from Damage and Deformation <i>C.H. Yeow, Peter V.S. Lee, James C.H. Goh</i>	
Session	Bionanotechnology		TU107, 10:45 - 12:15, 27 July
T4.1	Chairs: Thomas Lee, Eiichi Tamiya		
10:45	T4.1.1	In-situ and Regenerable Immune Sensing Probe Based on Gold-nanoparticle Enhanced Fiber-Optic Interferometry <i>Yuan-Tai Tseng, Chung-Shi Yang, Fan-Gang Tseng</i>	
11:15	T4.1.2	FluidFM: A Novel AFM Based Tool for Single-Cell Experiments <i>P. Behr, M. Gabi, A. Meister, M. Liley, J. Przybylska, P. Studer, H. Heinzelmann, J. Vörös, T. Zambelli</i>	
11:30	T4.1.3	Quantum Dots-Tagged Viruses for Anti-Enteroviral Drug Screening <i>Chung-Hao Wang, Ching-An Peng</i>	
11:45	T4.1.4	DNA Translocation Kinetics in Functional Nanopores <i>Yaling Liu, Abhijit Ramachandran, Samir M. Iqbal</i>	
12:00	T4.1.5	Effect of Fibre-Matrix Interaction in Constitutive Modelling of Soft Tissue <i>Zaoyang Guo</i>	
Session	Textile Biomaterials I		M104, 10:45 - 12:15, 27 July
SP2.1	Chairs: Feng Zhou, Ai-Zheng Chen		
10:45	SP2.1.1	Surface Grafted Polymer Brushes: Potential Applications in Textile Engineering <i>Bo Yu, Zi-Jian Zheng, Yi Li, Feng Zhou</i>	
11:15	SP2.1.2	Characterization of Polypeptides from Acidic Hydrolysate of Wool <i>Zheng Zhao, Ai-Zheng Chen, Yan-Xia Han, Yi Li, Jun-Yan Hu</i>	
11:30	SP2.1.3	Selective Attachment of Gold Nanoparticles to Ionic Liquids Adsorbed Multiwalled Carbon Nanotubes <i>Xu-Qing Liu, Feng Zhou, Yi Li, Zi-Jian Zheng, Jun-Yan Hu</i>	
11:45	SP2.1.4	Preparation and Characterization of Natural Fragrant Microcapsule <i>Jin-Mei Wang, Wei Zheng, Qing-Wen Song, Hong Zhu, Ying Zhou</i>	
12:00	SP2.1.5	PLLA/Danggui Oil Nonwoven Fabric for Tissue Engineering <i>Jia-Shen Li, Yi Li, Lin Li, Ai-Zheng Chen</i>	
Session	Human Body Metrics and Applications		M107, 10:45 - 12:15, 27 July
SP2.2	Chairs: Kanji Kajiwara, Xin Zhang		
10:45	SP2.2.1	A New Cultural Tradition: Digital Street Fashion in Japan <i>Kanji Kajiwara</i>	
11:15	SP2.2.2	Techniques of Efficient 3D Human Body Modeling and Feature Measurements Extraction Based on Reverse Engineering <i>Jun-Qiang Su, Guo-Lian Liu</i>	
11:30	SP2.2.3	Modeling and Display of 3D Human Body Based on Monocular Vision Measurement <i>Guang-You Sheng, Shou-Shan Jiang, Xin Zhang</i>	
11:45	SP2.2.4	Organization and Implementation of Chinese Minor Body Metrics <i>Long Wu, Xin Zhang</i>	

12:00 SP2.2.5 On-line Human Model Database for Clothing Bioengineering Design
Ruo-Mei Wang, Yong-Jin Wang, Yi Teng, Yi Li

Lunch 12:45-13:30

Session	Regenerative Medicine II		TU101, 13:30 - 15:00, 27 July
T1.2	Chairs: Min Wang, Gang Li		
13:30	T1.2.1	Managing Critical-Sized Bone Defect using Resorbable Bio-Ceramics and Bone Marrow Cells <i>Chao Song, Kai-Ming Chan, Gang Li</i>	
13:45	T1.2.2	Strontium Exerts in vivo Anabolic Effect on Intact Rats through Modulating Osteogenic and Osteoclastogenic Potential of Bone Marrow Cells <i>S.L. Peng, T. Wang, X.S. Liu, X.E. Guo, Z.Y. Li, G.Q. Zhou, K.D.K. Luk, W.W. Lu</i>	
14:00	T1.2.3	Low Intensity Pulsed Ultrasound Stimulates Both Normal and Osteoporotic Fracture Healing <i>W.C. Chin, W.H. Cheung, L. Qin, K.S. Leung</i>	
14:15	T1.2.4	Experimental Study of Injectable Calcium Sulfate Used in Anterior Lumbar Spinal Fusion <i>Gang Wu</i>	
14:30	T1.2.5	Elastic Substrates Direct WB-F344 Differentiation <i>Shuai Zhou, Yueyuan Hu, Chun Yang</i>	
Session	Medical Imaging Processing		TU103, 13:30 - 15:00, 27 July
T2.2	Chairs: Lei Sun, Tianzi Jiang		
13:30	T2.2.1	Sonography (SMG): A Signal Extracted from Ultrasound Imaging for Quantitative Muscle Function Assessment and Human-Machine Interface <i>Y.P. Zheng</i>	
14:00	T2.2.2	Reconstruction of Multiple Sectional Images in Optical Scanning Holography <i>Xin Zhang, Edmund Y. Lam, T.C. Poon</i>	
14:15	T2.2.3	Towards Construction of Statistical Chinese Brain Template <i>Defeng Wang, Lin Shi, Winnie C.W. Chu, Jack C.Y. Cheng, Poon Wai Sang, Anil T. Ahuja, Pheng-Ann Heng</i>	
14:30	T2.2.4	A Hybrid Low Pass-Like Filter Method for SBA Artifacts Reduction in 3D TOF MRA <i>Y.M. Dai, D.M. Wu, K. Liu, Q. Duan, B. Sun, Y.Q. Xue</i>	
14:45	T2.2.5	Parallel Lines Extraction Approach to 3D Image of Skin Surface for Roughness Characterization <i>M.H. Ahmad Fadzil, Esa Prakasa, Hermawan Nugroho, Hurriyatul Fitriyah, Azura Mohd Affandi, S.H. Hussein</i>	
Session	Tissue Properties and Healing Quality		TU201, 13:30 - 15:00, 27 July
T3.2	Chairs: Ling Qin, Roger W. Chan		
13:30	T3.2.1	A Challenging Area in Musculoskeletal Rehabilitation: Postoperative Enhancement of Bone-Tendon Insertion Repair <i>Ling Qin, W.H. Cheung, W.N. Wong, K.M. Chan, L.K. Hung, K.S. Leung</i>	
14:00	T3.2.2	Non Linear Mechanical Properties on Soft Tissue of Human Forearm <i>Haitian Zou, Jijun Su, Tongtong Guo</i>	
14:15	T3.2.3	Nonlinear Viscoelastic Response of Vocal Fold Tissues under Large-amplitude Oscillatory Shear <i>Roger W. Chan</i>	
14:30	T3.2.4	Dynamic Properties of Human Tympanic Membrane - Experimental Measurement and Modeling Analysis <i>Rong Z. Gan, Xiangming Zhang</i>	
14:45	T3.2.5	A Mechanics Model for Actin-based Motility <i>Yuan Lin</i>	
Session	Biomedical Devices and Biosensors		TU107, 13:30 - 15:00, 27 July
T4.2	Chairs: I-Ming Hsing, Fangang Tseng		
13:30	T4.2.1	Nanotechnology Based Biosensors and Biochips <i>Eiichi Tamiya</i>	

14:00	T4.2.2	Neuroprosthetic Epidural Electrical Stimulator to Regain Motor Control after Spinal Cord Injury <i>A. Larmagnac, J. Vörös, G. Courtine</i>
14:15	T4.2.3	upX73: Ubiquitous Platform for Personal Health Solutions based on End-to-End Standard Design <i>I. Martínez, J. Escayola, M. Martínez-Espronedada, L. Serrano, J.D. Trigo, J. García</i>
14:30	T4.2.4	Using an Innovative Device to Evaluate Swallowing Function and Management for Dysphagia <i>Chih-Ming Li, Sheng-Heng Hsieh, Chien-Ting Lee, Jia-Jin J. Chen</i>
14:45	T4.2.5	Electrical Evoked Action Potential in Evaluating the Electrode Insertion in the Cochlear Implanted Patients <i>Luminița Rădulescu, S. Cozma, C. Mârțu, D. Mârțu</i>

Session SP2.3	Textile Bioengineering Process I Chairs: Zi-Jian Zheng, Jia-Shen Li	M104, 13:30 - 15:00, 27 July
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13:30	SP2.3.1	Polymer Pen Lithography <i>Zi-Jian Zheng</i>
14:00	SP2.3.2	Effects of Temperature on Tensile Properties of Textile Fibers <i>Ting Wang, Wei-Lin Xu, Zhao-Qun Du, Wei-Dong Yu</i>
14:15	SP2.3.3	Effect of Operating Parameters on Yield and Anti-Oxidative Activity of Puerarin in Supercritical Process <i>Ai-Zheng Chen, Yi Li, Foo-Tim Chau, Tsui-Yan Lau, Jun-Yan Hu, Zheng Zhao, Daniel Kam-Wah Mok</i>
14:30	SP2.3.4	Study on the Pseudo-Thermoplastic and Biodegradable Polymers of Cellulose <i>Chin-An Lin, Chi-Che Tung, Cheng-Yu Cheng</i>
14:45	SP2.3.5	Improving Hand and Wrinkle Resistant Properties of Cotton Fabric by using Nano Wool Protein <i>Hao-Ran Dong, Yi Li, Jun-Yan Hu</i>

Session SP2.4	Clothing Bioengineering Design I Chairs: Xin Zhang, Rong Liu	M107, 13:30 - 15:00, 27 July
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13:30	SP2.4.1	Clothing Bioengineering Design <i>Xin Zhang</i>
14:00	SP2.4.2	Research of Parts Combination in Women's Clothing Design <i>Qian Gao, Xin Zhang, Bo-An Ying, Xiu-Mian Chen</i>
14:15	SP2.4.3	Design and Study of Clothing Structure for Persons with Limb Disabilities <i>Wei-Min Chang, Yu-Xiao Zhao, Rui-Ping Guo, Xiao-Dan Gu</i>
14:30	SP2.4.4	Establishment of Body-centered 5Ps Model for Comfort Athletic Wear <i>Rong Liu, Trevor Little</i>
14:45	SP2.4.5	Structure Design to Solve the Problem of Sleeve Distortion <i>Li-Xia Chang, Ai-Ying Li, Xin Zhang, Xue-Ling Yan</i>

Tea Break 15:00-15:30

Session T1.3	Tissue Engineering I Chairs: Faye H. Chen, Jiang Peng	TU101, 16:00 - 17:30, 27 July
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16:00	T1.3.1	Primary Cilia as Mechanosensors in Bone <i>Christopher Jacobs</i>
16:30	T1.3.2	A Novel 3D Co-culture Trabecular Bone Explant Model for the Study of Bone Adaptation and Mechanotransduction <i>M. Ete Chan, Jiasi Chen, Victor Chiang, X. Sherry Liu, Andrew D. Baik, Xin L. Lu, Bo Huo, X. Edward Guo</i>
16:45	T1.3.3	Repair of Osteochondral Defects with Biphasic Cartilage ECM- Acellular Bone Constructs and Bone Marrow-Derived Mesenchymal Stem Cells in a Dog Model <i>Jiang Peng, Qiang Yang, Quanyi Guo, Aiyuan Wang, Mei Yuan, Shibi Lu</i>
17:00	T1.3.4	<i>In vitro</i> Behavior of Osteoblast-Like Cells on Hydroxyapatite and Collagen Hybrid Coating Transferred from Porogens to Phbhhx Scaffolds <i>Yun Chen, Vincent Yu, Jiashen Li, M.S. Wong, Parco M.F. Siu, Arthur F.T. Mak, Peter H.F. Yu</i>

17:15	T1.3.5	<i>In vitro</i> Biological Assessment of Nanocomposite Scaffolds for Bone Tissue Engineering <i>Bin Duan, Min Wang, Zhaoyang Li, William W. Lu</i>
Session T2.3	MRI Techniques Chairs: Mina Kim, Chun Yuan	TU103, 16:00 - 17:30, 27 July
16:00	T2.3.1	Direct Vessel Wall Imaging Techniques for Visualization of Atherosclerosis <i>Chun Yuan</i>
16:30	T2.3.2	A Novel Diagnostic System for Cardiac Abnormalities Based on Magnetic Resonance Fluid Motion Tracking <i>Kelvin K.L. Wong, Richard M. Kelso, Stephen G. Worthley, Prashanthan Sanders, Jagannath Mazumdar, Derek Abbott</i>
16:45	T2.3.3	A Novel Algorithm for Eddy Current Effect Reduction in Three Points Dixon Method <i>Y.M. Dai, D.M. Wu, K. Liu, M. Ji</i>
17:00	T2.3.4	Hilbert-Huang Transform Identification of Brain Structures in Microelectrode-guided Stereotactic Neurosurgery for Parkinson's Disease <i>Rubén-Darío Pinzón-Morales, Álvaro-Ángel Orozco-Gutiérrez</i>
17:15	T2.3.5	Intravascular Ultrasound (IVUS) as a Potential Arthroscopic Tool for the Quantitative Assessment of Articular Cartilage <i>Yan-Ping Huang, Yong-Ping Zheng</i>
Session T3.3	Biomechanical Models of Musculoskeletal System Chairs: Yubo Fan, Guo-An Li	TU201, 16:00 - 17:30, 27 July
16:00	T3.3.1	Biomechanical Models for Medical Appliance and Artificial Organ Design <i>Yubo Fan</i>
16:30	T3.3.2	Biomechanical Analysis on the Lumbar Spine in Sitting Posture under Vibration Environment <i>Li-Xin Guo, Ming Zhang, Yi-Min Zhang, Jin-Li Li</i>
16:45	T3.3.3	Dynamic Simulation Technique for Evaluating Postoperative Stability of Lumbar Interbody Cage Fusion with Laminectomy, Facetomy, and Posterior Instrumentation <i>Wen-Chuan Chen, Hung-Wen Wei, Hung-Jen Lai, Kun-Jhih Lin, Cheng-Kung Cheng</i>
17:00	T3.3.4	Reconstruction and Finite Element Model of Hip Joint <i>Hang Ye, Chun Qiu Zhang, Jin Duo Ye</i>
17:15	T3.3.5	Sensitivity of Trabecular Modulus to Tibial Stress Shielding <i>Duo Wai-Chi Wong, Chi-Fai Cheung, Ling Qin, Ming Zhang</i>
Session T4.3	Biochips and Biomicrofluidics Chairs: Zhanhui Wang, Mo Yang	TU107, 16:00 - 17:30, 27 July
16:00	T4.3.1	Simultaneous Hybridization and Immune Assays on a Bead Based Microarray with Novel In-situ Encoding Technology <i>Dieter Trau, Qingdi Zhu, Wen-Tso Liu</i>
16:30	T4.3.2	Gold Nanostars for Surface Enhanced Raman Scattering (SERS) <i>Christopher G. Houry, Tuan Vo-Dinh</i>
16:45	T4.3.3	High Density Microfluidic Cell Array for Cell Cytotoxicity Analysis <i>Zhanhui Wang</i>
17:00	T4.3.4	Smart Microfluidic Systems with Integrated High-Sensitivity Piezoelectric Microsensors <i>K. Zhang, H.L. W. Chan, Y. Wang</i>
17:15	T4.3.5	A PDMS Planar Patch-clamp Array Chip with Poly(ethylene glycol)/SU-8 based Cell-Patch Interface <i>Baojian Xu, Zongbin.Liu, Yi-Kuen. Lee, Mo Yang</i>
Session SP2.5	Bioengineered Textiles Chairs: Karl Mayer, Dang-Xia Zhou	M104, 16:00 - 17:30, 27 July
16:00	SP2.5.1	Application of Warp Knitting Technology in the Medical Industry <i>Karl Mayer</i>
16:30	SP2.5.2	Bioengineered Textiles and Nonwovens – The Convergence of Bio-miniaturisation and Electroactive Conductive Polymers for Assistive Healthcare, Portable Power and Design-led Wearable Technology <i>Raymond Oliver, Jennifer Tillotson, Anne Toomey</i>

16:45	SP2.5.3	The Use of Spacer Fabrics for Absorbent Medical Applications <i>Angela Davies, John Williams</i>
17:00	SP2.5.4	Tremor Suppression using Smart Textile Fibre Systems <i>L.M. Swallow, E. Siores</i>
17:15	SP2.5.5	Relationships among Electric Resistances and Temperatures of 24 Jingluo Starting Points and Body Health Status <i>Dang-Xia Zhou, Yi Li, Quan-Hai Li</i>

Session **Clothing Bioengineering Technology** M107, 16:00 - 17:30, 27 July

SP2.6 **Chairs:** Bao-An Ying, Yong-Jin Wang

16:00	SP2.6.1	Development of Dynamic Block Pattern for Bioengineering of Sportswear <i>Yongjin Wang</i>
16:30	SP2.6.2	An Automatic Pattern Grading Technique in Garment CAD <i>Yi Xiu, Zhen-Kai Wan, Zhen Han</i>
16:45	SP2.6.3	Current Situation and Development of the Limbs Disabled Clothes <i>Jia Wu, Li-Min Shi, Yu-Xiao Zhao, Rui-Ping Guo, Yong-Kai Zhou</i>
17:00	SP2.6.4	Research on How to Improve the First Pass Yield of Garments by Strict Self-Check <i>Xiao-Wen Jiang, Mei-Ling Dong, Hai-Xia Zhang, Jun Ren</i>
17:15	SP2.6.5	A Systematic Approach to Design Resistive Network for Conductive Knitted Fabrics <i>Li Li, Wai-Man Au, Yi Li, Kam-Man Wan, Wai-Yee Chung, Tao Hua, Kwok-Shing Wong</i>

17:30 **WACBE COUNCIL MEETING**

19:00 **CONFERENCE BANQUET-** Chinese Restaurant, 4/F, Communal Building, PloyU

BANQUET LECTURE:

K.M. Chan - The Impact of Economic Tsunami - Challenges and Opportunities

Tuesday, 28 July, 2009

8:30-10:15 **PLENARY SESSION II** Chairs: Edward Wu, Benjamin Y.M. Yung

Kerong Dai - Digital Technique and Bone Regeneration

Chien Ho - A New Approach to Detect Organ Rejection

Ning Wang - Mechanisms of Mechanotransduction: from Tissues to Cells to Molecules

Tea Break 10:15-10:45

Session **Tissue Engineering II** TU101, 10:45 - 12:15, 28 July

T1.4 **Chairs:** Christopher R. Jacobs, Gang Li

10:45	T1.4.1	Osteocytic Network in Mechanical Memory of Bone <i>X. Edward Guo</i>
11:15	T1.4.2	Novel Biodegradable Fluorescent Polymers for Biomedical Applications <i>Jian Yang, Yi Zhang, Santosh Gautam, Li Liu, Ralph P. Mason, Liping Tang</i>
11:30	T1.4.3	Biomaterials Combined with Distraction Osteogenesis - A Functional Tissue Engineering Approach <i>Yan Wang, Ming Ni, Gang Li</i>
11:45	T1.4.4	The Application of Calcium Sulfate Pellets in Lumbar Spine Posterolateral Fusion <i>Gang Wu, Changtai Sun</i>
12:00	T1.4.5	Potential of Bioelectrosprayed Bone Marrow Stromal Cells in Tissue Engineering Applications <i>W.C. Lee, S. Sahoo, James C.H. Goh, S.L. Toh</i>

Session **Computer Aided Technologies** TU103, 10:45 - 12:15, 28 July

T2.4 **Chairs:** David Feng, Michael Small

10:45	T2.4.1	Recent Advances in Computer-Assisted Medicine <i>Pheng Ann Heng</i>
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11:15	T2.4.2	Optimization of Cardiopulmonary Resuscitation Based on Simulated Annealing Algorithm <i>Xiaoming Wu, Lin Xu, Yanru Zhang</i>
11:30	T2.4.3	Prediction of Respiratory Status during Remifentanyl-induced Conscious Sedation for Lithotripsy using Partial Least Square Regression <i>J�r�mie Guignard, Sonia Lala, Anthony Chan, Ezra Kwok, John Markez, Igor Brodtkin, Craig Ries</i>
11:45	T2.4.4	An Expert System for Detection of Leukemia Based on Cooperative Game Theory <i>Atefeh Torkaman, Nasrollah Moghaddam Charkari, Mahnaz Aghae Pour</i>
12:00	T2.4.5	Standard-based Design: The Implementation Way of New Ubiquitous and Personal Health Solutions <i>I. Mart�nez, J. Escayola, M. Mart�nez-Espronceda, L. Serrano, J.D. Trigo, J. Garc�a</i>
Session T3.4	Joint Biomechanics	TU201, 10:45 - 12:15, 28 July Chairs: Zhongmin Jin, Li-Xin Guo
10:45	T3.4.1	Biotribology Modelling from Natural Hip Joints to Artificial Replacements <i>Zhongmin Jin</i>
11:15	T3.4.2	Lateral Pivot of Tibiofemoral Cartilage Contact during the Stance Phase of Walking <i>Fang Liu, Michal Kozanek, Ali Hosseini, Thomas J. Gill, Harry E. Rubash, Guoan Li</i>
11:30	T3.4.3	Altered Knee Joint Loading of ACL Deficient and Reconstructed Knees <i>N. Zheng, Bo Gao</i>
11:45	T3.4.4	Intra-operative Evaluation of Knee Stability during Anterior Cruciate Ligament Reconstruction <i>Mak-Ham Lam, Daniel Tik-Pui Fong, Patrick Shu-Hang Yung, Kai-Ming Chan</i>
12:00	T3.4.5	Effect of Collagen Fiber Orientation on the Mechanical Contact of Knee Joints <i>L.P. Li, J.T.M. Cheung, W. Herzog</i>
Session T5.1	Cellular Mechanobiology	TU107, 10:45 - 12:15, 28 July Chairs: Ning Wang, Cheng Dong
10:45	T5.1.1	Chemokines From Melanoma Upregulate MMP2 Within the Tumor and Endothelial Microenvironment <i>Chonghaw Kwang, Cheng Dong</i>
11:15	T5.1.2	Flexibility, a Possible Dominant Factor on the Activity of Antimicrobial Peptides <i>Li Liu, Qingsheng Huang, Ying Fang, Jianhua Wu</i>
11:30	T5.1.3	Spatial Distribution of FAK-Src for Endothelial Remodeling on Anisotropic Cell Morphology <i>Chia-Ching Wu, Hui-Gen Huang, Ming-Jer Tang, Fong-Chin Su, Shu Chien</i>
11:45	T5.1.4	Cyclic Strain Modulate Migration and Proliferation of Vascular Smooth Muscle Cells via Rho-GDI α , Rac1 and p38 Pathway <i>Yingxin Qi, Mingjuan Qu, Zhiqiang Yan, Zonglai Jiang</i>
12:00	T5.1.5	A Co-culture Model of Keratinocytes and Fibroblasts <i>Dongyuan L�i, Bo Huo, Juan Chen, Yuxin Gao, Shujin Sun, Ning Li, Mian Long</i>
Session SP2.7	Biofunctional Performance Evaluation	M104, 10:45 - 12:15, 28 July Chairs: Zhao-Qun Du, Jun-Yan Hu
10:45	SP2.7.1	In Situ Complex Evaluation of Structure and Behaviour of Fibre Assembly <i>Zhao-Qun Du</i>
11:15	SP2.7.2	A Study on Effect of Mordant on the Natural Dyes and Flammability of Fabrics <i>Mehrdad Hajilari, Mohsen Hoseinkhani</i>
11:30	SP2.7.3	Study of Physical Properties of Commercial Running Wear <i>Lei Yao, Ru Lv, Hong Chan, Huang Chao, Ying-Lei Lin, Yi Li</i>
11:45	SP2.7.4	The Study of Subjective Pressure Sensation Evaluation of Foundation Gartment <i>Li Liu, Wei-Yuan Zhang</i>
12:00	SP2.7.5	Measurement of Poisson's Ratio of Elastic Knitted Fabric <i>Jin-Yun Zhou, Yi Li, Xu-Yong Cao</i>
Session SP2.8	Clothing Sensory Bioengineering	M107, 10:45 - 12:15, 28 July Chairs: Tetsuya Sato, Ji-Yong Hu
10:45	SP2.8.1	Numerical Expression of Colour Sensation and Its Application <i>Tetsuya Sato</i>

11:15	SP2.8.2	Tactile and Sensory Textiles for Children and Babies with Visual or Multi Sensory Impairment <i>Selina Moore, Michael Broadhurst, John Williams</i>
11:30	SP2.8.3	Effect of Lateral Compressibility on Tactual Detectability of Fabric's Surface Roughness <i>Ji-Yong Hu, Yi Li, Xin Ding, Deng Pan</i>
11:45	SP2.8.4	A Survey and Analysis of Adolescent Sports Shoes Wearing Requirement in China <i>Xiu-Mian Chen, Xin Zhang, Jie Zhou, Qian Gao</i>
12:00	SP2.8.5	Research on the Evaluation of Young Female Bra Aesthetic Property <i>Yan-Mei Gong, Hong Xiao, Xin Zhang, Jun Shi</i>

WACBE Assembly - TU201 12:15 - 13:30

Session	Biomaterials I	TU101, 13:30 - 15:00, 28 July
T1.5	Chairs: William Lu, Xiao-Yan Yuan	
13:30	T1.5.1	Properties and in vitro Gene Transfection of Poly(Ethylene Glycol)-Polyethylenimine Copolymer/DNA Delivery System <i>Shirong Pan, Xuan Zhang, Xin Luo, Min Feng, Wei Zhang, Yuting Weng</i>
13:45	T1.5.2	Astrocyte Monolayer Permeability to Water and Solutes <i>Guanglei Li, Melissa Simon, Zhongdong Shi, Limary Cancel, John Tarbell, Barclay Morrison, Bingmei Fu</i>
14:00	T1.5.3	Photodynamic Therapy of Cancer Cells by using Core-shell Upconversion Fluorescent Nanoparticles <i>Huichen Guo, Haisheng Qian, Yong Zhang, Paul Chi-Lui Ho, Ratha Mahendran, Eugene K.W. Sim, Lei Ye</i>
14:15	T1.5.4	Polyether Polyol -platinate Conjugate and Its Micelle as New Antitumor Nanomedicines <i>Zhongyu Li, Ying Chau</i>
14:30	T1.5.5	Preparation and Characterization of Hydroxyapatite Whiskers and Application as Reinforcement for Biomedical Resin Composites <i>Hongquan Zhang, Ming Zhang, Brian W. Darvell</i>
14:45	T1.5.6	Photopolymerization of Biofunctional Poly(ethylene glycol) (PEG) in Microfluidic Gradient Generation for Controlling Mesenchymal Stem Cell Proliferation <i>Zongbin Xu, Baojian Xu, M. Yang, Arthur F.T. Mak</i>
Session	Upper Limb Biomechanics	TU103, 13:30 - 15:00, 28 July
T3.5	Chairs: Zong-Ming Li, Ying He	
13:30	T3.5.1	Carpal Tunnel Mechanics <i>Zong-Ming Li</i>
14:00	T3.5.2	Design and Calibration of Pen That Used to Measure the Pen Grip Strength and Pen-tip force <i>S.M. Hsu, F.C. Su, I.M. Jou, L.C. Kuo</i>
14:15	T3.5.3	Relationship between Equilibrium Point Control Processes and Electromyographic Pattern in Elbow Joint Movement <i>Kai Chen, Richard Foulds</i>
14:30	T3.5.4	The Influence of Pitching Activities on Shoulder Rotational Laxity <i>N. Zheng, B. Gao, K. Eaton</i>
14:45	T3.5.5	Finger Braille Teaching System - Improvement of Interfaces <i>Yasuhiro Matsuda, Tsuneshi Isomura</i>
Session	Vascular Biomechanics I	TU201, 13:30 - 15:00, 28 July
T3.6	Chairs: Zhaoming He, Aike Qiao	
13:30	T3.6.1	Numerical Study of Hemodynamics in Stented Sinuous Aneurysms <i>Zhaoyong Gu, Hongbin Zhang, Xianlong Meng, Yu Chang, Aike Qiao</i>
13:45	T3.6.2	Diastolic Left Ventricular Hemodynamics with Mitral Valve Edge-to-Edge Repair <i>Yingying Hu, Liang Shi, Wei Sun, Zhaoming He</i>
14:00	T3.6.3	Modeling of Pulse Wave Propagation in Elastic Arteries <i>Fan He, Xiao-Yang Li</i>

14:15	T3.6.4	Numerical Simulation of LDL Luminal Surface Concentration in the Aortic Arch <i>Xiao Liu, Xiaoyan Deng, Yubo Fan</i>
14:30	T3.6.5	The Application of Swirling Flow in the Design of Vascular Bypass Anastomosis and Small-caliber Grafts <i>Anqiang Sun, Xiaoyan Deng, Yubo Fan</i>
14:45	T3.6.6	Aortic Wall Mechanics and Stent Design Optimization <i>Praveen Kumar Gideon. V., Mathew Lazar</i>

Session T5.2 Cellular and Genomic Bioengineering TU107, 13:30 - 15:00, 28 July

Chairs: Jianhua Wu, Bingmei Fu

13:30	T5.2.1	Microvessel Permeability Increase and Microthrombus Induced by Laser-Dye Treatment <i>Qin Liu, Min Zeng, Bingmei M. Fu</i>
14:00	T5.2.2	Modulation of the Blood-brain Barrier Permeability by Plasma Glycoprotein Orosomuroid <i>Wei Yuan, Guanglei Li, Min Zeng, Bingmei M. Fu</i>
14:15	T5.2.3	Induction of Apoptosis by Silencing Translation Initiation Factor <i>Chung-Hao Wang, Ching-An Peng</i>
14:30	T5.2.4	Electrically Induced Release of Bioactive Molecules into Living Cells <i>N. M. Graf, O. Gillaume-Gentil, J. Vörös, T. Zambelli</i>
14:45	T5.2.5	Cell Surface Affinity Binding and Microfluidic Separation with 1000 nm Magnetic Nanobeads <i>Liqun Wu, Lei Wang, Moorthi Palaniapan, Partha Roy</i>

Session SP2.9 Clothing Thermal Bioengineering M104, 13:30 - 15:00, 28 July

Chairs: John Williams, Bao-An Ying

13:30	SP2.9.1	Biomimetic Textiles in Terms of Clothing Comfort <i>John Williams</i>
14:00	SP2.9.2	An Improved Mathematical Model of Thermal Hysiological Response of Naked Infants <i>Bo-An Ying, Yi-Lin Kwok, Yi Li, Feng-Zhi Li, Kit-Lun Yick, Kar-Yin Wong</i>
14:15	SP2.9.3	Structural Design Optimization as a Technology Source for Multi-style Clothing Thermal Functional Engineering <i>Yi Teng, Ruo-Mei Wang, Yi Li</i>
14:30	SP2.9.4	The Study on the Relation between Temperature, Humidity and the Warmth-keeping Property of Fabric <i>Xue-Feng Yan</i>
14:45	SP2.9.5	Multi-structural Computational Scheme for Textile Thermal Bioengineering <i>Ai-Hua Mao, Yi Li, Xiao-Nan Luo, Ruo-Mei Wang</i>

Session SP2.10 Clothing Physiology and Health M107, 13:30 - 15:00, 28 July

Chairs: Malgorzata Zimniewska, Lei Yao

13:30	SP2.10.1	Studies on Physiological Response to Sportswear Made from Cellulosic Fibres <i>Malgorzata Zimniewska, Maria Laurentowska, Edyta Bogacz1, Oliwia Zimniewska</i>
14:00	SP2.10.2	Evaluation of Different Kinds of PPE Ensembles in Terms of Sensation, Usability, Satisfaction and Preference <i>Yue-Ping Guo, Yi Li, Thomson G.C. Wong, Joanne H.Y. Chung, Anthony S.W. Wong, Mayur D.I. Gohel, Polly H.M. Leung, Ameersing Luximon</i>
14:15	SP2.10.3	Development of a Process for Functional Apparel Design <i>Yong-Mei Deng, Kit-Lun Yick, Yan-Bo Ji</i>
14:30	SP2.10.4	Analysis and Research on the Outdoor Sportswear Market in Xi'an <i>Xiao-Man Rong, Guang-You Sheng</i>
14:45	SP2.10.5	Effects of Clothing Wicking and Moisture Management Characteristics on Perception of Breathable-Airtight <i>Jiao Jiao, Lei Yao, Ka-Wai Lau, Yi Li</i>

Tea Break 15:00-15:30

Session	Neuroimaging		TU101, 16:00 - 17:30, 28 July
T2.5	Chairs: Ching-Po Lin, Kevin C. Chan		
16:00	T2.5.1	Brain Anatomical Network and Intelligence <i>Tianzi Jiang</i>	
16:30	T2.5.2	Texture Analysis of Brain MR Images in the Deep Gray Matter of Patients with Multiple Sclerosis <i>Guilian Jiang, Longzheng Tong, Yanchen Xie, Chunshui Yu</i>	
16:45	T2.5.3	Motor Networks in Chronic Stroke: Comparison of Model-free and Model-based Analyses on Functional MRI Signals <i>W.W. Wong, K.Y. Tong, F. Meng, K.W. Tang, W.C. Fong, X. Gao, S. Gao, S.T. Chan</i>	
17:00	T2.5.4	Functional MRI Study of the Visual System Development in Rodent Model <i>K. Xing, K.C. Chan, M.M. Cheung, E.X. Wu</i>	
17:15	T2.5.5	Measurement of Neurovascular Response of Ischemic Stroke Rat using Near Infrared Spectroscopy <i>Ying-Chi Lien, Pei-Yi Lin, Jia-Jin Jason Chen</i>	
Session	Lower Limb Biomechanics		TU103, 16:00 - 17:30, 28 July
T3.7	Chairs: Jason TM Cheung, Leping Li		
16:00	T3.7.1	Computational Approach for Footwear Design and Evaluation <i>Jason Tak-Man Cheung, Ming Zhang</i>	
16:15	T3.7.2	A 3D Finite Element Female Foot Model for Biomechanical Evaluation of High-Heeled Shoe Designs <i>Jia Yu, Jason Tak-Man Cheung, Ming Zhang</i>	
16:30	T3.7.3	The Comparison between An Abrasive Tibial Bearing Component and Traditional Design: A Finite Element Analysis during Gait Cycle <i>Zixue Guo, Huai Meng, Xiaofeng Yang, Qin Liu</i>	
16:45	T3.7.4	Gender Differences of Knee Joint Kinematics during Daily Activities <i>B. Gao, N. Zheng</i>	
17:00	T3.7.5	Relationship of Knee Joint Function and Balance Performance of the Elderly during Putting on Pants in Standing <i>I-Fang Cheng, Fong-Chin Su, Chih-Han Chang, Chii-Jeng Lin</i>	
17:15	T3.7.6	Three-Dimensional Analysis of the Ludloff Osteotomy <i>Wei Mao, Gang Wu, Haitao Li, Chao Sun, Xianjun Wang, Jiangzhong Zhang</i>	
Session	Vascular Biomechanics II		TU201, 16:00 - 17:30, 28 July
T3.8	Chairs: Hai-Chao Han, Wei Huang		
16:00	T3.8.1	A Thin-Wall Nonlinear Model for Blood Vessel Buckling <i>Hai-Chao Han, Avione Northcutt</i>	
16:30	T3.8.2	Spiral Flow Can Suppress the Flow Disturbance Induced by Endovascular Stents: A Numerical Study <i>Zengsheng Chen, Xiaoyan Deng, Yubo Fan</i>	
16:45	T3.8.3	Effect of Flow Patterns on the Spatial Distribution of LDL Uptake in the Rabbit Aorta-iliac Bifurcation <i>Zufeng Ding, Xiaoyan Deng, Yubo Fan, Anqiang Sun, Hongyan Kang</i>	
17:00	T3.8.4	Numerical Physio-mechanical Simulation of Left Ventricle <i>S.C. Fan, Q. Chen</i>	
17:15	T3.8.5	Formula for the Pressure to Radius of Cardiovascular Stent during Expansion <i>Jie Yang, Nan Huang</i>	
Session	Molecular Biomechanics		TU107, 16:00 - 17:30, 28 July
T5.3	Chairs: Mian Long, Cheng Zhu		
16:00	T5.3.1	Force-induced Cleavage of Single VWF A1A2A3-tridomains by ADAMTS-13 <i>Tao Wu, Jiangguo Lin, Miguel A. Cruz, Jing-Fei Dong, Cheng Zhu</i>	
16:30	T5.3.2	Three Novel Approaches for Classifying Protein 3D Structures and Their Comparative Analysis <i>Georgina Mirceva, Slobodan Kalajdziski, Andrea Kulakov, Danco Davcev</i>	
16:45	T5.3.3	Why Can Force Induce Both Growth and Instability of Focal Adhesion: Micromechanics of Cell Adhesion <i>Baohua Ji</i>	

17:00	T5.3.4	Dynamic Structural Bases for Ala/Ile(Val) Site-related Functionality of Rice PIPs <i>Shouqin Lü, Mian Long</i>
17:15	T5.3.5	The Gravitational Effects on Flow-enhanced Cell Rolling Adhesion Mediated by the Interaction of E-selectin with PSGL-1 <i>Quhuan Li, Xiaoru Ding, Ying Fang, Cheng Zhu, Jianhua Wu</i>

Session **Textile Biomechanical Engineering** M104, 16:00 - 17:45, 28 July

SP2.11 **Chairs:** Bao-An Ying, Ruo-Mei Wang

16:00	SP2.11.1	CAD Technology for Clothing Biomechanical Engineering Design <i>Ruo-Mei Wang</i>
16:30	SP2.11.2	Establishment of Human-foot Skeleton-Joints Tree-Model <i>Jun Shi, Shou-Shan Jiang, Xin Zhang, Li-Xia Chang, Guang-You Sheng</i>
16:45	SP2.11.3	Status Analysis of Tactile Pressure Being Generated on Body Skin Surface of Men's Pants <i>Wei-Yi Feng, Bo-An Ying, Hai-Yi Wang</i>
17:00	SP2.11.4	A Three-dimensional Biomechanical Model for Numerical Simulation of Skin Pressure of Compression Sports Tights <i>Ying-Lei Lin, Ameersing Luximon, Ka-Fai Choi, Yi Li</i>
17:15	SP2.11.5	Discussion on Fashion Color Forecasting Researches for Textile and Fashion Industries <i>Li-Xia Chang, Shu-Hua Wang, Wei-Dong Gao, Xin Zhang</i>
17:30	SP2.11.6	Research of the Crotch Structure of Female Trousers Based on the Type of Body <i>Rui Zhang, Hong Dai, Yan-Bo Ji, Hua Shi</i>

Session **Textile Bioengineering Informatics** M107, 16:00 - 17:45, 28 July

SP2.12 **Chairs:** Zhong Wang, Chen-Ying Gao

16:00	SP2.12.1	Effective Deployment and Easy Access of Computing Techniques in Textile Functional Products Development. <i>Zhong Wang</i>
16:30	SP2.12.2	Virtual Sewing and Visualization of Tight-fit Sportswear <i>Ruo-Mei Wang, Jie Li, Yong-Jin Wang, Yi Li</i>
16:45	SP2.12.3	Computer Thermal Functional Simulation to Enhance University Students' Learning on Fashion Product Development <i>Ming-Liang Cao, Yi Li, Josephine Csete</i>
17:00	SP2.12.4	3D Human Body Scan Data Segmentation and Application <i>Cheng-Ying Gao, Ning Liu</i>
17:15	SP2.12.5	On-line Garment Pattern Database for Clothing Bioengineering Design <i>Ruo-Mei Wang, Yong-Jin Wang, Yi Teng, Yi Li, Yi-Pu Wang</i>
17:30	SP2.12.6	Influence of Fabric Colour and Type on UV-Blocking Properties <i>Hong Chen, Huang Chao, Xu-Yong Chao, Ru Lv, Lei Yao, Patrick Hui, Yi Li</i>

Wednesday, 29 July, 2009

8:30-10:15 **PLENARY SESSION III**

Chairs: Cheng Zhu, Xiaoping Hu

Feng Jiang - Current Situation and Trends for China Medical Devices Industry

Kirk Shung - High Frequency Ultrasound: A New Frontier for Ultrasound

KF So - Nanomedicine for CNS Regeneration and Instant Hemostasis

Tea Break

10:15-10:45

Session **Biomaterials II** TU101, 10:45 - 12:15, 29 July

T1.6 **Chairs:** Bingmei Fu, Yang Leng

10:45	T1.6.1	Composite Materials, Coatings and Scaffolds for Human Tissue Repair <i>Min Wang</i>
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11:15	T1.6.2	Controlled Release of Drugs from Porous PLGA Scaffolds under Cyclic Loading <i>Yanfang Yang, Gongwen Tang, Hong Zhang, Yunhui Zhao, Xiaoyan Yuan, Yubo Fan, Min Wang</i>
11:30	T1.6.3	Bioinspired Micro/Nano Patterned Biomaterials with Designed Properties <i>Xiong Lu, Yang Leng, Lili Jiang, Jia Xie, Xiang Ge</i>
11:45	T1.6.4	Coating PHBV- and PHBV/PLLA-based Scaffolds with Collagen and Characteristics of Collagen-coated Scaffolds <i>Naznin Sultana, Min Wang</i>
12:00	T1.6.5	Fabrication and Characterization of Ti-O/Ti Composite Coatings on NiTi Shape Memory Alloy for Medical Applications <i>Tao Sun, Lang-Ping Wang, Min Wang</i>

Session T2.6	Bio-signal Measurement & Processing	TU103, 10:45 - 12:15, 29 July
	Chairs: Albert C. S. Chung, Deyu Li	

10:45	T2.6.1	Spatial Organisation and Synchronisation Patterns during Gamma Oscillation in the Rat Cortex <i>Michael Small, C. Carmeli, P. Bonifazi, H.P.C. Robinson</i>
11:15	T2.6.2	Enhancement of Gas-filled Microbubble Magnetic Susceptibility by Iron Oxide Nanoparticles <i>April M. Chow, Jerry S. Cheung, Ed X. Wu</i>
11:30	T2.6.3	Ultrasound Reflection and Resolution Study in Bovine Vertebral bones <i>Lawrence H. Le, Chan Zhang, Edmond Lou, Mauricio D. Sacchi</i>
11:45	T2.6.4	Evaluation of Cerebral Blood Flow Changes in Ischemia Rats by using Doppler Ultrasound <i>Le Li, Zheng Ke, Kai Yu Tong, Michael T.C. Yin</i>
12:00	T2.6.5	Wrist Pulse Signal Diagnosis using Gaussian Model <i>Yinghui Chen, Lei Zhang, David Zhang, Dongyu Zhang</i>

Session T3.9	Sports Medicine	TU201, 10:45 - 12:15, 29 July
	Chairs: Parco Siu, Daniel TP Fong	

10:45	T3.9.1	Kinematics Analysis of An Accidental Supination Ankle Sprain Injury by A Model-based Image-matching Motion Analysis Method <i>Daniel Tik-Pui Fong, Kam-Ming Mok, Youlian Hong, Yosuke Shima</i>
11:00	T3.9.2	An Ankle Supination Sprain Identification System with the Use of Gyrometer and Accelerometer <i>Yue-Yan Chan, Daniel Tik-Pui Fong, Patrick Shu-Hang Yung, Kai-Ming Chan</i>
11:15	T3.9.3	Basic Study on Noncontact Respiration Measurement under Pedaling Motion with Upright Bicycle Ergometer <i>Hirooki Aoki, Shiro Ichimura, Satoru Kiyooka, Kohji Koshiji, Hidetoshi Nakamura</i>
11:30	T3.9.4	Repeated Passive Movement in Functional Velocities is Beneficial to Knee Proprioception <i>Hsin-Yi Kathy Cheng, Yan-Ying Ju, Yu-Chen Liu</i>
11:45	T3.9.5	In-vivo Paraspinal Muscle Activity and Stiffness Monitoring with Novel Technology <i>Y.L. Wong, Y. Hu, G.N. Kawchuk, W.W. Lu</i>
12:00	T3.9.6	Kinematic and Kinetic Analysis of Lower Extremity following Posterior Cruciate Ligament Reconstruction <i>Mei-Fang Liu, Pei-His Chou, Fong-Chin Su</i>

Session T3.10	Rehabilitation Engineering	TU107, 10:45 - 12:15, 29 July
	Chairs: Kai Yu Tong, Eric Tam	

10:45	T3.10.1	Improvement of Cortical Function during Reaching Post Stroke <i>G.H. Yue, Y. Fang, J. Hansley, Q. Yang</i>
11:00	T3.10.2	Recovery Process during Task Related Upper Limb Training with Functional Electrical Stimulation (FES) for Persons after Stroke <i>X.L. Hu, Raymond K.Y. Tong, Dora Y.L. Chan, Hobby K.Y. Cheung, Marko K.L. Chan, S.H. Cheung, M. Chen, J.J. Xue</i>
11:15	T3.10.3	The Recovery Index of Orthostatic Syncope using Oxygen Saturation in Patients with Spinal Core Injury <i>David S. Liu, Walter H. Chang, Alice M.K. Wong, Kang-Ping Lin</i>
11:30	T3.10.4	The Effect of Single Visual and Auditory Cues on Movement Kinematics in Patients

		with Parkinson's Disease <i>Po-Hung Chou, Wen-Juh Hwang, Li-Chieh Kuo, Keh-Chung Lin, Hui-Ing Ma</i>
11:45	T3.10.5	Neurological Effect in Treadmill and Wheel Exercises on Stroke Rats <i>Zheng Ke, Kai Yu Tong, Le Li, Xiao-Qiong Dong, Xiao-Xiang Zheng, Shea Ping Yip</i>
12:00	T3.10.6	Study on Expression of Nestin Protein, PSD-95, SYP, Morphological Change and Changes in Calcium ion Channel in Rats Central Nervous System after Traumatic Brain Injury <i>Wei Wu, Yinan Luo, Dong Zhu, Jiazi Gao, Xuwei Song</i>

Session	Eco and Easy-care of Textiles	M104, 10:45 - 12:15, 29 July
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SP2.13	Chairs: Jun-Yan Hu, Subramanian S. Muthu
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10:45	SP2.13.1	Objective Evaluation of Biofunctional Performance of Textiles
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		<i>Jan-Yan Hu</i>
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11:15	SP2.13.2	Effect of Detergent Products on Fabric Appearance during Laundering
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		<i>Ping-Hua Xu, Xue-Mei Ding, Xiao-Li Luan, Jin-Qiang Liu, Xiong-Ying Wu</i>
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11:30	SP2.13.3	An Exploratory Comparative Study on Eco-impact of Paper and Plastic Bags
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		<i>Subramanian Senthilkannan Muthu, Yi Li, Jun-Yan Hu, Pik-Yin Mok</i>
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11:45	SP2.13.4	Investigation of Washing and Maintenance of Women's Underwear in China
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		<i>Jian-Fang Liang, Jian-Ming Liang, Yan-Bo Ji</i>
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12:00	SP2.13.5	End of Life of Opportunities for Textiles in the UK Healthcare Sector
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		<i>Kate Riley, John Williams, Dennis Waldron</i>
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Session	Head and Neck Injury Biomechanics	M107, 10:45 - 12:15, 29 July
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SP1.1	Chairs: Peter Lee, Bing Deng
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10:45	SP1.1.1	The Engineering Basis for Automotive Passive Safety: Impact Biomechanics
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		<i>Albert I. King</i>
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11:15	SP1.1.2	Head Injury Prediction: Accident Reconstruction of Real-world Crash Cases
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		<i>Liyang Zhang, Melanie Franklyn, King H. Yang</i>
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11:30	SP1.1.3	A Study on Brain Injury Biomechanics in Car-to-Pedestrian Accidents
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		<i>Fan Li, Jikuang Yang, Yong Han, Kaiyang Liu, Yong Peng</i>
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11:45	SP1.1.4	FE Prediction of Head-Neck Responses under Various Impact Directions
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		<i>Ee-Chon Teo, Qing-Hang Zhang</i>
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12:00	SP1.1.5	A Simulation of the Neck Biomechanical Response in Vehicle Rear Impacts
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		<i>Zhi Xiao, Tin Fan, Xingmei Yang, Chaochen Zhang</i>
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Lunch

12:45- 13:30

Session	Biomaterials III	TU101, 13:30 - 15:00, 29 July
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T1.7	Chairs: X. Edward Guo, Hongquan Zhang
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13:30	T1.7.1	Nanofiber-based Scaffolds for Interface Tissue Engineering and Integrative Soft Tissue Repair
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		<i>Helen H. Lu, Kristen L. Moffat, Siddarth Subramony, Philip Chuang, Cevat Eriske</i>
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14:00	T1.7.2	Novel Strontium-borosilicate for Bone Tissue Engineering
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		<i>H.B. Pan, W.M. Lam, X.L. Zhao, Z.Y. Li, W.W. Lu, Deping Wang, Wenhai Huang, Kaili Lin, Jiang Chang</i>
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14:15	T1.7.3	Electrospinning of PLLA Micro- and Nanofibers: Effects of Electrospinning Parameters on Fiber Diameter and Morphology
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		<i>Jia-Chen Kang, Min Wang, Xiao-Yan Yuan</i>
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14:30	T1.7.4	Electrospinning of Surface-porous Fibers and in vitro Biological Study of these Fibers
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		<i>Ho-Wang Tong, Min Wang, Zhaoyang Li, Wing-Moon Lam, William W. Lu</i>
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14:45	T1.7.5	Experimental Study on the Distribution of Circumferential Residual Strains in Aortic Arch
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		<i>Xiaojun Zhang, Xiaoyang Li</i>
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Session	Molecular Imaging	TU103, 13:30 - 15:00, 29 July
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T2.7	Chairs: Xiaoping Hu, Yi-Xiang Wang
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13:30	T2.7.1	A Targeted Contrast Agent for MR Molecular Imaging of Cancer
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		<i>Zheng-Rong Lu</i>
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14:00	T2.7.2	Dynamic Bioluminescent and Fluorescence Imaging to Study Effect of Vascular Targeting Agents on Tumor Xenografts
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Li Liu, Yang Su, Ralph Mason, Barjor Gimi

14:15	T2.7.3	Dynamic and Deep Tissue Live Cell Tracking using a New Upconversion Fluorescent Nanoparticles <i>Niagara Muhammad Idris, Zhengquan Li, Qingqing Dou, Lei Ye, Rajendran Divya, Eugene K.W. Sim, Yong Zhang</i>
14:30	T2.7.4	Upconverting Nanoparticles for in vivo Imaging <i>D.K. Chatterjee, Y. Zhang</i>
14:45	T2.7.5	Study of Neonatal Hypoxic-ischemic Injury in the Late Stage using MEMRI <i>I.Y. Zhou, K.C. Chan, A.Y. Ding, E.S. Hui, K.X. Cai, E.X. Wu</i>

Session Orthopaedic Rehabilitation – Experience from Sichuan Earthquake

T3.11 Chairs: Kai-Ming Chan, Aaron Leung TU201, 13:30 - 15:00, 29 July

13:30	T3.11.1	5.12 Sichuan Earthquake Opportunities and Challenges for the Development of Orthopaedics and Rehabilitation Engineering <i>S.W. Law</i>
13:45	T3.11.2	New Rehabilitation Technology and Clinical Applications <i>K.Y. Ken Cheung</i>
14:00	T3.11.3	Rehabilitation Engineering from a Prosthetist's Perspective <i>Kam Wah Ho</i>
14:15	T3.11.4	Assessment of Structural Integrity of Bone Receiving Osseointegrated Prosthesis <i>Moufa Chen, Winson C.C. Lee</i>
14:30	T3.11.5	Enhancing Pedicle Screw Fixation in the Aging Spine with A Novel Bioactive Bone Cement: An in vitro Biomechanical Study <i>Qingan Zhu, Stephen Kingwell, Zhaoyang Li, Haobo Pan, William W. Lu, Thomas R. Oxland</i>
14:45	T3.11.6	Prosthetics and Orthotics Professional Service and Training Support for the Sichuan Earthquake Stricken Areas <i>AKL Leung, MS Wong, AFT Mak</i>

Session Pediatric and Lower Limb Injury Biomechanics

TU107, 13:30 - 15:00, 29 July

SP1.2 Chairs: Jikuang Yang, Ee-Chon Teo

13:30	SP1.2.1	Effects of Short-Duration Overpressure on Neurons – An <i>in vitro</i> Study <i>Lai Yee Leung, King H. Yang, Albert I. King, Pamela J. VandeVord</i>
13:45	SP1.2.2	The Use of Paediatric Test Dummy on Child Free Fall in Playground <i>T.J. Huang, L.T. Chang, Y.J. Huang, H.H. Huang</i>
14:00	SP1.2.3	A study on Lower Limb bone fractures in car to Pedestrian Accident <i>Han Yong, Fan Li, Kaiyang Liu</i>
14:15	SP1.2.4	Evaluation of Pedestrian Lower Legform Impactor using Human Body Model <i>Bing Deng, J.T. Wang, Wolfgang Hahn</i>
14:30	SP1.2.5	The Role of Impact Loads on Osteocartilage Degeneration <i>C.H. Yeow, Peter V.S. Lee, James C.H. Goh</i>
14:45	SP1.2.6	A Study on Neck Injury Characteristics under Different Postures in Side Impact <i>Zhigang Li, Jinhuan Zhang, Chunsheng Ma</i>

Session Textile Bioengineering Process II

M104, 13:30 - 15:00, 29 July

SP2.14 Chairs: Raymond Oliver, Jin-Mei Wang

13:30	SP2.14.1	Interactive Textiles and Smart Fabric Systems Development for Biomedical Applications <i>Raymond Oliver</i>
14:00	SP2.14.2	Cytotoxicity of the Polypeptide Hydrolyzed from Wool on Human Foreskin Fibroblast Cells <i>Xuan Liu, Lin Li, Yi Li</i>
14:15	SP2.14.3	Surface Switching Behaviour of Thermally Responsive Polymer Brushes of Poly(N-isopropylacrylamide) on the Cotton <i>Xu-Qing Liu, Zi-jian Zheng, Feng Zhou, Jun-Yan Hu, Yi Li</i>
14:30	SP2.14.4	Safety Evaluation of Biomaterials <i>Dang-Xia Zhou, Yi Li</i>
14:45	SP2.14.5	Development and Research on Anti-bacteria, UV-resistance Multi-functional Knitted Fabric <i>Li-Min Shi, Yue-Ping Wang, Qiu-Yu Li</i>

Session	Clothing Bioengineering Design II	M107, 13:30 - 15:00, 29 July
SP2.15	Chairs: Elias Siores, Lei Yao	
13:30	SP2.15.1 Converging Technologies and Empowering Textiles <i>Elias Siores</i>	
14:00	SP2.15.2 Structure Design and Analysis of Anti_G Pants Based on Human Body <i>Yan-Bo Ji, Jian-Fang Liang, Bo-An Ying, Yuan Xue</i>	
14:15	SP2.15.3 Critical Evaluation on Design and Function of Cycling Wear <i>Jie Luo, Lei Yao, Sau-Chuen Au, Ameersing Luximon, Jun-Yan Hu, Ru Lv, Yi Li</i>	
14:30	SP2.15.4 A Study on the Issues of Sportswear Design <i>Zhao-Hui Gu, Jian-Fang Liang</i>	
14:45	SP2.15.5 A Study on Chest and Waist Structure Design of Closed-fitted Clothing <i>Ming Hu, Bing-Bing Liu, Rui Zhang</i>	
Tea Break 15:00-15:30		
15:30 -16:15	WORKSHOP II (TU201)	Chair: Ming Zhang
	<i>Savio L-Y. Woo</i> - How to Write Scientific Papers	
16:15 - 16:45	CLOSING CEREMONY (TU201) Award Presentation	
16:45 - 18:45	TECHNICAL VISIT TO LOCAL UNIVERSITY (POLYU)	

Thursday, 30 July, 2009

9:00-12:45 **TECHNICAL VISITS TO LOCAL UNIVERSITIES (HKU/CUHK/UST)**

Poster Program

Poster	Session I, II	QR Podium, 12:15 - 12:45/15:30 - 16:00, 27 July
	Mount up 8:00-10:00, 27 July; Remove 16:30-17:30, 27 July	
Track 1 Biomaterials, Tissue Engineering and Regenerative Medicine		
P1.1	Effects of Oriented Cartilage Extracellular Matrix Derived Scaffold on Biological Behaviour of Chondrocytes Cultured in vitro <i>Shibi Lu, Quanyi Guo, Jun Yao, Jiang Peng, Aiyuan Wang</i>	
P1.2	Preparation of Injectable Porous Calcium Phosphate Cement Scaffold <i>Hua Liu, Changren Zhou, Hong Li, Zhizhong Li</i>	
P1.3	Small Intestinal Submucosa as A Scaffold For Cardiac Tissue Engineering <i>Yong Guo, Xi-Zheng Zhang, Rui-Xin Li, Juan Sun, Chun Guo, Chun-Qiu Zhang</i>	
P1.4	Woodpecker's Tongue Gives Amazing Mechanical Property <i>P. Zhou, X.Q. Kong, C.W. Wu, Zhen Chen</i>	
P1.5	Thoracic and Abdominal Impact Testing of Pediatric Cadaveric Subjects <i>Jun Ouyang, Weidong Zhao, Jianyi Li, Meichao Zhao</i>	
P1.6	Surface Modification of Selective Laser Sintered Ca-P/PHBV Nanocomposite Scaffolds <i>Bin Duan, Min Wang</i>	
P1.7	Effects of Different Elicitors on 10-Deacetylbaecatin III-10-O-Acetyl Transferase Activity and Cytochrome P450 Monooxygenase Content in Suspension Cultures of <i>Taxus Cuspidata</i> Cells <i>Peng Wang, Zhigang Guo</i>	
P1.8	Study on Calcium Phosphate Cement Containing Chinese Medicine <i>Shuxin Qu, Yurong Liu, Maohong Li, Chan Huang, Jie Weng</i>	
P1.9	Swirling Flow Created in a Glass Tube Suppressed Platelet Adhesion to the Surface of the Tube: Its Implication in the Design of Small-Caliber Arterial Grafts <i>Fan Zhan, Xiaoyan Deng, Yubo Fan</i>	
P1.10	Repair of Adult Rat Spinal Cord Injury by Co-Transplantation of Olfactory Ensheathing Cells and Neural Stem Cells <i>Gan Wang, Qiang Ao, Kai Gong, Yandao Gong, Xiufang Zhang</i>	
P1.11	Experimental Study of Chitosan Mediated <i>Igf-1</i> Gene Transfer for Repairing Cartilage Defect <i>Ronglan Zhao, Bei Sun, Rui Zhang, Jingyu Zhang, Dongchun Liang</i>	
P1.12	Two Types of Bridging Observed in Crack Tip between Two Layers of Lamellae on Mini Bone Sample after Three-Point-Bending Test <i>Honggang Zhong, Dong Han</i>	
P1.13	Cationic Core-Shell Nanoparticles Self-Assembled from Triblock Copolymer as Potential Dual Carriers of DNA and Anticancer Drug <i>Yuting Wen, Zhenhuan Guo, Shirong Pan, Min Feng, Xin Luo, Wei Zhang, Yuan Shen, Xuan Zhang, Rong Fang, Hongmei Wu, Chi Wang</i>	
P1.14	Core-Shell Hexagonal Phase NaYF_4 : Yb, Er Upconversion Nanoparticles for Biological Applications <i>Qingqing Dou, Zhengquan Li, Haisheng Qian, Yong Zhang</i>	
P1.15	Development of A Micromanipulator-Based Loading Device for Mechanoregulation Study of Human Mesenchymal Stem Cells in 3D Collagen Constructs <i>K.L. Au-Yeung, K.Y. Sze, M.H. Sham, B.P. Chan</i>	
P1.16	Fabrication of Articular Cartilage Extracellular Matrix Derived Oriented Scaffold for Cartilage Tissue Engineering <i>Quanyi Guo, Jun Yao, Jiang Peng, Aiyuan Wang, Shibi Lu</i>	
P1.17	New Kind of Mixed Collagen for Injection <i>Dongsheng Dai, Shumei Huang, Yinxi Tang</i>	
P1.18	Ni^{2+} Separation of Nitinol Modified on its Surfaces by Titanium or Titanium-Niobium Alloy <i>Shibi Lu, Yongbin Li, Mingxue Sun, Aiyuan Wang, Quanyi Guo, Jiang Peng</i>	
P1.19	A Study on Biocompatibility of Nitinol Modified on its Surfaces by Titanium or Titanium-Niobium Alloy <i>Aiyuan Wang, Shibi Lu, Yongbin Li, Mingxue Sun, Jiang Peng, Quanyi Guo</i>	
P1.20	Decellularization of Chondrocyte-Encapsulated Collagen Microspheres - A 3D Model to Study Effects of Acellular Matrix on Stem Cell Fate	

- P1.21** *H.W. Cheng, Y.K. Tsui, K.M.C. Cheung, D. Chan, B.P. Chan*
Bone Regeneration using Autologous Mesenchymal Cell Bound to Chitosan-Gelatin/
Hydroxyapatite-BMP-2 Complex for Segmental Bone Defects in Rabbit
- P1.22** *Xiaona Cao, Weili Xiong, Jingcai Ma, Dongchun Liang, Jingyu Zhang, Aijun Zuo*
Cloning and Expression of a Novel Thyroid Hormone Receptor β Isoform
- P1.23** *Bei Sun, Aijun Zuo, Dongchun Liang, Gang Guo, Jingyu Zhang*
PLGA-Gelatin/Hyaluronic Acid Ternary Scaffolds for 3D Culture of Chondrocytes
- P1.24** *Nai-Jen Chang, Ming-Long Yeh, Jane-Yii Wu, Yi-Ru Jhung*
Study of Cellular Behaviour on Micro- and Nano- Structures
- P1.25** *Hilary K.Y. Mak, Jack C.M. Wong, Dennis C.W. Leung, Denise S.B. Chan, Jade J. Shi, Chris S.K. Mak, Nicole M.M. Chan, Philip W.T. Pong*
Effects of Different Neutralization Methods on Nanotopography and Cytocompatibility of Chitosan Films
- P1.26** *Qing He, Qiang Ao, Yandao Gong, Xiufang Zhang*
The Mechanical Properties of the Skin in Relation to its Structure
- P1.27** *Sylwia Szotek, Magdalena Kobielarz, Piotr Kuroпка, Agnieszka Dudek, Katarzyna Kaleta, Małgorzata Żak*
Microplate Manipulation of Human Mesenchymal Stem Cells (hMSCs) – Collagen Microspheres
- P1.28** *C.H. Li, A. Ngan, K.Y. Sze, B.P. Chan*
Fibrous-PLGA by using an Electrospinning System for Tissue Engineering in Tendon Repair
- P1.29** *J.P. Chen, M.L. Yeh, Y.H. Nien*
Study on the Ultrasonically-activated Permeability of CHC Membrane
- P1.30** *Tse-Ying Liu*
Directional Mechanical Properties of Abdominal Aortic Aneurysms Wall
- P1.31** *Magdalena Kobielarz, Romuald Bedzinski, Sylwia Szotek, Katarzyna Kaleta, Piotr Kuroпка*
Self-Assembling Peptide Matrix for Probing Effects of Embedded Extracellular Matrix Mimicking Signals on Stem Cell Behavior
- P1.32** *Qianqian Li, King Lau Chow, Ying Chau*
Combined Effects of Electrical and Mechanical Stimulations on Cardiac Myocytes *in vitro*
- P1.33** *Ping Li, Yan Huang, Xiaoling Jia, Limin Feng, Baolong Xia, Yubo Fan*
Repair of Deep Burn Skin Defects with Cultured Epidermal Stem Cells and Acellular Amniotic Membranes
- P1.34** *Dewu Liu, Honglan Xiong, Yuanguai Mao, Peixin Huang, Jianping Chen, Wei Lan*
Plga Nanofiber by an Electrospinning System for Tendon Tissue Engineering
- P1.35** *J.P. Chen, M.L. Yeh, Y.H. Nien*
Poly(E-Caprolactone)-Poly(Γ -Glutamic Acid) (Pcl-Pga) Copolymer as Drug Carriers for Wild Type and Adriamycin-Drug Resistant Human Breast Cancer Cells
- P1.36** *A.G. Chan, M.F. Hsieh, C.H. Chen*
A Supercritical CO₂ Fluid Technique for the Preparation and Evaluation of rhBMP-2-Loaded PLLA Microspheres
- P1.37** *Jiang Wu, Yunqing Kang, Guangfu Yin, Huaiqing Chen*
Culturing of Ventricle Cells at High Density and Construction of Engineered Cardiac Cells Sheet without Scaffold
- P1.38** *Yong Guo, Xi-Zheng Zhang, Yan Wei, Chun Guo, Rui-Xin Li*
Cartilage Tissue Engineering by Hydrodynamic Bioreactor
- P1.39** *Yi-Ru Jhung, Hung-Shen Chin, Nai-Jen Chang, Kai-Hsiang Chen, Ming-Long Yeh*
Electrochemically Deposited Apatite Coating on NiTi Shape Memory Alloy
- P1.40** *Tao Sun, Min Wang*
Electrospinning, Characterization, and *in vitro* Degradation of PHBV Micro- and Submicron-fibers
- P1.41** *Ho-Wang Tong, Min Wang*
Hydrolytic Degradation and Protein Adsorption of PHBV/PLLA-based Tissue Engineering Scaffolds
- P1.42** *Naznin Sultana, Min Wang*
Fabrication of Porous Scaffolds via Low-Temperature Deposition
- P1.43** *Y.C. Liang, X.F. Zheng and W.J. Zhai*
Fibrous Scaffolds of Genipin-crosslinked Gelatin Fabricated through Electrospinning

Jia-Chen Kang, Min Wang, Xiao-Yan Yuan

Track 2 Biomedical Imaging, Signal Processing, and Health Informatics

- P2.1** Assessment of Cerebral Oxygenation during Prolonged Simulated Driving using Near Infrared Spectroscopy-Implications for the Development of Fatigue
Zengyong Li, Ming Zhang, Xiaoyin Zhang, Shixun Dai, Xingxin Yu, Yan Wang
- P2.2** Construction of Anatomically Accurate Finite Element Models of the Human fingers and the Rat Kidney
Lizhong Mu, Hongwei Shao, Ying He, Toshiaki Oda, Xuemei Jia
- P2.3** Theoretical Studies of the Effect of the Shell Elasticity and Viscosity of Ultrasound Contrast Agents Microbubble on Second Harmonic Scattering Properties
Fei Li, Deyu Li
- P2.4** 12-bit Successive Approximation ADC for Low Power Biomedical Applications
Hwang-Cherng Chow, Hsin Huang
- P2.5** Analysis of Finger Dexterity after Cold Stimulation using High-speed Camera
Hongwei Shao, Ting Lei, Hengdi Zhang, Ying He
- P2.6** Biomechanics Optimized Analysis of Femur Neck Fracture Fixation
Baoqing Pei, Shengwei Xu
- P2.7** Important Role of Rapid Prototype Bio-Template of Pelvic Acetabular
Shuqin Wu
- P2.8** Basic Study on Inverse Problem in Electrical Bio-Impedance Tomography for Reduction of Calculation Cost
Hirooki Aoki, Kohji Koshiji
- P2.9** Recent Progress in Computer-Aided Diagnosis for Lung Nodule in Chest Radiograph
Chunyan Wang, Xiaoming Wu
- P2.10** Application of Visible Simulation Surgery Technique in Intrahepatic Calculi Pre-operation Planning
Chihua Fang, Aowen Xie, Mianling Chen, Chaomin Lu, Yanpeng Huan, Xiaofeng Li, Jiahui Pan, Fengping Peng
- P2.11** A Vocoder for a Novel Virtual Channel Cochlear Implant Stimulating Strategy
Charles T.M. Choi, C.H. Hsu, W.Y. Tsai, Yi Hsuan Lee
- P2.12** Assessment of Adolescent Idiopathic Scoliosis (AIS) using 3D Ultrasound
James Chung, Wai Cheung, Yong-Ping Zheng
- P2.13** Comparison of Nitrogen Metabolism in a Salt-alkali Resistant Halophyte *Puccinellia tenuiflora* in Response to Salt and Alkali Stresses
Liquan Guo, Decheng Shi
- P2.14** Comparison between Sonomyography and Electromyography in Terms of Accuracy and Cognitive Requirement
Jing-Yi Guo, Yong-Ping Zheng, L.P. Kenney
- P2.15** SOM Based Adaptive Thresholding Technique for Semi-Automatic NPC Image Segmentation
Weerayuth Chanapai, Panrasee Ritthipravat
- P2.16** Three-dimensional Visualized Digital Models for Posterior 270° Decompression and Reconstruction for Thoracolumbar Fracture Segments with Severe Three-column Injury
Yongshu Wang, Huazi Xu, Lijun Wu, Jisong Wang
- P2.17** The Reconstruction of a 3D Digitized Virtual Wrist Model Based on CT Images and Necrotomy
Zhipeng Wu, Weiyang Gao, Lijun Wu, Jisong Wang
- P2.18** Automatically Identify and Position Reactive Segments of IVT Allergy Screen Device
Liqiang Xu, Fang Pu, Deyu Li, Yubo Fan, Lifeng Li
- P2.19** A Novel Method for Registration of 3-D HR-pQCT Images
Lin Shi, Defeng Wang, Vivian W.Y. Hung, Benson H.Y. Yeung, James Griffith, Winnie C.W. Chu, Pheng Ann Heng, Jack C.Y. Cheng, Ling Qin
- P2.20** The Implementation of Noise Reduction and Spike Detection for Intracortical Recording in Rats
Yao-Ming Yu, Rong-Chin Lo, Wen-Liang Tsai
- P2.21** Proposal of 3-D Shape of Body Surface using Slit-light Array Pattern Projection
Takayoshi Ozawa, Hirooki Aoki, Kohji Koshiji
- P2.22** Finding Stable Gene Sets for Microarray Data using Support Vector Machine
Y. Y. Leung, Y. S. Hung

- P2.23** The Relationship between EMG and Skin Temperature of Human Body Exposed to Air Conditioning Environment
Wonhak Cho, Wooyong Lee, Hyeonki Choi
- P2.24** The Effects of Metabolism Change on EMG Activity in Air Conditioning Environment
Wooyong Lee, Wonhak Cho, Hyeonki Choi
- P2.25** Experimental Study of Ultrasound Interaction in Water-Filled Aluminum Foams
Chan Zhang, Lawrence H. Le, Edmond Lou, Dean Ta
- P2.26** A Model for Calculating NTCP Incorporated Second Cancer Risk
Chufeng Jin, Hui Liu, Gui Li, Yican Wu, Lijun Wu, FDS Team
- P2.27** The Change of the Ultrasound Speed and Attenuation in Trypsin Digested Articular Cartilage
Haijun Niu, Feng Sun, Zhiyong Wu, Xiaoning Shao, Yubo Fan
- P2.28** Ultrahigh-field Magnetic Resonance Imaging of Normal and Hypertensive Eyes
Kevin C. Chan, Qing-ling Fu, Kwok-fai So, Ed X. Wu
- P2.29** Skin Roughness Measurement for Lesion Classification
Ahmad Fadzil M Hani, Hermawan Nugroho, Esa Prakasa, Azura M. Affandi, Suraiya H. Hussein
- P2.30** 3D Region Growing Segmentation using Bifurcations Detection and Adaptive Threshold
Jianjun Du, Jianrong Lu, Aike Qiao, Youjun Liu
- P2.31** An Impedance Scanning System of Back-Shu Points Based on 3D Platform Manipulator
Jiang Li, Ye-Hua Bao, Xiao-hui Liu, Jia-Mei Chu, Zheng-Liang Chen, Yi-Jun Huang, Zhen Liu
- P2.32** Reduced CSF Contamination in DTI by Additional DWIs with Smaller B-value
Edward S. Hui, Joseph A. Helpert, Ed X. Wu
- P2.33** A Comparative Study on the Geometrical Feature of Normal Stenotic Internal Carotid Arteries
Chi Zhang, Sheng Xie, Shuyu Li, Fang Pu, Deyu Li, Xiaoyan Deng, Yubo Fan
- P2.34** Effects of Hypercapnia on DTI Quantitation in Anesthetized Rat Brain
A.Y. Ding, E.S. Hui, E. X. Wu
- P2.35** Difference in Three-dimensional Trabecular Architecture between CKIP-I Gene Knockout Mice and its Wild Type at 15-month-old
Y.X. He, G. Zhang, T. Tang, K.F. Lu, X.S. Yin, L.Q. Zhang, F.C. He, L. Qin
- P2.36** Quantitative Assessment of Ulcers Volume using 3D Skin Surface Imaging
Ahmad Fadzil M. Hani, Nejoood M. Elteгани, Suraiya H. Hussein, Adawiyah Jamil, Priya Gill
- P2.37** Implementation of a Portable Ultrasound Densitometry Based on Fpga
Jian-Xing Wu, Pei-Jarn Chen, Tainsong Chen
- P2.38** The Establishment of the Three-Dimensional Digital Model of Pelvic Floor Levator Ani Muscles in the Older Healthy Woman
Wei Chen, Zhihan Yan, Lijun Wu, Jisong Wang, Yalan Fu, Danfeng Zhu
- P2.39** Optimization of B-value in DTI- a Rat Brain Maturation Study
M.M. Cheung, E.S. Hui, E. X. Wu
- P2.40** Reference Line Construction Approach for Thickness Characterization in 3D Skin Surface Images
M.H. Ahmad Fadzil, Hurriyatul Fitriyah, Esa Prakasa, Hermawan Nugroho S.H. Hussein, Azura Mohd Affandi

Track 4 Biosensors, Bionanotechnology and Medical Devices

- P4.1** A Program to Convert Intensity Fluence Map into Optimal MLC Machine Files
Jia Jing, Guoli Li, Hui Lin, Mengyun Cheng, Yican Wu
- P4.2** Use of Upconversion Nanoparticles for Fluorescence Resonance Energy Transfer (FRET) Based Biosensors
Shan Jiang, Yong Zhang, Kian Meng Lim
- P4.3** Relationship between Photoplethysmography (PPG) and Arterial Diameter Change Measured by Ultrasound
Cong-Zhi Wang, Yong-Ping Zheng
- P4.4** The Preparation Methods of Ultrasound Contrast Agents based on Microfluidic Device
Chunxiang Jiang, Hairong Zheng
- P4.5** Distribution, Translocation and Accumulation of Silver Nanoparticles in Rats
Tingfei Xi, Jinglong Tang, Shanshan Xi, Ling Xiong, Shuo Wang, Jianyu Wang, Li Liu, Jiage Li, Fuqiang Yuan
- P4.6** Planar Plasma Membranes on Polyelectrolyte Thin Films
K. Sugihara, J. Vörös, T. Zambelli

- P4.7** PLGA Nanoparticle Encapsulated Paclitaxol for Sustained Release and Its Anticancer Effect for HeLa Cells in vitro
Hong Yang, Kai Li, Zhonghua Liu, Zhenglong Ren, Yiyao Liu
- P4.8** Bead-based Microarray on Well-ordered Porous Film for Dengue Disease Detection
J.T. Cheng, J. Lib, N.G. Chen, P. Gopalakrishnakone, Y. Zhang
- P4.9** Hemodynamic Performance of a Functional Artificial Heart
Y. Chang, A.K. Qiao, Y.J. Liu
- P4.10** Biocompatible Core-shell Structured NaYF₄@SiO₂ Upconversion Nanoparticles
Zhengquan Li, Yong Zhang
- P4.11** Development of a Multi-Mode Ultrasound Driving Circuit for Biomedical Applications
Congo Tak-Shing Ching, Tai-Ping Sun, Hsiu-Li Shieh
- P4.12** Development of a System for Phototherapy
Hsiu-Li Shieh, Tai-Ping Sun, Congo Tak-Shing Ching
- P4.13** Development of an EMG Feedback Control System for TENS
Congo Tak-Shing Ching, Tai-Ping Sun, Hsiu-Li Shieh
- P4.14** A Novel Deep Brain Stimulation Model Based on Finite Element and Neural Models
Charles T.M. Choi, Yen-Ting Lee
- P4.15** The Influence of the Value Changes on the Perception of Costume Color
Xiaofeng Jiang
- P4.16** High Speed Biochip Scanning System with Rotational Pick-Up Mechanism
Sookyung Kim, Wonhyung Cho, Ki Seong Seo, Sangbin Lee, Kyung-Ho Kim, Seung-Yop Lee
- P4.17** Reverse Phase Layer-by-Layer Self-Assembly of Polymers: A Strategic Tool for New Applications
J. Bai, S. Beyer, D. Trau
- P4.18** Aortic and Arterial Elasticity Determination by Photoplethysmographic Technique
M. Huotari, N.Yliaska, V. Lantto, K. Maatta, , J. Kostamovaara
- P4.19** Capturing the Inventive Activity of Electronic Medical Equipment via Analysis of Patents
Zhaolian Ouyang, Hui Chi, Guozhong Yang
- P4.20** The Effects of Different Passive Warm-Up on Indirect Markers of Muscle Damage after Eccentric Exercise
Kuo-Wei Tseng, Yu-Fu Hsiao, Chih-Chung Hu, Pin-Hsien Wu, Tung-Wu Lu

Poster	Session III, IV	QR Podium, 15:30 – 16:00, 28 July/ 12:15 – 12: 45, 29 July
		Mount up 8:00-12:00, 28 July; Remove 16:30-17:30, 29 July

Track 3 Biomechanics, Sports Medicine and Rehabilitation

- P3.1** Apoptosis in Periodontal Ligament Cells after Being Challenged by Cyclic Stretching Force
F. Zhang, C. Xu, Y. Hao, J. Ma, J. Li, M. Xie
- P3.2** Monte Carlo Investigation of the Optical Path Length for Near-Infrared Spectroscopy in Risk Tissue for Pressure Ulcer
Yan Wang, Zengyong Li, Changhou Lu, Ming Zhang
- P3.3** Cyclic Stretching Force Induces Apoptosis in Human Periodontal Ligament Cells via Caspase-9
C. Xu, Y. Hao, J. Ma, J. Li, M. Xie, F. Zhang
- P3.4** Self-Reported Seat Discomfort amongst Economy Class Aircraft Passenger
Chee-Fai Tan, Wei Chen, Matthias Rauterberg
- P3.5** The Effect of Shoe Heel Location on Plantar Pressure
Xingfang Lu
- P3.6** Beneficial Influence Research of Vibration on the Bone Joint Disease
Zhi-Xiang Li, Chun-Lin Zhang, Chao Ma
- P3.7** Effect of Wedged Insoles on Knee Adduction Moment in the Normal Joint
Meng Huang, Ming Zhang
- P3.8** The Effect of Medial Collateral Ligament Injuries at Varying Degrees on Knee Joint
Jie Yao, Yubo Fan, Ming Zhang
- P3.9** Cyclic Strain Promotes Proliferation of Human Periodontal Ligament Cell via PI3K/Akt and ERK Signaling Pathway
Yue Han, Jin-Song Pan, Dan-Peng Chen, Xiao-Yan Mao, Ying-Xin Qi, Zhi-Qiang Yan

- P3.10** Changes of Internal Morphology of Vertebra under the Influence of Fatigue Damage and Repair
Chao Wang, Chun-Qiu Zhang, Xin Dong, Han Wu
- P3.11** Use of Model-Based Image-Matching Technique on Ankle Motion Measurement
Kam-Ming Mok, Daniel Tik-Pui Fong, Tron Krosshaug, Kai-Ming Chan
- P3.12** A Wireless In-Shoe Heel Impact Pressure Monitoring System
Mandy Man-Ling Chung, Daniel Tik-Pui Fong, Paul Lo, Kai-Ming Chan
- P3.13** Circuit Design of a Myoelectric Stimulation Device for Correcting Excessive Ankle Supination to Prevent Ankle Sprain Injury
Vikki Wing-Shan Chu, King-Fai Yu, Daniel Tik-Pui Fong, Patrick Shu-Hang Yung, Kai-Ming Chan
- P3.14** Makeup Application Tools for a Person Who Is Blind or Has Low Vision - Tools with Lipgloss in Place of Lipstick
Yasuhiro Matsuda, Mika Yoshimura, Makiko Yamasaki, Tsuneshi Isomura
- P3.15** The Biomechanical Effects of Osteoporosis Vertebral Augmentation on Treated and Adjacent Non-treated Vertebral Bodies: a Finite Element Study
Licheng Zhang, Bin Feng Yu, Lijun Wu, Guojing Yang, Yalan Fu
- P3.16** Biomechanical Evaluation of Posterior 270° Decompression and Reconstruction for Severe Thoracolumbar Fractures with Three-Column Injuries
Yuanming Ouyang, Huazi Xu, Lijun Wu, Xiangyang Wang
- P3.17** Mechanics Model at Different Stage of Cytokinesis
Meiwen An, Xiaona Li
- P3.18** The Effect of Loading History on Disc Rheology during Creep and Relaxation
Y.W. Kuo, Z.C. Lin, S.M. Yang, J.L. Wang
- P3.19** Effects of Different Period of Continuous and Intermittent Vibration on the Mechanical Properties in Prevention of Osteoporosis
Dong Zhu, Changsheng Li, Xin Dong, Jiazi Gao, He Gong, Xizheng Zhang
- P3.20** A Study of Human Injury during the Aircrew/Seat Through-the-Canopy-Ejection
Zhiqiang Li, Longmao Zhao, Yonggang Zhao
- P3.21** Lattice Boltzmann Simulations of Cells Moving in a Siphon
H.B. Li, W.W. Yan, Y. Liu, B.M. Fu
- P3.22** Effect of Channel Curvature on Cell Adhesion in Micro-circulation
W.W. Yan, Y. Liu, B.M. Fu
- P3.23** The Effect of the Forefoot Plantar Pressure Distribution of Hallux Valgus after Ludloff Osteotomy
Wei Mao, Gang Wu, Haitao Li, Chao Sun, Xianjun Wang, Jiangzhong Zhang
- P3.24** Changes of Blood Pressure and Blood Flow at Distal Anastomosis after Different Bypass Surgery
Wei Zhao, Zaipin Xu
- P3.25** Plantar Pressure and Shear Stress in High-Heeled Shoes
Cong Yan, Luximon Yan, Ming Zhang
- P3.26** Prediction of *in vivo* Bone Permeability and Fluid Flow Induced by Mechanical Stimulation
Yi-Xian Qin
- P3.27** Comparison between the Functional Performance of the Normal Subjects during Walking and Standing with HGO and a New RGO Orthoses
Mohammad Taghi Karimi, William Spence, Alexander Nicol
- P3.28** Evaluation the Amount of the Loads Applied on the Hip Joint Complex during Walking the Normal Subjects with a New Reciprocal Gait Orthosis
Mohammad Taghi Karimi, William Spence, Alexander Nicol
- P3.29** What Would Be the Best Performance of Paraplegic Subjects during Walking with a RGO Orthosis?
Mohammad Taghi Karimi, William Spence, Alexander Nicol
- P3.30** An Acceleration-based Control Framework for Interactive Gaming
Tiexiang Wen, Lei Wang, Jia Gu, Bangyu Huang
- P3.31** Curvature Direction Effects for Loading Distribution on Polyethylene Component of Artificial Disc - A Biomechanical Study with Finite Element Method
Wen-Chuan Chen, Hung-Wen Wei, Yu-Wen Chen, Cheng-Kung Cheng
- P3.32** Positioning Effect on Sagittal Trajectories of Vertebral Centers and Range of Motion for DePuy S.B. Charité III Total Disc Replacement

Wen-Chuan Chen, Tsung-Wei Chang, Hung-Wen Wei, Cheng-Kung Cheng

- P3.33** The Effect of Virtual Reality Training on Reaching Movement in Patients with Parkinson's Disease
Ching-Yi Wang, Wen-Juh Hwang, Ching-Fan Sheu, Li-Chieh Kuo, Hui-Ing Ma
- P3.34** Inter-Digit Force Coordination during Jar Opening in Patients with Carpal Tunnel Syndrome
Fong-Chin Su, Chen-Yu Huang, Sheng-Kun Chang, I-Ming Jou, Kao-Chen Wua, Li-Chieh Kuo
- P3.35** The Force Shares of the Digits during Jar Opening and Closing
Chen-Yu Huang, Sheng-Kun Chang, Li-Chieh Kuo, Fong-Chin Su
- P3.36** The Effects of the Elastic Tapping on Jumping
Chen-Yu Huang, Tsung-Hsun Hsieh, Fong-Chin Su, Po-Lin Wu
- P3.37** The Effects of Single-Axis and Multi-Axes Designs on Instant Rotational Center of PS Knee System
Yu-Liang Liu, Jiann-Jong Liau, Chih-Hui Chen, Hung-Wen Wei, Cheng-Kung Cheng
- P3.38** Three-Dimensional Finite Element Simulation of the Total Knee Joint in Deep Flexion
Yuan Guo, Xu-shu Zhang, Wei-yi Chen
- P3.39** The Effect of Single Visual and Auditory Cues on Movement Kinematics in Patients with Parkinson's Disease
Po-Hung Chou, Wen-Juh Hwang, Li-Chieh Kuo, Keh-chung Lin, Hui-Ing Ma
- P3.40** Gait in Pregnancy-related Pelvic girdle Pain (PPP): Amplitudes, timing, and coordination of horizontal trunk rotations
Wenhua Wu, Onno G. Meijer, Sjoerd M. Bruijn, Hai Hu, Jaap H. van Dieën, Claudine J.C. Lamoth, Barend J. van Royen, Peter J. Beek
- P3.41** Experimental Method to Analyze Passive Deformation of Iris Tissue Based on StereoVision
Xuefeng Bo, Jin Yang, Jinghua Liu, Xia Li, Haiying Quan, Zhicheng Liu
- P3.42** Design of the Custom Made Replacement after Large Mandibular Resection
Z. Horak, R. Jirman
- P3.43** Compensation Strategies for Balance Control of the Elderly
I-Fang Cheng, Fong-Chin Su, Chih-Han Chang, Chii-Jeng Lin
- P3.44** Investigation on the Structure and Mechanical Properties of the Human Dentin-Enamel Junction using Focused Ion Beam
Y.L. Chan, A.H. W. Ngan, N.M. King
- P3.45** Crucial to Realize the Wireless Sensor Network for Health Care Services
Lili Zhang, Xiaoming Wu
- P3.46** Research on transmissibility of two kinds of vibration in human body lower limb
Chao Ma, Ming Zhang, Chun-Lin Zhang, Zi-Qiang Zhao
- P3.47** Developing a Biofeedback Apparatus for Knee Performance of Patients with Anterior Crucial Ligament Deficiency
Yu-Chia Wang, Hung-Jen Lai, Huang-Ren Chen, Chung-Huang Yu, Cheng-Kung Cheng
- P3.48** Mechanical Evaluation of Silicone Gel on Skin Wound Healing
C.H. Chiang C.S. Yang, C.H. Yeh, M.Y. Chen, F.C. Su, C.Y. Liu, C.Y. Chen, M.L. Yeh
- P3.49** The Analysis of Muscle Fatigue and EMG Activities during the Prolonged Computer Work
Wonhak Cho, Wooyong Lee, Hyeonki Choi
- P3.50** Analyzing Current Patents of Power-Generating Shoe on Power Generating Methods and Gait Influences
Yi-Hung Chen, Hung-Jen Lai, Chung-Huang Yu, Yu-Cheng Lin, Chi-Wei Chou, Cheng-Kung Cheng
- P3.51** A Three-dimensional Sole Deformation Measurement of Power Generating Shoe during Gait
Chi-Wei Chou, Hung-Jen Lai, Yi-Hung Chen, Wen-Chuan Chen, Chung-Huang Yu, Cheng-Kung Cheng
- P3.52** Evaluation of the Autonomic Nervous System by Measuring Heart Rate Variability in Healthy Female Receiving Cervical Traction
Wen-Dien Chang, Jih-Huah Wu, Joe-Air Jiang
- P3.53** *In vivo* Assessment of Soft Tissue Artefacts Around the Knee during Flexion/Extension and Level Walking
Tung-Wu Lu, Tsung-Yuan Tsai, Horng-Chaung Hsu
- P3.54** The Validation of Wii Balance Board™ for Measuring Postural Sway and Weight-Shifting during Standing
Mei-Hua Chen, Hung-Jen Lai, Yu-Chia Wang, Chih-Wei Liao, Chung-Huang Yu,

- Cheng-Kung Cheng*
- P3.55** Accuracy of a Volumetric Model-Based Registration Method for Measuring Three-Dimensional Natural Ankle Kinematics with Single Plane Fluoroscopy
Cheng-Chung Lin, Tung-Wu Lu, Po-Hsiang Yu, Guan-Ying Li, Chien-Chung Kuo, Tsung-Yuan Tsai, Mei-Ying Kuo
- P3.56** Investigating the Failure Factors of Low Temperature Thermoplastic Anterior Ankle-Foot-Orthosis by Finite Element Analysis
Keng-Hao Cheng, Hung-Jen Lai, Hsiao-Chin Cheng, Wen-Chuan Chen, Chi-Wei Chou, Cheng-Kung Cheng
- P3.57** Finite Element Study of Expandable Cage in Adjacent Vertebral Body Fractures of Spine
Hsiao-Chin Cheng, Wen-Chuan Chen, Cheng-Kung Cheng
- P3.58** Gait Analysis of Patients with Type II Diabetes Mellitus during Obstacle-Crossing
Wei-Chun Hsu, Ming-Wei Liu, Tung-Wu Lu, Hao-Ling Chen
- P3.59** Investigation of Surface EMG Classification Based on Empirical Mode Decomposition
Lei Min, Meng Guang, Jiashui Cheng
- P3.60** Studies on Temperature and Blood Flow Changes of the Extremities after Cold Stimulation and Finger Movement by Infrared Thermography
Heng-Di Zhang, Ying He, Jun Zhang, Hong-Wei Shao, Li-Zhong Mu, Chang-Jin Ji
- P3.61** Hydrodynamics and Mass Transport in a Network Model of a Renal Glomerulus
Zaiyi Shen, Ying He
- P3.62** The Effect of Different Partial Foot Amputation Levels on Gait
Wei Chen, Fang Pu, De-Yu Li, Yubo Fan, Ming Zhang
- P3.63** *In vivo* 3D Kinematics of the Subaxial Cervical Spine during Flexion/Extension and Lateral Bending using a Volumetric Model-Based Image Registration Method with Bi-Planar Fluoroscopy
Tung-Wu Lu, Cheng-Chung Lin, Tsung-Yuan Tsai, Ting-Ming Wang
- P3.64** The Biomechanical Evaluation of Pedicle Screw Fixation to the Lumbar Spine
Lizhen Wang, Yubo Fan, Nan Li
- P3.65** Biomechanical Effect of Kyphoplasty on the Adjacent Vertebrae in Osteoporotic Vertebral Fracture
Wenxin Niu, Yubo Fan
- P3.66** Intelligent Reconstruction for Occlusion of Crown Design
Jing-Yun Han, Yubo Fan
- P3.67** Effect of Low Magnitude and High Frequency Vibration on Bone Healing in Trans-Tibial Amputation
H.S. Man, A. Leung, Ming Zhang
- P3.68** A New Model of Glaucoma in Rats by Injecting Silicon Oil into Anterior Chamber
Xueqian Guo, Bei Tian, Nan Xie, Bojun Chen, Fei Song, Ming Zhao, Zhicheng Liu
- P3.69** Reconstruction of Three-dimensional Finite Element Model of a Human Mandible with Thin-layer CT Scanning and Mimics Software
Yu Zhang, Wei-Min Zhu, Ying-Ming Wan, Xiao-Lin Xu

Track 5 Cellular, Genomic and Biomolecular Engineering

- P5.1** Mechanical Stretch and 5-Azacytidine Affect Differentiation toward Cardiomyocytes of Mesenchymal Stem Cells
Yong Guo, Xi-Zheng Zhang, Rui-Xin Li, Chun-Qiu Zhang, Chun Guo, Yanjun Zhang, Yu-Xian Yan
- P5.2** Simulated Microgravity Inhibits Erythroid Differentiation by Decreasing the Expression of GATA-1 in CD34+ cells
Qian Wang, Lei Zheng, Jing-Zheng Liu, Tian-Yu Zhong, Shi-Long Xiong
- P5.3** Identification of Reference Genes for Normalization Cartilage Tissue Transcripts
Ying Liu, Ronglan Zhao, Bei Sun, Rui Zhang, Jingyu Zhang, Dongchun Liang
- P5.4** Molecular Cloning and Characterization of Non-Biological Stress Resistant Genes in *Porphyra Yezoensis*
Ping Wang, Lefei Yi, Xianghong Zhou
- P5.5** Measuring Two-Dimensional Kinetics of 2-Integrin and ICAM-1 Bindings in Leukocyte-Facilitated Melanoma Metastasis by a Micropipette Aspiration Technique
Changliang Fu, Chunfang Tong, Manliu Wang, Yuxin Gao, Mian Long

- P5.6** Expression of Micro RNAs during Adipogenic Differentiation of Adipose Derived Stem Cells in vitro
Yong Zhang, Xiaoyu Li, Jingang Xiao, Weidong Tian, Hang Wang, Wei Tang, Jie Long, Xiaohui Zheng, Lei Liu
- P5.7** Sow Beans, Reap Melons- the Function of Bacillus Subtilis glnA Gene in Escherichia Coli
Jian Wu, Chunyang Wang, Juan Du, Guifu Dai, Xinqin Zhou, Jilun Li
- P5.8** Characterization of Optical Scattering Properties of Cells under Ischemic Stroke Conditions using Fiber-Guided Near Infrared
Yu-Jing Lin, Ching-Huang Hsu, Jia-Jin Jason Chen
- P5.9** Low Dose Alpha-particle Irradiation Induced Bystander Effect under Hypoxia Condition
Hui Liu, Chufeng Jin, Gui Li, Yican Wu, Lijun Wu, FDS Team

Special Symposium 2 Textile Bioengineering

- P01** The Retraction Investigation of Yak Hair Fiber during the Roller Stretching
Jian Liu, Yu-Bo Hu, Wei-Dong Yu
- P02** Study on Extracting of Natural Plant Dyestuff by Enzyme-ultrasonic Method and its Dyeing Ability
Wen-Jing Liu, Yong-Zhu Cui, Lei Zhang, Sen-Fang Ren
- P03** ¹H-NMR Spectroscopy Analysis of Homo- and Copolymers of L-lactic Acid
Ping Lan, Jia Lv
- P04** Study on the Camouflage Protective Ability of Lithospermum Erythrorhizon
Lan Zhou, Jian-Zhong Shao, Li-Qin Chai
- P05** Wool Keratin Extraction and Application for Wool Shrinkproofing Finishing
Song-Min Shang, Jin-Tu Fan, Lei Zhu
- P06** Preparation of Modified Chitosan with Quaternary Ammonium Salt
Wei-guo Chen, Xin Liu, Hai-Xiang Chen
- P07** Analysis on the Function of Lignin in Hemp Xyloid Stem Viscose Fiber
Yong-Kai Zhou, Jie Zhang, Hua Zhang, Jian-Chun Zhang
- P08** A Study on the Antimicrobial Finishing of Rodalon on Silken Carpet
Ali Ashjarian, Reza Ghazi-saeidi, Abusaeid Rashidi, Ramin Khajavi
- P09** Designing and Weaving of Similar “品” Shape Three-dimensional Woven Fabric Anticipated to Be Used as Human Adam’s Apple
Hong-Ying Zhu, Hai-Wen Liu, Gui-Fen Yao, Li-Hong Bai, Feng Xiao
- P10** Analysis on the Effect of the Clothing Super-functional Design on Fashion Design
Yan Yuan, Xin Zhang, Bing-Bing Liu
- P11** Application of Chitosan Nano-particles in Dyeing Process of A. pernyi Silk Fabric
Yan-Hua Lu, Zhao-Dan Yang, Xu Hao
- P12** Durable Antimicrobial Finish of PET with 6-(1-anthraquinonyl Amino) hexyldimethylammonium bromide
Wen-Jing Liu, Yong-Zhu Cui
- P13** Study on Creep Property of Vortex Spun Yarn
Zhuan-Yong Zou, Long-Di Cheng
- P14** Knitwear Design Innovation in the Details
Mei-Lian Yu, He Liu
- P15** The Design and Research of Linear Costume
Li-Ning Qi, Chi Liu, Hai-Xia Zhang
- P16** Lu brocade’s Art Characteristics and Its Application in Modern Fashion Design
Xue-Ling Ren, Yue-Rui Liu
- P17** Common Problem Analysis and Correction of Bra Try-on In Undergarment Factories
Meng-Jie Li, Xiao-Wen Jiang, Hui Guo, Ya-Shuang Gao
- P18** Garment CAPP System Design and Optimization of Procedure Balance
Hong Mu, Xin Lu
- P19** Study of Feature Parameters for Digital Bra Cup
Jing Han, Xin Zhang, Bo-An Ying, Quan Pan
- P20** Analysis of Molding Process Parameters of Bra Cup
Han-Yan Wu, Xin Zhang, Bo-An Ying, Quan Pan, Jing Han

- P21** Humanized Package Design of Baby's Soft Gauze Products
Jia Lv, Mei-Lian Yu, Ping Lan
- P22** Study on an Improved Design of Women's Corset
Yu Lei, Chi Liu, Min-Wei Zhong, Xin-Hui Wang
- P23** Study on the Functional Design of Farmer's Overalls
Min-Wei Zhong, Chi Liu, Yu Lei
- P24** Study on Work Time in Bra Sewing Assembly Line
Xiao-Min Zheng, Chi Liu, Lin-Lin Zhao, Hao-Ran Yun
- P25** The Exploration on the Relationship between Female Breast Shape and Princess Line Design
Lin-Lin Zhao, Chi Liu, Xiao-Min Zheng
- P26** Multi-Senses Design of High Performance Running Wear
Shu Sun, Lei Yao, Raymond Au, Ameersing Luximon, Jun-Yan Hu, Yi Li
- P27** Study on Collar Pattern Design of Knitted Sweater Based on Human Body
Can-Yi Huang, Xin Zhang, Li-Na Cui
- P28** Fixed-point Bending Fatigue Properties of PBO fiber
Guang-Ming Cai, Wei-Dong Yu
- P29** Study on the Insulating Performance and Flexibility Properties of Flexible Multilayer Composite Fabric
Jin-Jing Chen, Wei-Dong Yu
- P30** Effect of Pre-Treatment on Properties of Preform Based on Natural Fibers and Thermoplastics
Jin-Hua Jiang, Ze-Xing Wang, Hui-Hong Xu, Ya-Ming Fan, Ying Xi, Nan-Liang Chen
- P31** Comparison Analyses of Correlation Degree between the Number of Neps, Fiber Neps and SCN of Card Sliver by AFIS and aQura
Ji-Peng Cao, Peng-Zi Sun
- P32** Study on Neck Tactile and Mechanical Properties of Spun Silk Fabrics
Cai-Yuan Kuang, Guo-Lian Liu
- P33** Metallic Silk Fabrics Antistatic Performance Study
Zi-Min Jin, Juan Yan, Yin-Jie Zhen, Yu-Xiu Yan, Li-Yu Ma
- P34** Study on Strength Distribution Based on Weibull Model for PVC Calendered Flexible Composites
Ze-Xing Wang, Jin-Hua Jiang, Nan-Liang Chen
- P35** Stretch Behaviour of Elastic Knitted Fabric
Jin-Yun Zhou, Yi Li, Xu-Yong Cao
- P36** Study on Prediction Model for Seamless Underwear Fitness in Comfortable Apparel Pressure – Based on Young Women's Lower Body
Yu-Xiu Yan, Zi-Min Jin, Shi-Jia Yu, Jian-Wei Tao, Li-Ling Cai
- P37** Analysis of Pressure Distribution of Brassiere's under Wires
Li-Zhuo Wang, Dong-Sheng Chen, Bin Lin
- P38** Research on Pressure Distribution of Female Figure-control Underpants
Hai-Yan Wang, Guo-Lian Liu
- P39** Analysis on Functional Requirements to the Sole of Basketball Shoes Based on the Distribution of Plantar Pressure
Li-Na Cui, Xin Zhang, Can-Yi Huang
- P40** Maximum Plantar Pressures, Their Locations and Their Use in Footwear Design
Wen-Yan Li, Ravindra S. Goonetilleke
- P41** Sensory Elements of Innovative Display in Fashion stores
He Liu, Mei-Lian Yu
- P42** Emotional and Rational Perception in Fashion
Mei-Lian Yu, Jia Lv, He Liu
- P43** The Influence of the Value Changes on the Perception of Costume Colour
Xiao-Feng Jiang, Fang Qin, Shan-Shan Wang, Guo-Lian Liu
- P44** Comparative Study on Prediction of the Girths of Young Females' Body
Xiu-Li Huang, Guo-Lian Liu
- P45** Investigation of the Present Situation of Chinese Students' School Uniforms
Hai-Xia Zhang, Xiao-Wen Jiang, Li-Ning Qi
- P46** Female's Girth Fitting Based on Sizes from 2-Dimensional Pictures
Fei Tan, Xiao-Hui Xu, Guo-Lian Liu
- P47** Thermal Regulating Performances of PCM Fabrics Incorporated With Silver Nano Composite

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Qing-Wen Song, Yi Li, Marcus Yuen, Ian-Wei Xing
- P48** Research on Tights Bodies Structure of Feminine Kyphosis Bodys
Xin Lu, Hong Mu
- P49** Research on the Differences of Feminine Consumer to Bra Function Evaluation
Ya-Shuang Gao, Xiao-Wen Jiang, Xin Zhang, Meng-Jie Li
- P50** Research of Children's Pants Based on Chinese Child's Buttocks-waist Characteristic
QingZhu Ye, Xin Zhang
- P51** Study on the Body Foundation of Major Parts' Dimensions in the Bra Pattern Design on the Basic of 3-D Body Scanning
Su-Zhen Liang, Xin Zhang, Dong-Sheng Chen
- P52** Analysis about Male Neck-fitted Stand-collar based on Relevant Neck Factors
Li-Zhao, Dong-Sheng Chen, Yin-Jing-Gan, Jian-Gang-Wang
- P53** The Affecting Factors of the Garments Profile Appearance
Ji-Hong Xu, Shu-Ping Gao, Wen-Bin Zhang
- P55** Influence of Fabric Colour and Type on UV-Blocking Properties
Hong Chen, Huang Chao, Xu-Yong Chao, Ru Lv, Lei Yao, Patrick Hui, Yi Li
- P56** An Overview of Standards Concerning Color Fastness Assessment for Textiles
Ya-Li Zhang, Xue-Mei Ding, Xiong-Ying Wu
- P57** Colour Impression of Volleyball Team Shirt Used in Beijing Olympic Games: Prediction through Colour Emotion Equation
Masanori Iwase, Saori Kitaguchi, Tetsuya Sato, Kanji Kajiwara
- P58** Effect of "Technometric" Attributes on Productivity of Textile and Clothing Industry
KC Ho, Yi-Pu Wang, Patrick Hui, Yi Li
- P59** A Study on Evaporative Resistances of two Skins Designed for Thermal Manikin Tore under Different Environmental Conditions
Fa-Ming Wang, Chuan-Si Gao, Kalev Kuklane, Ingvar Holmér
- P60** Effect of Temperature and Hot Water on Creep Deformation of Spandex Filament
Zhao-Qun Du, Wei-Dong Yu
- P61** Analysis of clothing enterprises Web site design
Jun Ren
- P62** Characterization of Amino Acids Group from Alkaline Hydrolyzed Wool
Ai-Zheng Chen, Zheng Zhao, Yan-Xia Han, Yi Li, Jun-Yan Hu
- P63** Development of Dynamic Block Pattern for Bioengineering of Sportswear
Yong-Jin Wang, Pik-Yin Mok, Yi Li, Yi-Lin Kwok