

ICBE2016-UNNC Programme

Tuesday, June 21 st 2016	
15:00 - 20:00	Registration and Welcome Reception

Wednesday, June 22 nd 2016	
From 8:00 Information desk open	
9:00 - 10:00	Opening + Bionic prize
10:00 - 11:00	<p>Plenary Session - 1, Chair: Yuying Yan</p> <p><i>The Ecology of Human Infrastructure</i> Prof. Weissburg J Marc Georgia Insitute of Technology, USA</p> <p><i>Smart Interfacial Materials from Super-Wettability to Binary Cooperative Complementary Systems</i> Prof. Lei Jiang Institute of Chemistry, The Chinese Academy of Sciences, China</p>
11:00 - 11:20	Coffee breaks (Conference hall)
11:20 - 12:35	<p>Keynote Session - 1, Chair: Thomas Stegmaier</p> <p><i>Explore the Shear-Induced Adhesion Properties of a Bio-Inspired Fibrillar Adhesive</i> Dr. Carlo Menon Simon Fraser University, Canada</p> <p><i>Drag Reduction using Riblets with Application to Sports</i> Prof. Kwing-So Choi University of Nottingham, UK</p> <p><i>Eccentric structure characteristics and mechanical properties of tamarisk (Tamarix aphylla)</i> Prof. Zhiwu Han Jilin University, China</p>

12:35 - 13:45	Lunch breaks (Student Canteen)				
13:45 -15:00	<p>Keynote Session - 2, Chair: YJ Lin and Jianqiao Li</p> <p><i>Biomimetics on gecko locomotion: from biology through engineering to applications</i> Prof. Zhengdong Dai Nanjing University of Aeronautics and Astronautics, China</p> <p><i>Influence of Bionics and Nature in Sports and Ball Aerodynamics</i> Dr. Rabindra D. Mehta Sports Aerodynamics Consultant, USA</p> <p><i>Bio-inspired interfacial materials with enhanced droplet mobility: Fundamentals and multifunctional applications</i> Dr. Zuankai Wang City University of Hong Kong, Hong Kong</p>				
15:00-16:10 Parallel Session Including session keynote	PS1-1 (Chair: Chu Shiang Chen and Andrew Parsons)	PS2-1 (Chair: Ioana Demetrescu and Zuankai Wang)	PS3-1 (Chair: Peter X. Ma and Sanjay P. Sane)	PS4-1 (Chair: Ana Moita and Tomohiko Yamaguchi)	PS5-1 (Chair: Friedrich G. Barth and Hoon Cheol Park)
	Invited/session keynote Paper ID: 16152 Trade-offs, evolution and biomimetics <i>Julian F. V. Vincent</i>	Invited/session keynote Paper ID: 13245 A Study on the Effects of Bio-inspired Superhydrophobic Coatings on Ice Accretion Process over Airfoil Surface for Aircraft Icing Mitigation <i>Hui Hu</i>	Invited/session keynote Paper ID: 18261 Harvesting energy with artificial muscles: challenges and solutions <i>Iain A. Anderson</i>	Invited/session keynote Paper ID: 14283 Solving the trade-off between flow separation and force generation in owl flight: a computational study <i>Hao Liu</i>	Invited/session keynote Paper ID: 1248 The main progress and prospects of beetle forewing biomimetic research in China <i>Jinxiang Chen</i>
	Paper ID: 1554 An aco-based discrete and continuous optimization algorithm for optimising multi-levels truss topological design	Paper ID: 1346 Slippery surface with high-temperature resistance and its application in anti-adhesion for soft tissue <i>By P.F. Zhang et al.</i>	Paper ID: 1920 Feedback Control of Artificial Cells <i>By J. Ali et al.</i>	Paper ID: 1484 Design of bionic shovel and performance analysis by DEM simulation <i>By R. Zhang et al.</i>	Paper ID: 12284 A boundary integral model to study the effects of piezoelectricity on bone <i>By V. Duarte et al.</i>

	By M. Nwaki et al.				
	Paper ID: 1592 Butterfly wings with superhydrophobic and superoleophilic properties for efficient oil-water separation By Z.W. Han et al.	Paper ID: 1382 Self-jumping of condensed micro-drops on sprayable and stable nano-porous superhydrophobic coatings By S.L. Wang et al.	Paper ID: 18282 Slipping Friction Force-Impulse Mechanism, (FIM): a biomimicking skeletal muscle for Dynamic Agile Animal Robots By F. Nickols	Paper ID: 14129 Lattice Boltzmann modelling of microflow dynamics over structured surfaces By W.N. Zhou et al.	Paper ID: 1042 Dynamic simulation in ostrich didactyl foot locomotion on sand based on Discrete Element Method By R. Zhang et al.
	Paper ID: 15161 Bionic design for reducing adhesive resistance of the ridger inspired by boar's head By Z. Meng et al.	Paper ID: 1389 Structure-function Adaptations of Anti-erosion Terga on Two Scorpions, Parabuthus transvaalicus and Heterometrus spinifer By Z.W. Han et al.	Paper ID: 1956 A Climbing Robots Based on Claws Interlocking By Z.H. Zhao et al.	Paper ID: 14138 Water trapping and drag reduction effect of fish Ctenopharyngodon idellus scales and its simulations By Z.B. Jiao et al.	Paper ID: 1070 Nanomechanical alterations in the internal mammary artery of patients with high Pulse Wave Velocity By Z. Chang et al.
	Paper ID: 15293 Biological-inspired hybrid control methods based on genetic algorithm and artificial neural network PID for piezoelectric actuator By M.L. Zhou et al.	Paper ID: 1395 Mechanical durability of superhydrophobic nanostructured copper foams for oil-water separation By H.Y. Zhu et al.		Paper ID: 14150 Study on water migration in plant xylem with NMR By J.J. Hong et al.	Paper ID: 1075 Towards a bio-inspired musculoskeletal robot to investigate human movement biomechanics By K.Y. Wang et al.
16:10 - 16:30	Coffee breaks (Parallel session building)				
16:30 - 17:45	PS1-2 (Chair: Ille C. Gebeshuber and Michael U. Hensel)	PS2-2 (Chair: Junping Zhang and Yan Liu)	PS3-2 (Chair: Benard Chirende and Zhendong Dai)	PS6-1 (Chair: Zhenning Liu and Jiang Zhou)	PS5-2 (Chair: Zhihui Zhang and Miguel Cerrolaza)
Parallel Session Including session	Invited/session keynote Paper ID: 15319	Invited/session keynote Paper ID: 13216	Paper ID: 19108 Evolution and bionics of	Invited/session keynote Paper ID: 12272	Paper ID: 1090 Experimental research in the

keynote	Study of a bionic system for health enhancements Shujun Zhang	Functional microstructural surface manufacturing and assessment Xun Chen	rover configuration By Y. Jia et al.	Bionics Engineering of Osteochondral Scaffold: Grand Challenges Chaozong Liu	adhesive characteristics of ostrich foot plantar surface on sand By R. Zhang et al.
	Paper ID: 15274 Investigations on Growth and Building By P. Gruber et al.	Paper ID: 13171 Experimental Study on the Effect of LST on Tribological Performance of Cast Iron By F.Y. Yan et al.	Paper ID: 19109 Geometric Morphometric Study of Chinese Mitten Crab <i>Eriocheir Sinensis</i> Milne-Edwards By X.D. Zhang et al.	Paper ID: 1219 The microstructure and mechanical properties of the straight tendrils from Virginia creeper (<i>Parthenocissus quinquefolia</i> [L.] Planch.) By S.Y. Chen et al.	Paper ID: 10103 Biomechanics of locomotion in Giant pandas By S.S. Yuan et al.
	Paper ID: 15262 Column Structure Bionic Design of Heavy Duty Machine Tool Based on TRIZ Theory By F.H. Wu et al.	Paper ID: 13175 Wettability of Coatings Based on Poly (vinyl alcohol) and SiO ₂ Nanoparticles By Q. Wang et al.	Paper ID: 19116 The bionic structure and motion behavior of unmanned ground Vehicle By B. Su et al.	Paper ID: 1221 Dynamic performance of spider web, Araneidae By Y. Guo et al.	Paper ID: 10130 Dynamic Regulation of the Whole-body Centre of Mass Motion during Human Level Walking By Z.R Luo et al.
	Paper ID: 15294 Particle swarm and bat-inspired optimization algorithm-based parameter identification of Krasnosel'skii-Pokrovskii model for piezoelectric hysteresis By R. Xu et al.	Paper ID: 13225 Bioinspired gradient surfaces with controlling of dynamic wettability By Y.M. Zheng	Paper ID: 19132 Recent progress of olfaction localization for mobile robot By Y.Y. He et al.	Paper ID: 1293 Fog-collecting of metal foam with different surface wettability assisted by centrifugation By K.J. Ji et al.	Paper ID: 10127 A preliminary research on the mechanism in bamboo weevil (<i>otidognathus davidis</i> fair) piercing through the thick bamboo epidermis By J. Zhou et al.
	Paper ID: 1571 Electrochemical and	Paper ID: 13137 A DEM simulation for	Paper ID: 19178 Development and		Paper ID: 10157 How birds avoid traumatic

	Antibacterial Properties of a Nanostructured New Dental Alloy <i>By A.B. Stoian et al.</i>	mechanism of drag reduction of biomimetic surface of farm machinery riding on paddy field <i>By Q. Sheng et al.</i>	Application of Fish Motion Capture System <i>By B. He et al.</i>		brain injuries? <i>By G. Jiang et al.</i>
Free					

Thursday, June 23 rd 2016	
From 8:00 Information desk open	
8:30 - 10:00	<p>Plenary Session - 2, Chair: Julian F. V. Vincent, Jianqiao Li,</p> <p><i>Bionic Drilling Bit</i> Prof. Youhong Sun Jilin University, China</p> <p><i>Bio-integrated Design - An alternative Approach to Architecture and Biology Cross-Species</i> Prof. Michael U. Hensel The Oslo School of Architecture and Design, Norway</p> <p><i>Bio-inspired Lubrication and Beyond</i> Prof. Zhou Feng Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, China</p>
10:00 - 10:20	Coffee breaks (Conference Hall)
10:20 - 11:35	<p>Keynote Session - 3, Chair: Zhiwu Han</p> <p><i>Mimicking antibody interactions on-chip for biomedical applications</i> Dr. Pedro Estrela University of Bath, UK</p> <p><i>Innovating Energy Storage Technologies through an Interdisciplinary Approach</i> Prof. Tianshou Zhao HKUST Energy Institute, Hong Kong</p>

	Head Stabilization in Birds –Why and How do they do it? Prof. Daniel Weihs Israel Institute of Technology, Israel				
	PS1-3 (Chair: Shujun Zhang and Firoz Alam)	PS2-3 (Chair: Xun Chen and Hui Hu)	PS3-3 (Chair: Iain A. Anderson and Aihong Ji)	PS4-2 (Chair: Kwing-so Choi and Hao Liu)	PS6-2 (Chair: Feng Zhou and Chaozong Liu)
	Invited/session keynote Paper ID: 15276 An exploration of certain biomimetics prospect in helping to improve the elderly welfare Chu Shiang Chen	Invited/session keynote Paper ID: 1365 LBM Modelling of a Single Droplet on Biomimetic Micro Structured Surfaces Yingqing Zu	Paper ID: 19186 An occupancy counting mechatronic device based on a bio-inspired algorithm for comfort and control optimization in buildings By B. Pavlin et al.	Invited/session keynote Paper ID: 1487 Characterization of Bioflows as a Clinical Diagnostic Tool Ana Moita	Invited/session keynote Paper ID: 12302 Bio-inspired Non-precious Metal-based Metalloporphyrin Frameworks as Oxygen Reduction Electrocatalysts Zhenning Liu
11:35 -12:45 Parallel Session Including session keynote	Invited/session keynote Paper ID: 12269 Mimicking the extracellular microenvironments to direct stem cell fate for tissue regeneration Peter X. Ma	Paper ID: 13249 Controlling wettability for improved corrosion inhibition on magnesium alloy as biomedical implant materials By L. Yan et al.	Paper ID: 19123 Designing the simplest low Reynolds number microswimmers By U.K. Cheang et al.	Paper ID: 14177 Coupled Fluid-Structure FEM Analysis and Optimization of Bionic Non-smooth Turbine Blade of Turbodrill By S. Wang et al.	Paper ID: 12194 The elastic property of the micro soft-core spring made with spirulina coated with silver by electroless deposition technique By J. Cai et al.
	Paper ID: 15311 Biomimetic Design in Anti-icing Strategy By S.Q. Yang et al.	Paper ID: 13295 Fabrication of hybrid super-wettability copper mesh with knife-like-flowers By H.X. Chen et al.	Paper ID: 19188 A Hybrid CPG-DZMP Algorithm for Dynamic Locomotion Control of Biped Robot By B. He et al.	Paper ID: 14184 The effect of arterial wall elasticity on the flow through a stenosis By C. Alegre et al.	Paper ID: 12199 Novel bioresorbable textile composite for biomedical applications By Y.Q Wang et al.
	Paper ID: 16136 Winding Roller Design of	Paper ID: 13308 Durable superamphiphobic	Paper ID: 19198 Simulation and Experimental	Paper ID: 14193 Contact Time Reduction of	Paper ID: 12259 Coupling characteristics of

	Long Foreign Matters in Raw Cotton Based on Structural Bionics By L. Zhao et al.	coatings with low sliding angle By J.P. Zhang et al.	Study of Near-body Pressure Sensing during Fish-Like Propulsion By H. Zhou et al.	Impacting Drops on Superhydrophobic Porous Substrate By Y.H. Liu et al.	the structure and morphology of biomimetic units processed by laser under different processing parameters By P.P Zhang et al.
	Paper ID: 1552 Visual perception of tau-dot for guidance of approaching flights of unmanned aerial vehicles By W.C. Chi et al.	Paper ID: 13182 Experimental Investigation on Anti-wear Properties and Numerical Simulation of Spur Gears with Bionic Microscopic Concave Morphology By L.C. Dong et al.	Paper ID: 19230 An approach of Stepping-up Slope with Similarity Imitation on Humanoid Robot By Y.M. Yao et al.	Paper ID: 14212 Superhydrophobic surfaces: Self-cleaning, air retention and unexpected functionalities of biological and biomimetic surfaces By M. Mail et al.	Rapidly dissolvable alloy materials and bridge plug for fracturing of low permeability reservoir By S.B. Wei
12:45 - 14:00	lunch break (Student Canteen)				
14:00 - 16:05	<p>Keynote Session - 4, Chair: Zhendong Dai, Carlo Menon</p> <p>Architecture → Bio-mimicry → Bio-gimmickry Dr. Robin Wilson The University of Nottingham, UK</p> <p>The bionic mastoid process by nanosintering makes vapor chambers independent of gravity Prof. Jinliang Xu North China Electric Power University, China</p> <p>Bioinspired Hybrid Coatings Enhancing Performance of Implant Alloys Prof. Ioana Demetrescu University Politehnica of Bucharest, Romania</p> <p>Bio-Inspired Surface Materials and Droplet-Generation Prof. Liqiu Wang The University of Hong Kong, Hong Kong</p>				

	Understanding Musculoskeletal System Design Using Simulations and Bio-robotics Dr. Lei Ren The University of Manchester, UK					
16:05 - 16:30	Coffee breaks (Parallel session building)					
16:30 - 17:45 Parallel Session Including session keynote	PS1-4 (Chair: Robin Wilson and Jinliang Xu)	PS2-4 (Chair: Yingqing Zu and Liqiu Wang)	PS3-4 (Chair: Bin He and Francis Nickols)	PS4-3 (Chair: Rabindra D. Mehta and Zhenya Zhang)	PS5-3 (Daniel Weihs and Huawei Chen)	JBE Editorial Board meeting
	Invited/session keynote Paper ID: 15155 Bio-inspired Design for Aero/hydrodynamic Efficiency Firoz Alam	Invited/session keynote Paper ID: 1386 Application of Bioinspired Superhydrophobic Surfaces in Two-phase Heat Transfer Experiments Yan Liu	Invited/session keynote Paper ID: 19317 Adaptive Central Pattern Generator with Synaptic Plasticity for Robot Locomotion Control Poramate Manoonpong	Invited/session keynote Paper ID: 14143 Development of DEM-LBM Hybrid Model for Particles Flow at Low Reynolds Number Tomohiko Yamaguchi	Paper ID: 10128 A preliminary investigation on the triboelectrification during geckos' adhesion By Y. Song et al.	
	Invited/session keynote Paper ID: 16266 Current Status and Development Trend of Petroleum Engineering Bionics By H. Liu et al.	Invited/session keynote Paper ID: 16263 The controlling of the three-dimensional shape of the bionic unit during fabricating by laser Zhihui Zhang	Paper ID: 19240 Performance Comparison Testing of Self-Made and Shadow PAMs By C.Q. Xiang et al.	Paper ID: 14234 The Structure and Function of Hairy Tongue for Nectar Drinking of Honeybees By J.L. Zhao et al.	Paper ID: 10179 Gait parameters of human walking on terrains with different friction By B. He et al.	
	Paper ID: 18246 Bioenergy Utilization and its System Analysis	Paper ID: 1373 Biomimetic fabrication of the pagoda	Paper ID: 19257 Robust Modeling and Planning of RFID	Paper ID: 14235 Effect of V-riblet bionic tire tread pattern on	Paper ID: 10196 The Scaling of the Size and Mechanical	

	By R. Noguchi	hierarchical nanostructures in Morpho butterfly wing scales By Z.W. Han et al.	Network under Uncertain Conditions By J.J. Li et al.	tire hydroplaning By H.C. Zhou et al.	Properties of Long-eared Owl Primary Feather By J.L. Gao et al.
	Paper ID: 16214 Three-dimensional dynamic finite element analysis of interaction between soil and a bionic toothed wheel By Z.H. Zhang et al.	Paper ID: 13153 Study of the Energy Curves during the Wetting Transition for a Droplet on Biomimetic Surface By W. Gong et al.	Paper ID: 19288 Pneumatically responsive superhydrophobic surface By J.N. Wang et al.	Paper ID: 14248 Optimization of okara polysaccharides extraction using subcritical water technology and its antioxidant activity By Z.Y. Zhang et al.	Paper ID: 10201 In vitro Experimental Study on the Biomechanical Performance of Hemi-Pelvis Reconstruction using a Adjustable Hemipelvic Prosthesis By Z.K. Hua et al.
	Paper ID: 18141 A comparison of artificial actuators with biological muscle in actuation properties— a review By W. Liang et al.	Paper ID: 1829 Bio-inspired Surface Coating for Operating a Radiant Cooling Panel below Dew-point Temperature By P. Jarumongkonsak et al.	Paper ID: 19289 Superhydrophobic SERS Substrates By H. Wang et al.	Paper ID: 1418 Numerical Study of Polymer-induced Drag Reduction in Turbulent Pipe Flow By J.F. Yang	Paper ID: 10226 Self-repair behaviour of bone material: how bone regulates itself to keep its strength? By Y.T. Lu et al.

	<p>Paper ID: 1888 Bionic research in the saving-energy walking mechanism based on locomotor performance of ostrich hind limb By R. Zhang et al.</p>			<p>Paper ID: 14160 Effect of micro electrical field on Oil-water separation in hydrocyclone By S. Liu et al.</p>	<p>Paper ID: 10244 An Experimental Study on the Unsteady Wake Vortices behind Tandem Flapping Wings Pertinent to the Flight of Dragonflies By H. Hu et al.</p>	
19:00 - 21:00	Conference Dinner Programme					

Friday, June 24 th 2016						
From 8:00 Information desk open						
8:30 - 10:00	<p>Plenary session - 3, Chair: Zhiwu Han, He Liu</p> <p><i>Water, oil and droplets: New filter and separation systems based on bionic functions</i> Dr. Thomas Stegmaier Institute of Textile Research and Process Engineering Denkendorf, Germany</p> <p><i>Gangnam Style in Microbiorobotics: Biologically Inspired Microscale Robotic Systems</i> Prof. MinJun Kim Drexel University, USA</p> <p><i>Nature's Multiscale Design and Manufacturing Strategies</i> Dr. Xiaodong (Chris) Li University of Virginia, USA</p>					
10:10 - 10:30	Coffee break (Parallel Session Building)					
10:30 - 12:30 Parallel Session Including session keynote	<p>PS1-5 (Chair: Denise K. Deluca, Tianshou Zhao and Julian F. V. Vincent)</p>	<p>PS3-5 (Chair: Poramate Manoonpong and MinJun Kim)</p>	<p>PS5-4 (Chair: Zhongmin Jin, Jinkui Chu and Lei Ren)</p>	<p>PS6-3 (Chair: Jun Cai and Yunhai Ma)</p>	<p>PS7 (Chair: Pedro Estrela and Ryoza Noguchi)</p>	
	Invited/session keynote	Invited/session keynote	Invited/session keynote	Invited/session keynote	Invited/session keynote	

<p>Paper ID: 12187 Sustainable Biomimetic Nanotechnology: Inspiration from Nature for Disruptive Micro- and Nanosystems <i>Ille C. Gebeshuber</i></p>	<p>Paper ID: 15162 Review on application of biomimetics in the design of soil-engaging implements for agricultural mechanization <i>Benard Chirende</i></p>	<p>Paper ID: 15159 Stroke-Plane-Change mechanism for attitude control in an insect-like tailless flapping-wing MAV <i>Hoon Cheol Park</i></p>	<p>Paper ID: 13303 Cross-Species Bioinspired Liquid Repellent Materials <i>Shikuan Yang</i></p>	<p>Paper ID: 17273 Airflow sensing and response in flying insects <i>Sanjay P. Sane</i></p>
<p>Invited/Session keynote Paper ID: 15185 Melt-processed PLA/HA platelet nanoparticle composites produced using tailored dispersants <i>Andrew Parsons</i></p>	<p>Invited/session keynote Bbb Bionic Engineering: from Bio- inspirations to Soft Robotics <i>Kin Huat Low</i></p>	<p>Paper ID: 10122 A Human-Mimicking Pattern Planner for Humanoid Robot Considering Full - body Dynamics <i>By G.B. Sun</i></p>	<p>Paper ID: 1117 Analysis of Photoluminescent and photodegradation reaction in the male damselfly <i>By C.C. Wu et al.</i></p>	<p>Invited/Session keynote Paper ID: 17180 Sensory systems – a biological view and why biomimetics needs more biology <i>Friedrich G. Barth</i></p>
<p>Paper ID: 11203 Research on aerodynamic noise reduction of cavity using bionic non-smooth method <i>By Y.C Zhang et al.</i></p>	<p>Paper ID: 19291 Bioinspired graphene actuators prepared by UV irradiation <i>By D.D. Han et al.</i></p>	<p>Paper ID: 11279 Research on thermal fatigue behavior and microstructure for die steel with bionic structures <i>By Y.H. Ma et al.</i></p>	<p>Paper ID: 11117 Self-Assembly of 2D MnO₂ Nanosheets into High-Purity Sponge-like Aerogels with Ultralow Density <i>By K.L. Xu et al.</i></p>	<p>Paper ID: 1725 Bat-like Harmonic Signal Analysis and Underwater Bionic Acoustic Imaging <i>By C.S. Yang et al.</i></p>
<p>Paper ID: 1612 Numerical investigation of a bionic model for abrasive wear reduction of bulk-solids-handling equipment <i>By G.M. Chen et al.</i></p>	<p>Paper ID: 11147 Design and Gait Simulation of the Bionic Legged Walking Structure <i>By G.Q. Zhang et al.</i></p>	<p>Paper ID: 11121 Wind tunnel tests on the collection efficiency of particulate matter by porous vegetation barriers at low wind speed <i>By J. Tong et al.</i></p>	<p>Paper ID: 10250 Fabrication of a bioinspired graded coating by the brazing technique <i>By H.S. Li et al.</i></p>	<p>Paper ID: 1741 Analysis of bat ultrasonic pulse and ears motion with optic flow <i>By X. Pan et al.</i></p>

	<p>Paper ID: 1676 The Effects of the Bio-inspired Pulsed Electromagnetic Fields on ATP and Health <i>By S.J. Zhang et al.</i></p>	<p>Paper ID: 19305 The cushion contribution analysis of Canine pad based on static and dynamic mechanical property measurement <i>By L. Zhou et al.</i></p>	<p>Paper ID: 1150 Investigation of Boundary Friction Based on the Toe pad of Tree Frog <i>By L.W. Zhang et al.</i></p>	<p>Paper ID: 12210 Preparation and Characterisation of Iron Doped Borophosphate Glasses for Biomedical Applications <i>By C. Tan et al.</i></p>	<p>Paper ID: 17174 Morphological Investigation on the Lateral Line Systems of Sinocyclocheilus macrophthalmus and Cyprinus carpio haematopterus (Cypriniformes: Cyprinidae) <i>By Z.Q. Ma et al.</i></p>
	<p>Paper ID: 16239 Biomimetics applied to factory layout planning: Fibonacci based patterns, spider webs, nautilus shell and honeycombs as bio-inspiration to reduce internal transport costs in factories <i>By D. Tinello et al.</i></p>	<p>Paper ID: 19290 Light-driven water spider robot based on graphene composite material <i>By B. Han et al.</i></p>	<p>Paper ID: 11105 Functional morphology and bending characteristics of the honeybee forewing <i>By Y. Ma et al.</i></p>	<p>Company 3D Printing Technology and its Application in Bionic Engineering <i>By J.R. LU</i></p>	<p>Paper ID: 1783 Foot Position Tracking during Human Motions using an Integrated Sensing System <i>By G. Zizzo et al.</i></p>
	<p>Paper ID: 16271 Can biological strategies facilitate disruptive biomimetic innovation? <i>By D. K. Deluca</i></p>		<p>Paper ID: 11255 How do vein-joints influence the deformation of dragonfly wings? <i>By H. Rajabi et al.</i></p>		<p>Paper ID: 17104 Dynamics and behavior measurement system for animal's locomotion and adhesion <i>By A.H. Ji et al.</i></p>
	<p>Paper ID: 10243 Design and operation assessment for a coupling biomimetic spudcan <i>By W.X. Tang et al.</i></p>		<p>Paper ID: 16158 A Simulator for friction and wear testing of artificial hip joints <i>By F. Tang et al.</i></p>		

	<p>Paper ID: 20286 Xingyi Boxing Bionics Research <i>By T. Zhang et al.</i></p>		<p>Paper ID: 1163 Lateral Compressive Buckling Performance of Aluminum Honeycomb Panels for Long-Span Hollow Core Roofs <i>By W.D. Zheng et al.</i></p>		
	<p>Paper ID: 14268 The effect of the size of sphere-like clusters of magnetic nanoparticles on hyperthermia heating <i>By R. Fu et al.</i></p>		<p>Paper ID: 1164 Investigating mechanism of bionically inspired serrated structure for improving efficiency of micro-topographical preparation <i>By Z.H. Zhang et al.</i></p>		
12:45 - 14:30	Lunch (Student Canteen) & Conference closure				
14:30	UNNC Campus tour				

Note:

PS1: Nature inspired designs and industrial applications

PS2: Biomimetic Surfaces

PS3: Robotics, motion systems, artificial intelligent

PS4: Fluids flow and drag reductions

PS5: Mechanics in bionics

PS6: Biomimetic materials

PS7: Sensors and signal processing