

## PROGRAM

	Wednesday, June 27 <sup>th</sup>		Thursday, June 28 <sup>th</sup>			Friday, June 29 <sup>th</sup>	
8:00-8:45	Registration and Opening Ceremony		Registration			Registration	
8:45-9.15	PLENARY LECTURE: Prof. Jackie Ying		PLENARY LECTURE: Prof. Ralph Müller			PLENARY LECTURE: Prof. Nicola M. Pugno	
9:20-11:00	Multiscale characterization	Innovative technologies Multiscale	Bio-inspired materials and interfaces 1	Mechanics of tissue and biomaterials 1	Medical devices	AIAS group 1	Mechanics of extreme materials
11:00-11:20	COFFEE BREAK		COFFEE BREAK			COFFEE BREAK	
11:20-13:00	Electrospinning	3D-printing1 Composites	Bio-inspired materials and interfaces 2	Mechanics of tissue and biomaterials 2	Multiscale characterization of bone and bones	AIAS group 2	Smart sensors
13:00-14:15	LUNCH		LUNCH			LUNCH	
14:15-14:30	Ciao-Tech: The EU-Health Innovation Marketplace		14:15-14:45	PLENARY LECTURE: Prof. Thomas Webster		14:15-14:30 Closing Ceremony	
14:30-16:00	Medical coatings	3D-printing 2	14:45-16:00	Poster session			
16:00-16:30	COFFEE BREAK						
16:30-17:50	Mechanical Behaviour	3D-printing 4	16:30-22:30 CULTURAL VISIT AND GALA DINNER VILLA MONASTERO (LAKE COMO)				
17:50-18:20	PLENARY LECTURE: Prof. Amir Zadpoor						
18:20-00	WELCOME PARTY						

**BL.27.04:** Plenary lectures & Sessions

**BL.27.05:** Sessions

**BL.27.06:** Sessions

Wednesday, June 27 <sup>th</sup>			
8:00-8:30	Registration		
8:30-8:45	OPENING CEREMONY (BL.27.04)		
8:45-9:15	PLENARY LECTURE (BL.27.04): Prof. Jackie Ying		
9:20-11:00	<p><b>Multiscale Characterization (BL.27.04)</b>  <b>Chairman: prof. Marco Rossi</b>  <b>149:</b> H.-M. Chan, J.H. Soh, and J.Y. Ying; <i>"Paper-Based Lateral Flow Device for Rapid, Point-of-Care Diagnosis of Zika and Dengue"</i>  <b>90:</b> A. Dulebo; <i>"Fast, accurate and reproducible mechanical characterization of biomaterials using atomic force microscopy"</i>  <b>139:</b> L. Angeloni, M. Reggenti, D. Passeri, M. Rossi; <i>"Nanomechanical characterizations of biomaterials using atomic force microscopy"</i>  <b>119:</b> K.Mougin, P. Bauer, D. Faye, V. Vignal, A. Buch; <i>"Gold flower-like structures: excellent candidates as biosensors"</i>  <b>148:</b> N. Jiri, S. Michael, E. Philipp, M. Di Donato; <i>"Micromechanical Properties of Polyacrylamide Hydrogels Measured by Spherical Nanoindentation"</i></p>	<p><b>Innovative technologies (BL.27.05)</b>  <b>Chairman: dr. Sara Baghierifard</b>  <b>122:</b> A.G. Demir; <i>"Single track deposition study of biodegradable Mg-rare earth alloy by micro laser metal wire deposition"</i>  <b>70:</b> F. Scocozza; S. Marconi; V. Fantini; M. Bordoni; C. Cereda; F. Auricchio; M.Conti; <i>"3D printing of hydrogel-based bio-ink: a protocol for parameter setting and effectiveness evaluation"</i>  <b>137:</b> M. Annoni, F. Arleo, L. Villa, S. Volpi; <i>"Advantages of micro Water Jet machining in the biomedical sector"</i>  <b>058:</b> F. Bini; R. Guachi; P. Marconato; C. Del Gaudio; F. Marinozzi; <i>"Combining Additive Manufacturing and Computational Fluid Dynamics to Optimize Scaffold Design: a Preliminary Study"</i>  <b>040:</b> P. Bhati, A. Srivastava, R. Ahuja, N. Bhatnagar; <i>"Effect of PCL and UV Irradiation on the Surface Hydrophilicity of PLA Tubes"</i></p>	
11:00-11:20	COFFEE BREAK		
11:20-13:00	<p><b>Medical coatings (BL.27.04)</b>  <b>Chairman: prof. Roberto Chiesa</b>  <b>108:</b> M.V. Diamanti, A. Brenna, M. Ormellesse: B. Del Curto; MP. Pedferri <i>"Nanostructuring the surface of titanium by anodic oxidation for biomedical applications"</i>  <b>116:</b> F. Tana F, E. De Giglio, S. Cometa, F. Variola; R. Chiesa; L. De Nardo: <i>"Calcium doped mesoporous zirconia coatings: the effect of surface chemistry and nanopatterning for biomedical application"</i>  <b>125:</b> A. Patelli, F. Mussano, P. Brun, T. Genova, E. Verga, E. Ambrosi, T. Michieli, M. Scatto, G. Mattei, P. Scopece: <i>"Surface functionalisation, nanoroughness and drug delivery by atmospheric plasma jet on scaffolds"</i>  <b>103:</b> M. Azzi; M. Moscatelli; A. Cochis; B. Azzimonti; L. Rimondini; R. Chiesa: <i>"Biocompatible antibacterial treatment for implantable titanium alloys"</i>  <b>050:</b> K.S. Shin; <i>"Processing and Characterization of Biodegradable Magnesium Alloys"</i></p>	<p><b>3-D printing 1 (BL.27.05)</b>  <b>Chairman: prof. Ferdinando Auricchio</b>  <b>118:</b> I. Ferrer, J.A. Méndez, M.L. Garcia-Romeu, M. Delgado-Aguilar; <i>"Biocompatible polymeric blends to manufacture micro plates by ultrasonic microinjection molding"</i>  <b>100:</b> M.L. Garcia-Romeu, I. Bagudanch, G. Palumbo, A. Cusanno, T. Villa, S. Farè; <i>"Single Point Incremental Forming and Electrospinning to produce biodegradable magnesium (AZ31) biomedical prostheses coated with porous PCL"</i>  <b>64:</b> M. Invernizzi, R. Suriano, S. Turri and M. Levi; <i>"Processability of 4D printable modified polycaprolactone with self-healing abilities"</i>  <b>102:</b> P. Bhati, N. Bhatnagar; <i>"Effect of processing parameter on the mechanical behavior of porous PLA tubular scaffold"</i></p>	
13:00-14:15	LUNCH		
14:15-14:30	57: C. Zocchi; M.D. Tavano, <i>"The EU-Health Innovation Marketplace: facilitating valorization of project results"</i> (BL.27.04)		
14:30-16:00	<p><b>Electrospinning (BL.27.04)</b>  <b>Chairman: prof. Maria Letizia Focarete</b>  <b>135 (keynote):</b> A. Sensini, <i>"3D Multiscale Scaffolds for Tendon Tissue Engineering"</i>  <b>112:</b> G. Suarato, M.Contardi, C.Pignatelli, G.Caputo, G.Perotto, J.A.Heredia-Guerrero, R.Bertorelli, A.Athanassiou; <i>"Wool keratin as a naturally-derived biomaterial: structure-property relationships"</i>  <b>117:</b> R. Castagna; P. Colnago; S. Donini; E. Parisini, C. Bertarelli: <i>"Biohybrid electrospun membranes for chemical filtration"</i>  <b>128:</b> V.C. Niculescu, G. Paun, V. Parvulescu; <i>"Mesoporous silica – support for organometallic complex and its enzymes activity inhibition properties"</i>  <b>156:</b> A. Di Luca; <i>"Mimicking the tissue specific extracellular matrix composition by electrospinning"</i></p>	<p><b>3-D printing 2 (BL.27.05)</b>  <b>Chairman: dr. Mohammad Mirzaali</b>  <b>59 (keynote):</b> M. Amini; D. Pahr: <i>"Influence of size-scaling on the mechanical behavior of printed bone microstructure"</i>  <b>87:</b> G. De Pasquale, F. Luceri, M. Riccio: <i>"Experimental validation of Ti6Al4V bio-inspired cellular structures from additive manufacturing processes"</i>  <b>86:</b> G. De Pasquale, L. Scaltrito, V. Bertana, L. Zappulla: <i>"Numerical and evaluation of SLA"</i>  <b>95:</b> W. Matysiak, T. Tański; <i>"The electrospun 1D nanomaterials and their application possibilities. polymers adhesion for innovative bio-MEMS.experimental"</i></p>	Ciao-Tech (BL.27.06)

16:00-16:30	<b>COFFEE BREAK</b>		
16:30-17:50	<p><b>Mechanical behavior (BL.27.04)</b>  <b>Chairman: prof. Chiara Bertarelli</b>  <b>083:</b> M.R. Ayatollahi; S. Ghouli; <i>“Fracture analysis of dental restorative bio-composites using a strain-based fracture model”</i>  <b>110:</b> R. Basan; T. Marohnic; M. Franulovic; <i>“Possibilities of application of artificial neural networks for biological and nonconventional materials”</i>.  <b>66:</b> G. Marchiori; G. Cassiolas; M. Berni; N.F. Lopomo; G. Valente; C. Signorelli; M. Bontempi; S. Zaffagnini; <i>“Monitoring knee biomechanics in patients undergoing anterior cruciate ligament reconstruction: how joint loading affects cartilage quality”</i>  <b>044:</b> R. Roy and V. Sairam; <i>“Effect of Silica Fume and Foundry waste sand on strength characteristics of Geogrid and Ferro cement panel”</i></p>	<p><b>3-D printing 3 (BL.27.05)</b>  <b>Chairman: prof. Chiara Colombo</b>  <b>071:</b> G. Marchiori; M. Berni; M. Boi; M. Petretta; C. Gualandi; D. Bellucci; M.C. Maltarello; M. Bianchi; <i>“Design of composition and geometry of novel 3D printed PCL/bioactive glass scaffolds for bone tissue engineering”</i>  <b>52:</b> R. Scholz; M. Langhansl; C. Zollfrank; F. Walther; <i>“Experimental study on the actuation and fatigue behavior of the biopolymer composite Cottonid”</i>  <b>099:</b> V. Fantini; M. Bordoni; F. Scocozza; M. Conti; O. Pansarasa; S. Marconi; F. Auricchio; C. Cereda; <i>“New 3D in vitro model for the study of neurodegeneration”</i>  <b>123:</b> A. H. Jabbari, M. Sedighi, M. Guagliano, S. Bagherifard, E. Ghazizadeh; <i>“Effect of Shot Peening Process on Residual Stress, Microhardness and Corrosion Behavior of Mg/HA Biocomposite”</i></p>	<b>Ciao-Tech (BL.27.06)</b>
17:50-18:20	<b>PLENARY LECTURE: prof. Amir Zadpoor</b>		
18:00-20.00	<b>WELCOME PARTY AT THE DEPARTMENT OF MECHANICAL ENGINEERING, POLITECNICO DI MILANO</b>		

Thursday, June 28 <sup>th</sup>			
8:00-16:00	Registration		
9:00-9:30	PLENARY LECTURE (BL.27.04): Prof. Ralph Mueller		
9:30-10:50	<p><b>Bio-inspired materials and interfaces1 (BL.27.04)</b>  <b>Chairman: prof. Marco Alfano</b>  <b>145:</b> F. Libonati; <b>(keynote)</b> <i>“Prospects and Limitations of bone-inspired solutions for new, tough composites”</i>  <b>109:</b> L. Zorzetto; D. Ruffoni; <i>“3D Printing of Bio-inspired Helical Composites with Enhanced Failure Resistance”</i>  <b>147:</b> M. Alfano, <i>“Bio-inspired strategies for the development of architected damage-tolerant interfaces”</i>  <b>41:</b> Ran Tao, Marco Alfano, Gilles Lubineau; <i>“Evaluation of non-local bridging effect on the fracture toughness of composite joints with CFRP adherends”</i>  <b>76:</b> A. Tarakanova, G. C. Yeo, C. Baldock, A.S. Weiss, M.J. Buehler; <i>“Molecular models of elastin structure in health and disease”</i></p>	<p><b>Mechanics of tissue and biomaterials 1 (BL.27.05)</b>  <b>Chairman: prof. Pasquale Vena</b>  <b>77:</b> L. Guachi; R. Guachi; F. Bini ; M. Bici; F. Marinozzi; F. Campana; <i>“Virtual Simulation System of Colorectal Tissues Using Finite Element Model for Analysing Surgical Scenarios”</i>  <b>74:</b> S.E. Falconer; R.A. Tomlinson; Z.A. Taylor; <i>“Developing a Soft Tissue surrogate for use in Photoelastic Testing”</i>  <b>62:</b> G. Marchiori, A. Parrilli, N. Sancisi, M. Berni, L. Luzi, R. Calzoni, M. Conconi, G. Cassiolas, S. Zaffagnini, N.F. Lopomo; <i>“Integration of micro-ct and uniaxial loading to analyse the evolution of 3d microstructure under increasing strain: application to the anterior cruciate ligament”</i>  <b>130:</b> J. Ubaid, M.F. Arifa, B.L. Wardle, S. Kumar; <i>“Compliance-Tailored of Multilayers via Multimaterial Jetting Additive Manufacturing”</i></p>	<p><b>Medical devices (BL.27.06)</b>  <b>Chairman: prof. Luca Cristofolini</b>  <b>84:</b> R. Bertolini; S. Bruschi; A. Ghiotti; <i>“Enhancement of corrosion resistance to sterilization stages of a biomedical grade AISI 316L stainless steel by means of using of low-temperature coolants in machining”</i>  <b>129:</b> M. Benčina, I. Junkar, M. Kulkarni, T. Lampe, J. Kovač, K. Lakota, S. Sodin-Semrl, M. Mozetič, M. Valant, V. Kralj-Iglič, A. Iglič; <i>“Nanostructuring of titanium for biomedical applications”</i>  <b>132:</b> M. Kouhi, M. Fathi, J.R. Venugopal, S. Ramakrishna; <i>“Bredigite reinforced electrospun nanofibers for bone tissue engineering applications”</i>  <b>42:</b> M. Dallago, S. Raghavendra, V. Luchin, F. Zappini, D. Pasini, V. Fontanari, M. Benedetti; <i>“Effect of the printing accuracy on the mechanical performance of SLM cellular structures for biomedical implants”</i>.  <b>150:</b> S. Danti, B. Azimi, M. Milazzo, C. Stefanini, Z. Qin, M. J. Buehler; <i>“Electrospun piezoelectric nanocomposites for cochlear stimulation”</i></p>
10:50-11:20	COFFEE BREAK		
11:20-13:00	<p><b>Bio-inspired materials interfaces 2(BL.27.04)</b>  <b>Chairman: dr. Flavia Libonati</b>  <b>138:</b> M. Mirzaali; <i>“Biomimetic soft-hard interfaces”</i>  <b>67:</b> A. Šutka, M. Järvekülg, A. Šutka and K. A. Gross; <i>“Hydroxyl-functional nanoparticles as phase-modulating additives in electrospun polymer nanofibers”</i>  <b>111:</b> G. Perotto, C. Pignatelli, M. Nardini, R. Cancedda, M. Mastrogiacomo, A. Athanassiou; <i>“Silk nano materials for controlled drug release”</i>  <b>120:</b> K.Mougini; H.Hoelscher, <i>“Surface color on demand: chameleon effect”</i></p>	<p><b>Mechanics of tissue and biomaterials 2 (BL.27.05)</b>  <b>Chairman: prof. Majid Ayatollahi</b>  <b>93:</b> P. Vena, D. Gastaldi, E. Cattarinuzzi, A. Alessandrino, G. Freddi; <i>“In-situ biaxial mechanical characterization of a bilayer silk fibroin vascular grafts”</i>  <b>82:</b> D. Pahr; M. Amini; A. Reisinger; <i>“Biomechanical measurement of the fracture risk of a human femur in multiple load directions based on DIC”</i>  <b>101:</b> D. Dapaah; A. Bahmani; J. Montesano; T. Willett; <i>“A continuum damage mechanics model of the microdamage process zone during cortical bone fracture”</i>  <b>98:</b> B. Uzer, S. Cicek, A. Karaca; <i>“The Relationship of Surface Roughness and Wettability of Implants with Plastic Deformation Mechanisms”</i></p>	<p><b>Multiscale characterization of bone and bones (BL.27.06)</b>  <b>Chairman: prof. Chiara Colombo</b>  <b>134:</b> L. Cristofolini; <i>“Multiscale investigation of the biomechanics of the natural, diseased and treated vertebrae and spine segments”</i>  <b>94:</b> P. De Falco; L. Xi; W. Wagermaier; R. Weinkamer; P. Fratzl; H. S. Gupta; <i>“Mechanical multi-scale modelling and structural characterization of bone”</i>  <b>65:</b> M. Boi; G. Marchiori; M. Berni; M. Fini; A. Russo; M. Bianchi.; <i>“Nano-mechanical investigation of engineered bone tissue and of the osteochondral interface”</i>  <b>133:</b> F. Cosmi, F. Saracchini; <i>“Bone structure evaluation: perspectives in oncology”</i> <b>92:</b> G. Ciobanu; M. HarjaG. Ciobanu; M. Harja; <i>“Hydroxyapatite coatings on titanium surface”</i></p>

13:00-14:20	LUNCH
14:20-14:50	PLENARY LECTURE: Prof. Thomas Webster
15:10-16:00	POSTER SECTION
	<p><b>36:</b> A. Alahmad, J. Walter, T. Scheper; <i>"Green synthesis and characterization of Crystalline Silver Nanoparticles by using Hypericum perforatum L aqueous extract and Determination the organic layer at the surface of these Nanoparticles"</i></p> <p><b>39:</b> H. V. Xu; X. T. Zheng; Y. L. Zhao; Y. N. Tan; <i>"Bioinspired Synthesis of Biomolecule-derived Fluorescent Nanodots from Natural Amino Acids with Enhanced Photostability, Biocompatibility and Cellular Uptake"</i></p> <p><b>46:</b> T. Ito, H. Terasawa, N. Matsumoto, T. Shimizu, S. Shingubara; <i>"Dual Biosensor Coupling with Localized Surface Plasmon Resonance and QCM-D Using Nano-honeycomb Structure"</i></p> <p><b>61:</b> K. Nakade, K. Jindai, T. Sagawa, H. Kojima, T. Shimizu, S. Shingubara, T. Ito; <i>"Single cell / real-time imaging of bactericidal effect on the nano-structural surface"</i></p> <p><b>60:</b> K. Jindai, K. Nakade, T. Sagawa, H. Kojima, T. Shimizu, S. Shingubara, T. Ito; <i>"Investigation of nanostructure-based bactericidal effect derived from a cicada wing by using QCM-D"</i></p> <p><b>104:</b> L. Sartore, N. Inverardi, S. Pandini, F. Bignotti, F. Chiellini; <i>"PLA/PCL-Based Foams as Scaffolds for Tissue Engineering Applications"</i></p> <p><b>115:</b> Ho-Ryun Won, Jong-Eun Won, Chul-Ho Kim, Su A Park, Yoo Seob Shin; <i>"Osteo-Promoting 3D Scaffold Using an Engineered Peptide for Successful Bone Regeneration"</i></p> <p><b>140:</b> M. Molla, S. Bagherifard, M. Guagliano; <i>"Modulating mechanical properties of biodegradable metallic materials through surface ultrafine grain refinement"</i>.</p> <p><b>144:</b> F. Gallina; F. Libonati; L. Vergani; M.J. Buehler; <i>"Probing the diatom structure for the design of bio-inspired materials"</i></p> <p><b>146:</b> F. Tamburrino, S. Graziosi, F. Ballo, F. Libonati; <i>"Chemistry-inspired architected materials"</i></p>
16:30-22.30	<p>CULTURAL VISIT AND GALA DINNER AT VILLA MONASTERO (LAKE COMO)</p> <p>(Departure from Politecnico at 16:30)</p>

Friday, June 29 <sup>th</sup>			
8:00-9:00	Registration		
9:00-9:30	<b>PLENARY LECTURE (BL.27.04): Prof. Nicola M. Pugno</b>		
9:30-11:10	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>AIAS 1 (BL.27.04)</b>  <b>Chairman: prof. Carmine Pappalettere</b>  <b>85:</b> G. De Pasquale; <i>“Wearable sensing systems for biomechanical parameters monitoring”</i>  <b>121:</b> F.Cosmi, N. Maximova, F. Zennaro; <i>“A mesoscale assessment of bone structure abnormalities”</i>  <b>89:</b> D. D’Andrea; G. Epasto ; E. Guglielmino; G. Palomba; F. Traina; S. Di Bella; R. Mineo; <i>“Experimental investigation of rhombic dodecahedron micro-lattice structures manufactured by Electron Beam Melting”</i>  <b>127:</b> B. Leban, D.Fabbri, L.I.Lecca, M.Campagna, M.Pau; <i>“Characterization of pushing-pulling forces in hospital bed moving”</i>  <b>143:</b> G. Grezzana, F. Libonati, A. Masic; <i>“Multimodal and multiscale modeling of bone microstructure”</i></p> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Mechanics of extreme materials (BL.27.05)</b>  <b>Chairman: prof. Nicola M. Pugno</b>  <b>43:</b> R. Roy; A. Mitra; V. Sairam; <i>“Effect of Graphene Oxide in Cement composites incorporating Metakaolin and Silica Fume”</i>  <b>37:</b> Y. Kim; Y. Kim; T.-I. Lee; T.-S. Kim; S. Ryu; <i>“An Extended Analytic Model for the Elastic Properties of Platelet-Staggered Composites and Its Application to 3D Printed Structures”</i>  <b>136:</b> F. Bosia, M. Miniaci, A.O. Krushynska, N. Kherraz, A. Gliozzi, N.M. Pugno, <i>“Bio-inspired hierarchical elastic metamaterials”</i>  <b>88:</b> F. Furlani, P. Sacco, M. Cok, F. Asaro, E. Marsich, D. Cojoc, S. Paoletti, I. Donati; <i>“Mimicking biological mechanical behavior by a bioactive lactose-modified chitosan”</i>  <b>124:</b> A.E. Vellwock, L. Vergani, F. Libonati; <i>“Understanding the mechanical behavior of a bone - inspired composite material with an XFEM approach”</i></p> </td> </tr> </table>	<p><b>AIAS 1 (BL.27.04)</b>  <b>Chairman: prof. Carmine Pappalettere</b>  <b>85:</b> G. De Pasquale; <i>“Wearable sensing systems for biomechanical parameters monitoring”</i>  <b>121:</b> F.Cosmi, N. Maximova, F. Zennaro; <i>“A mesoscale assessment of bone structure abnormalities”</i>  <b>89:</b> D. D’Andrea; G. Epasto ; E. Guglielmino; G. Palomba; F. Traina; S. Di Bella; R. Mineo; <i>“Experimental investigation of rhombic dodecahedron micro-lattice structures manufactured by Electron Beam Melting”</i>  <b>127:</b> B. Leban, D.Fabbri, L.I.Lecca, M.Campagna, M.Pau; <i>“Characterization of pushing-pulling forces in hospital bed moving”</i>  <b>143:</b> G. Grezzana, F. Libonati, A. Masic; <i>“Multimodal and multiscale modeling of bone microstructure”</i></p>	<p><b>Mechanics of extreme materials (BL.27.05)</b>  <b>Chairman: prof. Nicola M. Pugno</b>  <b>43:</b> R. Roy; A. Mitra; V. Sairam; <i>“Effect of Graphene Oxide in Cement composites incorporating Metakaolin and Silica Fume”</i>  <b>37:</b> Y. Kim; Y. Kim; T.-I. Lee; T.-S. Kim; S. Ryu; <i>“An Extended Analytic Model for the Elastic Properties of Platelet-Staggered Composites and Its Application to 3D Printed Structures”</i>  <b>136:</b> F. Bosia, M. Miniaci, A.O. Krushynska, N. Kherraz, A. Gliozzi, N.M. Pugno, <i>“Bio-inspired hierarchical elastic metamaterials”</i>  <b>88:</b> F. Furlani, P. Sacco, M. Cok, F. Asaro, E. Marsich, D. Cojoc, S. Paoletti, I. Donati; <i>“Mimicking biological mechanical behavior by a bioactive lactose-modified chitosan”</i>  <b>124:</b> A.E. Vellwock, L. Vergani, F. Libonati; <i>“Understanding the mechanical behavior of a bone - inspired composite material with an XFEM approach”</i></p>
<p><b>AIAS 1 (BL.27.04)</b>  <b>Chairman: prof. Carmine Pappalettere</b>  <b>85:</b> G. De Pasquale; <i>“Wearable sensing systems for biomechanical parameters monitoring”</i>  <b>121:</b> F.Cosmi, N. Maximova, F. Zennaro; <i>“A mesoscale assessment of bone structure abnormalities”</i>  <b>89:</b> D. D’Andrea; G. Epasto ; E. Guglielmino; G. Palomba; F. Traina; S. Di Bella; R. Mineo; <i>“Experimental investigation of rhombic dodecahedron micro-lattice structures manufactured by Electron Beam Melting”</i>  <b>127:</b> B. Leban, D.Fabbri, L.I.Lecca, M.Campagna, M.Pau; <i>“Characterization of pushing-pulling forces in hospital bed moving”</i>  <b>143:</b> G. Grezzana, F. Libonati, A. Masic; <i>“Multimodal and multiscale modeling of bone microstructure”</i></p>	<p><b>Mechanics of extreme materials (BL.27.05)</b>  <b>Chairman: prof. Nicola M. Pugno</b>  <b>43:</b> R. Roy; A. Mitra; V. Sairam; <i>“Effect of Graphene Oxide in Cement composites incorporating Metakaolin and Silica Fume”</i>  <b>37:</b> Y. Kim; Y. Kim; T.-I. Lee; T.-S. Kim; S. Ryu; <i>“An Extended Analytic Model for the Elastic Properties of Platelet-Staggered Composites and Its Application to 3D Printed Structures”</i>  <b>136:</b> F. Bosia, M. Miniaci, A.O. Krushynska, N. Kherraz, A. Gliozzi, N.M. Pugno, <i>“Bio-inspired hierarchical elastic metamaterials”</i>  <b>88:</b> F. Furlani, P. Sacco, M. Cok, F. Asaro, E. Marsich, D. Cojoc, S. Paoletti, I. Donati; <i>“Mimicking biological mechanical behavior by a bioactive lactose-modified chitosan”</i>  <b>124:</b> A.E. Vellwock, L. Vergani, F. Libonati; <i>“Understanding the mechanical behavior of a bone - inspired composite material with an XFEM approach”</i></p>		
11:10-11:30	<b>COFFEE BREAK</b>		
11:30-13:10	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>AIAS 2 (BL.27.04)</b>  <b>Chairman: dr. Giacomo Risitano</b>  <b>155:</b> C. Colombo (keynote); <i>“Bone strain: a novel parameter for trabecular bone damage quantification”</i>  <b>105:</b> G. La Rosa; <i>“Numerical simulation and experimental tests on a lumbar disk prosthesis”</i>  <b>106:</b> G. La Rosa; C. Clienti; D. Corallo; <i>“Design of a new intervertebral disc prosthesis”</i>  <b>113:</b> C. Pappalettere; F. De Cillis; Eng. C. Cianci; G. Siciliani; F. Cervinara; <i>“Set up of an experimental method to measure pressures between orthodontic aligner and tooth”</i>  <b>126:</b> M. Ciciù; G. Cervino; E. Guglielmino; G. Iannello; G. Risitano; D. Santonocito; <i>“Mechanical and Metallographic Evaluation of Two Common Brand Fixtures Dental Implants”</i></p> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Bio-inspired materials and interfaces 3 (BL.27.06)</b>  <b>Chairman: dr. Sara Bagherifard</b>  <b>47:</b> R. Shahsavari; <i>“Biomimetic, Strong, Tough, and Self-Healing Composites Using Universal Sealant-Loaded, Porous Building Blocks”</i>  <b>114:</b> R. Guarino; G. Greco; B. Mazzolai; N.M. Pugno; <i>“Fluid-structure interaction study of spider’s hairs sensing system”</i>  <b>91:</b> A. Bahmani; TL. Willett; J. Montesano; <i>“Generating realistic representative microstructures of biomimetic composite materials for computational assessment of mechanical properties”</i>  <b>72:</b> M. Järvekülg; P. Reemann; R. Liira; V. Jaks; A. Šutka; <i>“Biomimetic 3D scaffolds and interactive cell substrates from gelatin”</i>  <b>56:</b> K. Raidongia; R.K. Gogoi; <i>“Strategic Shuffling of the Clay Layers to imbue them with Responsiveness”</i></p> </td> </tr> </table>	<p><b>AIAS 2 (BL.27.04)</b>  <b>Chairman: dr. Giacomo Risitano</b>  <b>155:</b> C. Colombo (keynote); <i>“Bone strain: a novel parameter for trabecular bone damage quantification”</i>  <b>105:</b> G. La Rosa; <i>“Numerical simulation and experimental tests on a lumbar disk prosthesis”</i>  <b>106:</b> G. La Rosa; C. Clienti; D. Corallo; <i>“Design of a new intervertebral disc prosthesis”</i>  <b>113:</b> C. Pappalettere; F. De Cillis; Eng. C. Cianci; G. Siciliani; F. Cervinara; <i>“Set up of an experimental method to measure pressures between orthodontic aligner and tooth”</i>  <b>126:</b> M. Ciciù; G. Cervino; E. Guglielmino; G. Iannello; G. Risitano; D. Santonocito; <i>“Mechanical and Metallographic Evaluation of Two Common Brand Fixtures Dental Implants”</i></p>	<p><b>Bio-inspired materials and interfaces 3 (BL.27.06)</b>  <b>Chairman: dr. Sara Bagherifard</b>  <b>47:</b> R. Shahsavari; <i>“Biomimetic, Strong, Tough, and Self-Healing Composites Using Universal Sealant-Loaded, Porous Building Blocks”</i>  <b>114:</b> R. Guarino; G. Greco; B. Mazzolai; N.M. Pugno; <i>“Fluid-structure interaction study of spider’s hairs sensing system”</i>  <b>91:</b> A. Bahmani; TL. Willett; J. Montesano; <i>“Generating realistic representative microstructures of biomimetic composite materials for computational assessment of mechanical properties”</i>  <b>72:</b> M. Järvekülg; P. Reemann; R. Liira; V. Jaks; A. Šutka; <i>“Biomimetic 3D scaffolds and interactive cell substrates from gelatin”</i>  <b>56:</b> K. Raidongia; R.K. Gogoi; <i>“Strategic Shuffling of the Clay Layers to imbue them with Responsiveness”</i></p>
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13:10-13:20	<b>CLOSING CEREMONY</b>		
13:20-14:30	<b>LUNCH</b>		

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