


# Wednesday - 26 June 2013

	Main Auditorium	Auditorium 1	Auditorium 2	Auditorium 3	Auditorium 4				
08:00	Conference Registration								
08:45									
08:45	Opening Session								
09:00									
09:00	Informed Tectonics in Material Based Design <i>Rivka Oxman</i>								
09:50									
09:55	Digital fabrication and the architectural detail <i>Gabriela Celani</i>								
10:45									
10:45	Coffee Break								
11:00									
	<b>Green Transportation</b> Chair: David Vale (Fac. Architecture/Technical Univ. of Lisbon, Portugal)	<b>Renewable Energy Technologies</b> Chair: José Pinto Duarte (Fac. Architecture/Technical Univ. of Lisbon, Portugal)	<b>Smart Design</b> Chair: Gabriela Celani (UNICAMP, Brazil)	<b>Sustainable Business Models</b> Chair: Mohamed Hussein (University of Connecticut, USA)	<b>Reuse and Recycling Techniques</b> Chair: Jorge de Brito (IST, Technical Univ. of Lisbon, Portugal)				
	Systematic Approach of Upscaling Aircraft Parts and Sub-Modules to Aircraft Level <i>R. Ilg</i>	Use of Jathropa biomass for adsorption of glyphosate in water <i>H. Nacke, A. C. Gonçalves Jr., D. Schwantes, G. F. Coelho, M. R. Silva &amp; A. Pinheiro</i>	How to design smart-buildings without smart-people? <i>M. C. Zélem</i>	Managerial decision support tools for sustainable actions <i>M. Dolinsky &amp; V. Dolinska</i>	Kinetics, equilibrium and thermodynamics of cadmium adsorption by a biosorbent from the bark of Pinus eliottii <i>L. Strey, A. C. Gonçalves Jr., D. Schwantes, G. F. Coelho, H. Nacke &amp; D. C. Dragunski</i>				
	Social sustainability: a key concern for the recovery of urban roads <i>A. Annunziata</i>	Modeling of multi-assortment production of CO <sub>2</sub> -extract's <i>E. P. Koshevoy, V. S. Kosachev, V. U. Chundyshko &amp; N. N. Latin</i>	Designing a sustainable and healthy living environment with smart technology <i>J.-H. Lan</i>	Eco-efficiency in Six Small and Medium Enterprises in Mexico <i>L. Iturbide, P. Lora &amp; P. Baptista</i>	Equilibrium of the adsorption process of Glyphosate using wastes from the cassava industry <i>D. Schwantes, A. C. Gonçalves Jr., G. F. Coelho, J. Casarin, J. R. Stangorlin &amp; A. Pinheiro</i>				
	Modeling complex Aviation Systems – The Eco-Design Tool EcoSky <i>R. Ilg</i>	To develop a framework for the implementation of Miscanthus-fuelled ESCOs for non-domestic heat in Ireland – state of the art report <i>E. Stilwell &amp; D. O'Sullivan</i>	Fabricating Selective Elasticity <i>M. P. Gutierrez</i>	Collaborative actions, technology and smart design <i>I. S. L. Xavier &amp; P. J. Silva Junior</i>	Physical properties of aqueous mixtures of lignin and calcium hydroxide for their use as insulators in building <i>I.C. Garcés, A. Legido, J. L. Legido &amp; J. Garcia</i>				
	Recovery Of Roads In Urban Areas: From An Indistinct Feature To A Specific Function <i>A. Annunziata &amp; F. Annunziata</i>	Comparison of working (operating) efficiency of electric and gas heat pump regarding to renewable heat source <i>D. Rajković &amp; M. Sentić</i>	The limits of inclusive design in the current design practice <i>E. Zitkus, P. Langdon &amp; P. J. Clarkson</i>	Sustainable Supply Chain and Collaboration: what is the link and what are the benefits? <i>Y. Dwi, I. Nouasouri, H. Alilaoui &amp; G. Gonçalves</i>	Controlling the properties of Materials manufactured using Recycled PVC <i>C.M.Pratt, F.J. Davis &amp; G.R. Mitchell</i>				
				A method to select best nuggets from eco-innovation sessions <i>F. Vallet, B. Tyd, D. Millet &amp; B. Eymard</i>					
13:00									
13:00	Lunch Break								
14:15									
14:15	Sustainable work for a human centred manufacturing <i>Marco Santochi</i>								
15:00									
15:00	Envisaging sustainable globalization <i>Francesco Jovane</i>								
15:45									
15:45	Coffee Break								
16:00									
	<b>Eco Design and Innovation</b> Chair: Fernando Moreira da Silva (Fac. Architecture/Technical Univ. of Lisbon, Portugal)	<b>Energy Efficiency</b> Chair: Marco Santochi (University of Pisa, Italy)	<b>Green and Smart Manufacturing</b> Chair: Francesco Jovane (Politecnico di Milano, Italy)	<b>Smart Materials</b> Chair: Paulo Bártolo (CDRsp/IPLEiria, Portugal)					
	New visions in the manufacturing design – Jewels as Multiples <i>C. Scarpitti</i>	Spectral Shifters for an enhanced Indoor Environment <i>G. R. Mitchell &amp; F. J. Davis</i>	Compressed air system assessment for machine tool monitoring <i>A. Gantarz, P. Boshard, K. Wegener &amp; L. Weiss</i>	Advanced smart polymer/nanographite composites for environmental pollution control <i>M. Knite, J. Zavičkas, G. Sakale, K. Ozols &amp; A. Linarts</i>					
	Additive manufacturing as a social inclusion tool <i>G. M. Bem, R. T. Pupo &amp; A. T. C. Pereira</i>	Electrical energy analysis and potential environmental improvements of sheet metal punching processes <i>G. Ingarao, K. Kellens, R. Renaldi, W. Dewulf &amp; J.R. Dujlou</i>	Crop rotation and association design for N budgeting in organic dairy farms <i>G. Bukvić, R. Gantner, Z. Steiner &amp; K. Karalić</i>	Photocatalytic degradation of textile effluent using ZnO/NaX and ZnO/AC under solar radiation <i>T. M. P. Schmitt, F. R. Soares, V. Slusarski-Santana, F. F. Brites-Nóbrega &amp; N. R. C. Fernandes-Machado</i>					
	Patterns of sustainability in textile design use of traditional technologies <i>A. Rusu</i>	A linear reciprocating thermomagnetic motor powered by water heated using solar energy <i>L. D. R. Ferreira, C. V. X. Bessa, I. Silva &amp; S. Gama</i>	System –based analysis of environmental effects of liquid food packaging <i>Z. Bogóné-Tóth &amp; Z. Lakner</i>	New patent on nanomaterials for preserving stone and wood structures <i>S. Di Salvo</i>					
	Eco-design concept manual as a web tool to reduce the impact of a product on the environment <i>Z. Tončíková</i>	Optimalmould   Energy Consumption in Injection Moulding Optimization <i>C. Ramos, P. Carreira, P. Bártolo, I. Reis, L. Durão &amp; N. Alves</i>	Rapid Construction with Functionally Graded Designs <i>F. Craveira, H. A. Almeida, L. Durão, H. Bártolo &amp; P. Bártolo</i>	Biomimetic materials for design <i>L. Pietroni &amp; J. Mascitti</i>					
		Prototypelab 2012: Mass-customization of energy self-sufficient prototypes and less environmental impact through improved parametric tools, sensors and CNC technology <i>J. Ballesteros &amp; P. Ferreira</i>		Novel plastics for sustainable building design <i>G. R. Mitchell</i>					
18:00									



SIM2013

## Thursday - 27 June 2013

	Main Auditorium	Auditorium 1	Auditorium 2	Auditorium 3
09:00				
09:50	Design Prototyping = Design Construction <i>Lawrence Sass</i>			
09:55				
10:45	Interactive facades and the future of spatial media <i>Robert Kemp</i>			
10:45	Coffee Break			
11:00	<b>Eco Design and Innovation</b> Chair: Regiane Pupo (Federal University of Santa Catarina, Brazil)	<b>Green and Smart Manufacturing</b> Chair: Marco Santochi (University of Pisa, Italy)	<b>Green Transportation</b> Chair: Robert Miles Kemp (Variate Labs, USA)	<b>Renewable Energy Technologies</b> Chair: Geoffrey Mitchell (CDRsp/IPLEiria, Portugal)
	Self-building process: living the crisis in a sustainable way <i>F. Pugnoloni, E. Bellu &amp; M. Giovanelli</i>	Synthetic Manufacturing – Resilient Modular Systems (RMS) <i>W. W. Fak</i>	New York City blue network: water as liquid state of earth <i>M. Louro &amp; F. Oliveira</i>	Removal of cadmium from aqueous solutions by adsorption on Jatropha biomass <i>H. Nacke, A. C. Gonçalves Jr., G. F. Coelho, L. Strey, D. Schwantes &amp; A. Laufer</i>
	A visual impaired children photography's catalogue as an inclusive tool <i>A. P. P. Demarchi, B. M. Rizardi, G. Pires &amp; C. B. R. Farnasler</i>	Influencing variables on sustainability in additive manufacturing <i>S. Junk &amp; S. Côté</i>	An Innovative Six Sigma and Lean Manufacturing Approach for Environmental Friendly Shipyard <i>L. Bilgili, D. Deli &amp; U. B. Celebi</i>	Guidelines for redesign a commercially available product: The case of a split air conditioning unit <i>P. N. Batsaris</i>
	Door's design for people with mobility impairments and service dogs <i>C. P. Carvalho, A. B. Magalhães, J. B. Pedro &amp; L. de Sousa</i>	Environmental aspects of lightweight construction in mobility and manufacturing <i>S. Albrecht, M. Baumann, C. P. Brandtetter, R. Horn, H. Krieg, M. Fischer &amp; R. Ilg</i>	Life Cycle Assessment Approach of Waste Management for Ship Operation <i>L. Bilgili &amp; U. B. Celebi</i>	System of thermal energy accumulation in a soil layer in a combination with wind energy <i>A. V. Bunyakin</i>
	Designing innovation with craft-evolution to develop sustainability <i>E. Aparo, L. Soares &amp; H. Santos-Rodrigues</i>	Package Design for frozen foods - principles for sustainability <i>R. A. Delfino, L. C. Paschoarelli &amp; R. Frazão</i>	An Innovative Method Establishment for a Green Shipyard Concept <i>L. Bilgili &amp; U. B. Celebi</i>	Natural ventilation potential on thermal comfort of a light-steel-framing residential building <i>A. Craveiro, A. Gameiro Lopes, P. Santos &amp; L. Simões da Silva</i>
	Back to craft <i>E. Karanastasi, M. Moelee, S. Alexapoulou, M. Kardarakou, M. Nikolakaki, A. Papadopoulou, X. Papatriantafyllou &amp; A. Terezaki</i>	A Study of Injection Moulding with Bismuth Alloy <i>A. Kus, E. Unver, B. Jagger &amp; I. Durgun</i>	Sustainable mobility <i>António Costa, Toyota Portugal</i>	Analysis of the Ethanol production chain in the State of Rio Grande do Sul, Brazil: a study based on system's dynamics with a view for exploring scenarios <i>A. Longhi, G. L. R. Vaccaro, T. Fleck, K. Roos, D. C. Azevedo &amp; M. H. C. Moutinho</i>
13:00				
13:00	Lunch Break			
14:15				
14:15	Leiria			
18:00				

# Friday - 28 June 2013

	Main Auditorium	Auditorium 1	Auditorium 2	Auditorium 3	Auditorium 4
09:00	Energy and resource efficient manufacturing: a multi-strategy approach <i>Joost Dufloy</i>				
09:50					
09:55	Nanotechnology: Science or Fiction? <i>Paula Ferreira</i>				
10:45					
10:45	Coffee Break				
11:00	<b>Energy Efficiency</b> Chair: Vasco Rato (Fac. Architecture/Technical Univ. of Lisbon, Portugal)	<b>Life-Cycle Engineering</b> Chair: Joost Dufloy (University of Leuven, Belgium)	<b>Reuse and Recycling Techniques</b> Chair: Paulo Bártolo (CDRsp/IPLEiria, Portugal)	<b>Smart Design</b> Chair: Rivka Oxman (Technion Israel Institute of Technology, Israel)	<b>Smart Materials</b> Chair: Paulo Jorge Ferreira (University of Texas at Austin, USA)
	A bottom-up perspective upon climate change – approaches towards the local scale and microclimatic assessment <i>A. S. Nouri</i>	Manufacturing Renaissance: Return of manufacturing to western countries <i>B. Klanian, T. C. Larsson &amp; M. H. Tavassoli</i>	Use of bark of Pinus elliptica as a biosorbent in the removal of glyphosate from aqueous solutions <i>L. Strey, A. C. Gonçalves Jr., G. Coelho, D. Schwantes, H. Nacke &amp; C. R. T. Tarley</i>	Freeform 3D Printing: Towards a Sustainable Approach to Additive Manufacturing <i>N. Oxman, J. Laucks, M. Kayser, E. Tsai &amp; M. Firstenberg</i>	Behavior of High Strength Concrete with Raw Rice Husk Exposed to High Temperature Effect <i>B. Ucarosar, N. Yuzer &amp; N. Kabay</i>
	Energy Price Differential and Industrial Production Growth in Mexico: A Wavelet Approach <i>G. S. Uddin, S. Chakraborty, R. Hossain &amp; B. Sjö</i>	Life-cycle Management of High-performance and Sustainable Buildings Based on Enterprise Modeling Method <i>Y. M. Shao</i>	Kinetics, equilibrium and thermodynamics of the adsorption process of lead using cassava industry wastes <i>D. Schwantes, A. C. Gonçalves Jr., L. Strey, V. Schwantes &amp; H. Nacke</i>	The haptic/ visual image as an inclusive tool <i>A. P. P. Demarchi, B. S. Pazzi &amp; C. B. R. Fornasier</i>	Transparent and sustainable materials <i>A. L. Volpe</i>
	Daylighting and ventilation in energy efficient factories <i>K. Klimke, T. Rüssel, P. Vohlida &amp; H. Riemer</i>	Set up of an European LCA Building Rating Methodology within the Open House Project <i>J. Gantner, K. Lenz &amp; H. Krieg</i>	Design of experimental composting of animal carcasses in university unit of treatment aimed a correct final disposition and soil improve <i>J. C. L. Fonseca, M. R. R. Marchi, L. T. Bras, A. A. Cecilio &amp; L. V. S. Sacramento</i>	The Industrial Engineering: Sustainable Factor in the Process <i>A. Vargas &amp; J. A. Laredo</i>	Particle Model for Orange Peel Pyrolysis <i>J. A. Rodriguez, J. A. Laredo &amp; R. C. Miranda</i>
	Environmental quickscans as a decision supporting tool – Scanning the embodied energy of different fibre treatments in the development of biocomposite building products <i>E. E. Keijzer</i>	Evaluating the impact of glass and PET packaging for bottled water <i>H. A. Almeida, C. A. Ramos, H. Bártolo &amp; P. J. Bártolo</i>	Adaptation of the creativity tool ASIT to support eco-ideation phases <i>B. Tyl, J. Legardeur, D. Millet &amp; F. Vallet</i>	Digital fabrication and rapid prototyping as a generative process <i>F. Coutinho, M. Kruger &amp; J. P. Duarte</i>	Phase Change Materials as a tool for Climate Change Mitigation <i>A. P. Viera, H. Bártolo, G. R. Mitchell &amp; P. Bártolo</i>
				Digital manufacture: Robotic CAD/CAM protocol for low cost housing <i>V. Portugal</i>	
13:00					
13:00	Lunch Break				
14:15					
14:15	Rethink the design for the sustainable innovation <i>Mario Buono</i>				
15:00					
15:00	Practice in sustainable automotive manufacturing <i>Giuseppe D'Angelo</i>				
15:45					
15:45	Coffee Break				
16:00	<b>Eco Design and Innovation</b> Chair: Rita Almendra (Fac. Architecture/Technical Univ. of Lisbon, Portugal)	<b>Green and Smart Manufacturing</b> Chair: Giuseppe D'Angelo (FIAT Research Center, Italy)	<b>Sustainable Business Models</b> Chair: Gideon N. Levy (CDRsp/IPLEiria, Portugal)	<b>Sustainable Construction</b> Chair: Robert Miles Kemp (Variate Labs, USA)	
	Sustainability @ Portugal Telecom <i>Teresa Salema, Portugal Telecom</i>	A step towards sustainable machining through increasing the cutting tool utilization <i>F. Schultheiss, J. M. Zhou, E. Gräntoft &amp; J. E. Ståhl</i>	Multi-criteria evaluation of reaction to the economic recession in modernization of multi-apartment buildings <i>L. Kelpsiene &amp; M. L. Matuseviciene</i>	3 Scales of Repurposed Disposability – Construction, Renovation, and Demolition (CRD) <i>W. W. Fak</i>	
	Communicating effectively in writing: issues and strategies for engineers <i>L. Nazarenko &amp; G. Schwarz-Peaker</i>	Natural Aspect of Sustainable Food and Cosmetics Manufacturing <i>K. Kyriakopoulou, S. Papadaki &amp; M. Krokida</i>	Sustainable development and business: Past and Future <i>M. Lešćević</i>	Towards Zero Energy House Integrated Design: Parametric Formwork for Capillary Systems in Precast Concrete Panels <i>C. Beorkrem &amp; M. Azarbayjani</i>	
	In Direction to Sustainable Eco Resorts <i>C. Alho &amp; J. C. Pina</i>	Cobalt and manganese recovery from spent industrial catalysts by hydrometallurgy <i>D. Fontana &amp; F. Forte</i>	Assessment of the costs and benefits of environmental investment <i>M. E. Hussein, G. S. Seow &amp; K. Tam</i>	Sustainable design of prefabricated solutions for the rehabilitation of ancient buildings <i>A. C. Coelho, J. M. Branco, P. B. Lourenço &amp; H. Gervásio</i>	
	The Meaning of Public Spaces <i>M. Hanzl</i>	The Olivetti factory as a paradigm of sustainable growth <i>F. Costantò &amp; A. Gallo</i>	Corporate sustainability measurement in Portuguese manufacturing organizations <i>P. Mamede &amp; C. F. Gomes</i>	Architectural rehabilitation and NZEB: the expansion of the Library of FDUL <i>A. P. Pinheiro</i>	
	Urban Nomads - Smart and Flexible Design Strategies for a Sustainable Future <i>N. Loeper &amp; M. Ott</i>	Disruptive innovation and learning to create architectural forms <i>L. S. Leite, A. T. C. Pereira &amp; R. Pupo</i>	An economic approach on the urban development of squatter settlements in hillsides high-risk areas <i>S. R. Soares &amp; S. T. Moraes</i>	Smart Technology for the passive house <i>S. Vattano</i>	
18:00					

## Saturday - 29 June 2013

	Main Auditorium	Auditorium 1	Auditorium 2	Auditorium 3
09:00	Design Democracy <i>Branko Kolarevic</i>			
09:50				
09:55	Challenges and technologies of the city of tomorrow			
10:45	<i>Klaus Sedbauer</i>			
10:45	Coffee Break			
11:00				
11:00	<b>Life-Cycle Engineering</b> Chair: Gideon N. Levy (CDRsp/IPLeiria, Portugal)	<b>Sustainable Construction</b> Chair: Branko Kolarevic (University of Calgary, Canada)	<b>Smart Design</b> Chair: Geoffrey Mitchell (CDRsp/IPLeiria, Portugal)	<b>Sustainable Business Models</b> Chair: Mohamed Hussein (University of Connecticut, USA)
	Assessment tool for building materials <i>S. Vasconcelos, C. Alho &amp; B. Müller</i>	New paradigms in post-hydrological disaster shelter practice; hydrological disasters & informal urban settlements – An insoluble problem? <i>J. Lacey &amp; A. Read</i>	Robotically Controlled Fiber-based Manufacturing as Case Study for Biomimetic Digital Fabrication <i>N. Oxman, M. Kayser, J. Laucks &amp; M. Firstenberg</i>	Integrated environmental and economic assessment in the construction sector <i>H. Krieg, S. Albrecht, J. Gantner &amp; W. Fawcett</i>
	Environmental Management and use of the water in Food Service Segment: the Life Cycle Assessment as a tool for a sustainable development <i>M. S. Lourenço, S. R. R. Costa, M. L. Nunes, L. S. Xavier &amp; J. A. A. Peixoto</i>	On- demand post-disaster emergency shelters <i>M. Tafahomi</i>	Climate change adaptation and strategies: an overview <i>A. S. Nouni &amp; M. M. Silva</i>	Parametric Places 22@: Smart Urban Analysis Tools and Place Brand-ing Value <i>P. Speranza</i>
	Objective Monetization of Environmental Impacts <i>H. Krieg, S. Albrecht, M. Jäger &amp; J. Gantner</i>	Sustainable by Nature <i>Carlos Manuel, AISOL, Group Amorim</i>	Space time information on display: smart devices and spatial cognition <i>D. P. Henriques</i>	Collaborative Development of Advanced Manufacturing Technologies <i>José Carlos Caldeira, Productech Cluster</i>
	Process chain analysis of lightweight metal components – A case study <i>R. Ilg &amp; D. Wehner</i>	Mass customization of ceramic tableware through digital technology <i>E. Castro e Costa &amp; J. P. Duarte</i>	Architectural fabrication of tensile structures with flying machines <i>A. Mirjan, F. Gramazio, M. Kohler, F. Augugliaro &amp; R. D'Andrea</i>	Implementing Concurrent Engineering in the Construction Industry: A different approach for a better consideration of users <i>X. Latortue &amp; S. Minel</i>
		Improving urban environment with green roofs <i>G. Darázs &amp; I. Hajdu</i>		Exploring Green IT and Green IS: insights from a case study in Brazil <i>T. A. Viaro &amp; G. L. R. Vaccaro</i>
13:00				
13:00	Closing Ceremony			
14:15				