

Scientific Program - i-SUP2010, Innovation for Sustainable Production, Sunday 18/04/2010 - Wednesday 21/04/2010

FINAL PROGRAM

Sunday April 18, 2010

16:00 - 17:00 Registrations - Site of Old Saint-John's

18:00 - 19:00 Welcome and reception - Provincial Court Bruges

Monday, April 19, 2010

07:00 - 08:40 Registrations - Site of Old Saint-John's

08:40 - 08:50 Welcome and practical info for all participants - Ludo Diels - Organizing Committee i-SUP2010

Introduction of keynote speaker for all participants

08:50 - 09:25 Keynote speaker Conference Sustainable Chemistry - Sigurd Buchholz (Bayer Technology Services), "F3 chemical production plant of the future"

09:25 - 10:00 Keynote speaker Conference Carbon Dioxide (CO₂) capture and storage (CCS) - John Gale (IEA Greenhouse Gas R&D Programme), "Lecture CO₂ Capture and Storage; Where are we now and what are the challenges we face"

10:00 - 10:20 Coffee break sponsored by BASF - Site of Old Saint-John's

10:20 - 12:20 Parallel Scientific Sessions - Site of Old Saint-John's

Location (is the same every day)	Room Beethoven	Room Ambassador	Room Bach	Room Morus	Room Strauss	Room Mozart	Room Erasmus	Room Vives
Conference	<u>Conference 1 Sustainable Production</u>		<u>Conference 2 Sustainable Chemistry</u>	<u>Conference 3 Sustainable Energy</u>	<u>Conference 4 Materials for Sustainable Production</u>	<u>Conference 4 Parallel sessions Materials for Sustainable Production</u>	<u>Conference 5 Carbon Capture and Storage (CCS)</u>	<u>Conference 6 Centre for Advanced Research and Development of Alternative Methods (CARDAM)</u>
Theme	<u>Theme 2: New approaches, methodologies, tools for sustainable production</u>		<u>Theme 1, session 1: Biorefineries and biorenewables (From biomass to product)</u>	<u>Theme 3: Energy connects technology (Intelligent networks)</u>	<u>Theme 2: Materials for Health</u>	<u>Theme 3: New Materials Processing Routes</u>	<u>Theme 3: Carbonation</u>	<u>Theme 1: New promising methods for the replacement and reduction of animal tests</u>
	<u>Chair: Ester van der Voet</u>		<u>Chair: Jacco Van Haveren, Priyangshu Manab Sarma</u>	<u>Chair: Gerrit Jan Schaeffer</u>	<u>Chair: J. Schrooten / M. Santin</u>	<u>Chair: A. Vanhulsel</u>	<u>Chair: Lackner/Laenen</u>	<u>Chair: Ph. Vanparys</u>
10:20 - 10:40	Ester van der Voet, Institute of Environmental Sciences (CML), Leiden (NL), "A view on tools and approaches for sustainable production"		Invited: Jacco Van Haveren, Wageningen University (NL),	Invited: Guenter Eckardt (D), Vice president for Smart Grids, Siemens AG "Smart energy systems integrating demand and supply technologies"	M. Santin, University of Brighton (UK), "Industrially-feasible production of biofunctionalised"	Invited: C. Oehr, Fraunhofer Inst. (DE), "Plasma processes for surface treatment - efficiency and environmental aspects"	Invited: K. Lackner, "Mineral Sequestration, an important complement to conventional geological storage"	Invited: A. Goldberg, CAAT, Johns Hopkin University (USA), "The new toxicology -In Vitro approaches to hazard assessment and safety evaluation"
10:40 - 11:00			Margriet Drouillon, Ghent Bio-Energy Valley (BE), "Critical succes factors for biorefineries"	Gilles Bourgain, Tractebel Engineering (BE), "DER, distribution networks and regulation"	S. Van Bael, Catholic University of Leuven (BE), "Design and production of Ti6Al4V bone scaffolds by selective laser melting"	J. Van Noyen, VITO (BE), "Synthesis of diameter and chirality controlled CNTs in zeolites, and their integration on wafers"	J. Fagerlund, "Progress with the carbonation of serpentinite-derived magnesium hydroxide using a pressurised fluidised bed"	
11:00 - 11:20	Perrine Chancerel, Berlin Institute of Technology (TUB) (DE), "LiMaS Project: A new approach for helping SMEs to Eco-Innovate"		Inaki Gandarias, School of Engineering (UPV/EHU) (ES), "Glycerol Hydrogenolysis to propanediols: the role of acid and metal sites and the reaction mechanism"	Blažič B., Faculty of Electrical Engineering, (SLO), "Large-Scale Integration of Photovoltaic Systems in Distribution Networks"	J. Demol, Catholic University of Leuven (BE), "Natural fibrin hydrogels as substrate and carrier in bone tissue engineering"	L. Baeten, Hasselt University (BE), "Parameter influence on the synthesis of ZnO nanorods for use in photovoltaic devices"	A.M Lopez-Periogo, "Ultrasonic enhancement of supercritical processes for material preparation"	H. Witters, CARDAM (BE), "The zebrafish embryo: an alternative model to screen for developmental neurotoxicity and teratogenicity of compounds"
11:20 - 11:40	J. Van Caneghem, University of Leuven (BE), "A methodology for eco-efficiency evaluation applied to ArcelorMittal Gent and the Flemish industrial sector"		Inge Velghe, Laboratory of Applied and Analytical Chemistry, CMK - Hasselt University (BE), "Pyrolysis of municipal solid waste for the production of renewable fuels and chemicals"	C. Develder, Ghent University (BE) "A simulator for the control network of smart grid architectures"	T. Desmet, Ghent University (BE), "Rapid prototyping as an elegant tool to process biodegradable polyesters into patient-specific biodegradable implants"	I. De Graeve, VUB (BE), "A coating combination of self-healing polymers and corrosion inhibitors for active corrosion protection of metals"	Van Noort, "Coupled geomechanical-geochemical aspects of geological sequestration of CO ₂ in peridotites"	N. Mesens, Johnson and Johnson PRD (BE), "Predictive toxicology in the pharmaceutical industry: zebrafish swim into view"

11:40 - 12:00	U. Fortkamp, IVL Swedish Environmental Research Institute (SE), "Transnational toolbox facilitating innovations from small and medium-sized enterprises (SME)"		Frank Pudel, PPM-Pilot Pflanzenöltechnologie Magdeburg e.V.(GE), "Oilseed Bio-Refinery – a new concept of value-added processing"	Glenn V. D. Wolk, Technical University of Eindhoven (NL) "Power Router Implementation to enable Active Distribution Networks"	Y. Chen, Catholic University of Leuven (BE), "Cell seeding optimisation of 3D fibre deposition scaffolds for skeletal tissue regeneration"	S. Kuypers, JEOL (Europe) BV (BE), "Atmospheric Scanning Electron Microscope, ClairScope, observes dynamic phenomena in liquid"	T. Van Gerven, KULEuven (BE), "On the processing conditions, product properties and in-situ analysis of mineral carbonation"	E. Adriaens, Ghent University (BE), "A new application of the Slug Mucosal Irritation (SMI) Assay: Detecting Stinging, Itching and Burning (SIB)"
12:00 - 12:20	S. Shamuilia, Catholic University of Leuven (BE), "The 3P-scan: a method to trace innovative material technology for a sustainable Flemish production landscape"		Meeta Lavania, The Energy and Resources Institute, "Integration of process technologies for enhanced production of bio-hydrogen: Concepts and Application "	Tine Vandoorn, Electrical Energy Laboratory (EELAB) (BE), "Grid voltage control in islanded microgrids with inverter-interfaced power sources"	Y.C. Chai, Catholic University of Leuven (BE), "Calcium phosphate functionalisation of Ti6Al4V Scaffolds by perfusion electrodeposition"	F. Markert, Technical University of Denmark (DK), "Development of sustainable paper coatings using nanoscale industrial surface processing"	M. Quaghebeur, VITO (BE), "Accelerated carbonation for the production of high quality building materials from waste and CO2"	M. Willems, Ghent University (BE), "Flatworms as emerging and promising model organisms for pharmaceutical preclinical drug development"
	Henriette Cornet, Institute for Resource and Energy Technology (DE), "Sustainability assessment tool for innovations in fields urban mobility, food packaging and low energy houses "				E. Lippens, Ghent University (BE), "Biocompatibility screening of flexible sensors for bladder pressure monitoring"		R. Zevenhoven, "Precipitated calcium carbonate (PCC) production from steelmaking slag using an ammonium salt solvent cycle process"	
12:20 - 12:30	Wrap-up by chairman - Site of Old Saint-John's							
12:30 - 14:00	Lunch sponsored by Royal Haskoning - Site of Old Saint-John's							
14:00 - 15:20	Parallel Scientific Sessions - Site of Old Saint-John's							
Themes			Theme 1, session 1: <i>Biorefineries and biorenewables (From biomass to product)</i>	Theme 2: Energy connects money (new smart grid energy markets)	Theme 2: Materials for Health	Joint session <i>Materials for Energy and Environment & Sustainable Chemistry</i>		Theme 1: New promising methods for the replacement and reduction of animal tests
	<i>Chair: Ester van der Voet</i>		<i>Chair: Bruce Logan, Stephan Freyer</i>	<i>Chair: Will Kling</i>	<i>Chair: T. Cleij / H. Van Oosterwyck</i>	<i>Chair: J. Denayer / A. Buekenhoudt</i>	<i>Chair: Zevenhoven/Quaghebeur</i>	<i>Chair:</i>
14u00 - 14u20	Liesbet Van den Abeele, Caroline Polders, VITO (BE), "Methodology for Determining Emission Levels Associated with Best Available Techniques for Wastewaters: 2 Case Studies"		Invited: Stephan Freyer, BASF (GE) "Biomass conversion into low-cost and sustainable chemicals"	Invited: John Scott, KEMA (UK), "The role of smart grids in creating new trading opportunities"	T. Cleij, Hasselt University (BE), "The use of semi-conductive polymers in development of biosensor applications"	T. Van Gestel, Fz-Jülich (DE), "Development of advanced nano particle coatings at Forschungszentrum Jülich, IEF-1: Novel solid oxide fuel cells and gas separation membranes"	M. Werner, "Assessing the mineral carbonation science and technology"	S. Lynagh, Bioptra, Glasgow (UK), "Bridging the Gap – Human Tissue Use in the Drug Development Process"
14u20 - 14u40	Karel Kellens, Catholic University of Leuven (BE), "Environmental impact assessment and reduction potential in discrete part manufacturing"		Kathy Elst, VITO (BE), "Valorisation of the leftovers from the poultry industry towards biodiesel."	Daan Six, VITO (BE), "Potential Barriers and Solutions for Active Demand: a Qualitative Analysis"	T. Mattheys, Catholic University of Leuven (BE), "Porous Ti coatings for improved implant fixation"	S. Ribbens, University of Antwerpen (BE), "Sustainable synthesis of photocatalytic active titania based nanotubes as potential alternative water treatment technique"	R. Baciocchi, "Carbonation of stainless steel slags at mild operating conditions"	C. Krul, TNO Quality of Life (NL), "Ex vivo human skin model for toxicity testing"
14u40 - 15u00	Bettina Muster-Slawitsch, Joanneum Research (AT) "EINSTEIN – Expert System for an Intelligent Supply of Thermal Energy in Industry - Audit Methodology and Software Tool"		Bruce Logan, Penn State University (USA), "Biofuels production using microbial fuel cell technologies"	Alexis Malchair, CISCO (BE), "title" to be confirmed	H. Van Oosterwyck, Catholique University of Leuven (BE), "In vivo, in vitro, in silico: computational tools for tissue engineering"	M. Verhaege, Ghent University (BE), "Electrochemical oxidation of 1,4-dioxane at boron-doped diamond electrode"	M. Uibu, "The behaviour of CA-Mg-silicates in direct aqueous carbonation of oil shale ash"	N. Schrage, Aachen Centre of Technology Transfer in Ophthalmology (DE), "The EVEIT as valuable tool to predict side effects – eye drop buffers cause calcifications"
15u00 - 15u20	De Meester S., Ghent University (BE), "Quantitative sustainability assessment of processes and products; positioning and prospects"		Dr. Ulrich Kettling, Süd-Chemie AG-München (GE), "Second Generation Biorefineries: Challenges and Perspectives"	ERSE (I), name and title to be confirmed	A. Braem, Catholic University of Leuven (BE), "Sol-gel based bioactive coatings inside open porous titanium structures"	J.C. Remigy, Toulouse University (FR), "Innovative contactor for CO2 recovery"	M. Verduyn, "Review of the various CO2 minealization product forms"	C. Schäfer, BioMed-zet Life Science GmbH (AT), "Development of a 3D-liver cell culture model for drug metabolism and hepatotoxicity studies"
15:20 - 15:30	Wrap-up by chairman - Site of Old Saint-John's							
16:00 - 18:00	Official plenary opening - Concert Hall							
18:30 - 20:00	Walking dinner - Site Old Saint-John's							
20:00 - 23:00	Roadmap Flanders - Concert Hall							
	Flanders Cleantech Association - Concert Hall							
	SCALA - Concert Hall							

Tuesday, April 20, 2010

08:40 - 8:50	What can EUREKA and Eurostars do for YOU - Jan-Eilert Askerøi (EUREKA)							
	Introduction of keynote speaker for all participants - Ludo Diels - Organizing Committee i-SUP2010							
08:50 - 09:25	Keynote speaker Conference Materials for Sustainable Production - Makio Naito (Osaka University - Japan), "Novel Nanoparticle Processing for Advanced Composite Materials and their Recycling"							
09:25 - 10:00	Keynote speaker Conference Sustainable Production - Jos Delbeke (DG Environment - EU), "The EU approach and new developments for Sustainable Production"							
10:00 - 10:20	Coffee break sponsored by Tessengerlo Chemie - Site of Old Saint-John's							
10:20 - 12:20	Parallel Scientific Sessions - Site of Old Saint-John's							
Themes	Theme 1: Policies for sustainable production		Theme 2: Process intensification (Re-inventing chemical processes)	Theme 1: Energy connects people (pilot projects smart grids and residential applications)	Theme 2: Materials for Health	Joint session Materials for Sustainable Production & Carbon Capture and Storage	Theme 2: Storage	Theme 1: New promising methods for the replacement and reduction of animal tests
	Chair: Paul Ekins		Chair: Paul Watts, Luc Martens	Chair: Eefje Peeters	Chair: E. Schacht / R. Cornelissen	Chair: H.P. Buchkremer / F. Snijders	Chair: S. Holloway/R. Dreesen	Chair: Bart De Wever
10:20 - 10:40	Invited: Paul Ekins, UCL Energy Institute, University College London (UK) "Success and failure of current policies and instruments and the way forward"		Invited: Melvin Koch, CPAC, University of Washington (USA), "The Development and Application of Micro-Analytical Tools to Achieve Process Intensification"	Invited: Matthias Kuom (Programme Manager E-Energy, Project Management Agency, - German Aerospace Centre) "The role of different actors in the German E-energy programme on smart grids"	Invited: A. Boccaccini, University of Erlangen (DE), "Progress in the development and characterisation of nanostructured bioactive scaffolds for tissue engineering"	Invited: P. Mathieu, University of Liege (BE), "Overview of capture technologies in industrial installations"	Invited: S. Holloway (BGS, UK), "Modelling CO2 storage in the Bunter Sandstone"	J. Schanz, Fraunhofer Institute for Interfacial Engineering and Biotechnology (DE), "A vascularized liver cell module as possible alternative to animal experiments"
10:40 - 11:00			Paul Watts, Department of Chemistry, University of Hull (UK), "Enhanced Synthesis and Rapid Scale-Up in Micro Reactors"	E. Peeters, VITO (BE), "LINEAR: towards a Breakthrough of Smart Grids in Flanders"	G. Pyka, Catholic University of Leuven (BE), "Non-destructive characterisation of the influence of surface modification on the morphology and mechanical behaviour of rapid prototyped Ti6Al4V bone tissue engineering scaffolds"	W. Haije, ECN (NL), "Evaluation of advanced pre-combustion CO2 capture processes"	D. Marx, "Enhanced coal bed methane recovery as a means of carbon dioxide storage"	J. Pusch, Fraunhofer Institute for Interfacial Engineering and Biotechnology (DE), "Establishment of a 3D intestinal tissue equivalent in vitro"
11:00 - 11:20	P.W. Gerbens-Leenes, University of Twente (NL), "The water footprint of renewable transport fuels in the European Union"		Martin Cohen, Cytec Industries Inc. (USA), "Development of a simple sustainability index for the chemical industry"	B. Roossien, Energy research Centre of the Netherlands (ECN) - KEMA (NL), "Intelligent heating systems in households for smart grid applications"	S. Van Vlierberghe, Ghent University (BE), "Polymer membranes - A versatile tool in regenerative medicine"	J.M. Serra, UPV-CSIC (ES), "Development of ceramic membrane for hydrogen separation at high temperature"	Rosane Ligabue, University of Rio Grande (Brazil) "The influence of Buffer Solutions in CO2 Mineral Trapping"	S. Constant, Epithelix (CH), "The Use Of A Long Shelf-Life In Vitro Cell Model Of The Human Airway Epithelium (Mucilair™) For Inhalation Toxicity Assessment"
11:20 - 11:40	Isabel Vermeulen, University of Leuven (BE), "Comparison between the environmental impact of specialised incineration and co-incineration in cement kilns"		T. Van Gerven, KULeuven (BE), "Structure, energy, Synergy, Time - the fundamentals of process intensification"	Bert Vande Meerseche, KHKempen (BE), "Capacity of a freezer for active demand side management"	P. Nuyts, VITO (BE), "The 3D Fiber Deposition technique for producing porous periodic metals and ceramics"	C. Niedrig, IWE (DE), "Ba0.5Sr0.5Co0.8Fe0.2O3-d for oxygen separation membranes: A study of its thermal and pO2-dependent stability"	H. Ferket, "Risks and monitoring challenges for CO2 sequestration in coal"	R. Marsh, Covance Inc. (UK), "Optimisation of a Reconstituted Corneal Epithelium Model for In Vitro ocular irritancy testing of finished products"
11:40 - 12:00	DaeYoung PARK, Gent University (BE), "REACHING Asia Continued"		T. de Groot, AkzoNobel, Research, Development & Innovation, Process Technology (BE), "Electrodialysis for monoethanolamine recovery"	L. Degroote, University of Ghent (BE), "Impact of Distributed Generation on Three-Phase Voltage Dips"	S. De Koker, Ghent University (BE), "Potent vaccine delivery by polyelectrolyte microcapsules"	C. Buysse, VITO (BE), "Fabrication and performance of gastight, macrovoid-free BSCF capillaries for high temperature oxygen separation"	K. Piessens, "Establishing a priority list for the exploration of CO2 reservoirs in Belgium"	M. Culot, Université Lille Nord de France (F), "In vitro blood-brain barrier models for high throughput toxicological screening"
12:00 - 12:20	Dominiek Vandewiele, Intercommunale Leiedal (BE) "Subregional energy planning in densely urbanized areas: obstacles and potencies within the Kortrijk Region"		Anna Ekman, Lund University, "Life Cycle Assessment of mineral oil and vegetable oil based hydraulic fluids including biocatalytic production"	Dexters A., Catholic University College Limburg (BE), "Effect of grid oriented control on the thermal storage of CHP"	V. Vermeersch, Ghent University (BE), "Poly-alpha-amino acids as improved gene delivery systems"	R. Castillo, Fz-Jülich (DE), "Thermodynamic analysis of oxyfuel power plants with high temperature membrane for air separation"	Ira Ojala, SINTEF Petroleum Research (Norway), "The effect of CO2 on the mechanical properties of reservoir and caprock"	S. Remy, CARDAM (BE), "In vitro model for the identification of respiratory sensitizing chemicals"
12:20 - 12:30	Wrap-up by chairman - Site of Old Saint-John's							

12:30 - 14:00	Lunch sponsored by Procter & Gamble - Site of Old Saint-John's							
14:00 - 15:20	Parallel Scientific Sessions - Site of Old Saint-John's							
Themes	Theme 3: Sustainable production: Business examples and research cases	Joint Session: Sustainable production and Sustainable chemistry: Sustainable biobased systems	Theme1, session 2: Biorefineries and biorenewables (From biomass to product)	Theme 1: Energy connects people (pilot projects smart grids and residential applications)	Theme 2 : Materials for Health	Joint session Materials for Sustainable Production & Carbon Capture and Storage	Theme 2: Storage	Theme 2 : Validated models and test methods
	Chair: Peter Verschaeve	Chair: Jo Dewulf	Chair: Gilbert De Vos, Gerald Bargemann	Chair: Eefje Peeters	Chair: S. Van Vlierberghe / A.R. Boccaccini	Chair: J.M. Serra / F. Snijkers	Chair: B. Beck/K. Piessens	Chair: B. De Wever
14:00 - 14:20	Peter Verschave, AGFA (BE) "Agfa's approach for sustainable production (tentative title)"	Invited: Jo Dewulf, University of Ghent (BE), "The thermodynamic bottom line of sustainable technology development"	J. Dullius, Organometallics and Resins Laboratory, Chemistry Faculty, Pontifical University Catholic of Rio Grande do Sul (Brazil), "Biodiesel production from rice bran oil by a two-step process using methanol/ethanol mixture"	K. El Bakari, Eindhoven University of Technology (NL), "Facilitating sustainability through smart network design in combination with virtual power plant operation"	R. Cornelissen, Ghent University (BE), "Bone tissue engineering with in situ photo-polymerizable biomaterials and autologous mesenchymal stem cells"	C.R. Forero, University of Valle (CO), "CuO-based oxygen carriers for high temperature chemical-looping combustion process"	M. Broothaers, "Potential reservoirs for underground CO2 storage in deep aquifers in northern Belgium"	Invited: J. Kreysa, JRC - ISPRA (It), "Validation of alternative methods: realisations, needs and state of the art concerning the process of validation"
14:20 - 14:40			Deepak Pant, VITO (BE), "Low cost microbial fuel cells for energy recovery from wastewater"	Meersman Bart, Ghent University (BE), "Overview of three-phase inverter topologies for distributed generation purposes"	L.J. De Cock, Ghent University (BE), "Polyelectrolyte capsules as carriers for growth factor delivery in the field of tissue engineering"	W. Yave, GKSS Geesthacht (DE), "Membranes with ultra high performance for CO2 capture"	P. Bertier, "A multi-disciplinary assessment of the CO2-sequestration potential of the Buntsandstein in the Campine Basin (NE-Belgium)"	
14:40 - 15:00	Christian Pladerer, Colors of Nature (DE), "Sustainable dyeing processes with dyestuff based on renewable resources for the textile industry"	William Tongamp, Akita University (JP), "Generation of hydrogen gas from polymers by milling and heating with Ni as catalyst and Ca as adsorbent"	Inge Genné, VITO (BE), "In situ recovery of bio-alcohols from aqueous solutions with novel organophilic pervaporation membranes"	Davy Geysen, VITO (BE), "Market based demand side integration in a domestic domain"	T. Van Gijsegem, Ghent University (BE), "Polymer materials for optical sensing applications"	F. Akhtar, Stockholm University (SE), "Hierarchically porous zeolite monoliths for CO2 capture"	A. Kranzmann, "Integrity of casing and injection pipe steels during Carbon Capture and Storage CCS"	K. Schröder, BioMed-zet Life Science GmbH, Linz (AT) "The Hen's Egg Micronucleus (HET-MN) Assay as a Potential replacement for the in vivo Micronucleus Test (MNT): A first Interlaboratory Trial"
15:00 - 15:20	Hans Schnitzer, TU Graz (AT), "Low carbon solutions for the food industry"	Michael Buchmann, Linde-KCA-Dresden GmbH (DE), "The Chemical-Biotechnological Process Center CBP in Leuna: Innovative design concept for a unique process-development and scale-up center"	Jan-Harm Urbanus, TNO (NL), "Biorefinery: towards biomass valorisation by reversed engineering"	Carlo Vandecasteele, Catholic University of Leuven (BE), "Energy recovery from and recycling of cachaza (press mud) and bagasse from the sugar cane industry"	H. Declercq, Ghent University (BE), "3D osteogenic differentiation of mesenchymal stem cells derived from embryonic stem cells and adipose tissue"	S. Couck, VUB (BE), "Amino-MIL-53 and its use in adsorptive CO2 capture"	J. Condor, "Comparison of risk assessment methodologies for geological storage of CO2"	M. Eeman, StratiCELL (BE), "Prediction of skin irritation potential of chemicals using StratiCELL reconstituted human epidermal model"
15:20 - 15:50	Coffee break - Site of Old Saint-John's							
15:50 - 17:10	Parallel Scientific Sessions - Site of Old Saint-John's							
				Theme: Energy management				
				Chair: Guy Vekemans	Chair: P. Dubruel / S. Jaecques			
15:50 - 16:10	Ute Weißfloch, Fraunhofer (DE), "Multi-criteria evaluation of service-based new business models to increase energy efficiency of compressed air systems"	Filomena Freitas, Universidade Nova de Lisboa (PT), "Valorization of Glycerol By-Product from the Biodiesel Industry by its Biological Conversion into Value-added Polysaccharides"	K. Jevons, Koch Membranes (UK), "Potential for membranes offering economic benefits in Industrial biotechnology"	Maes T., Ghent University (BE), "Carbon and energy management on eco-industrial parks: case study Flanders' carbon neutral industry parks"	A. R. Boccaccini, University of Erlangen (DE), "Structural investigation of hydrothermally-surface functionalised carbon nanotube-reinforced hydroxyapatite biocomposite layers formed by electrophoretic deposition (EPD)"		Invited: Juho Lipponen (IEA), "Legal Aspects of Carbon capture and storage: ensuring safe, secure ghg mitigation"	J. Hooyberghs, CARDAM (BE), "VITOSENS in vitro skin sensitization assay: recent developments and pre-validation"
16:10 - 16:30	Wouter Ghyoot, Umicore (BE), "A contribution to a sustainable supply chain for Li-ion batteries in automotive applications"	Chantal Block, University of Leuven (BE), "CO2-neutral industrial park: case study Herdersbrug-Bruges, Belgium"	Bert Lemmens, VITO (BE), "Harvesting and downstream processing of intracellular metabolites from single cell biomass"	Seth Girvin, Compass Informatics Ltd. Sustainable Energy Ireland (IRL), "A Bioenergy Mapping & Modelling Tool as Applied in Ireland"	J. Schelfhout, Ghent University (BE), "A tissue engineering approach to meniscus regeneration by rapid prototyping"		S. Hannis, "Monitoring technologies used at some CO2 storage pilot sites"	D. Basketter, DABMEB Consultancy Ltd (UK), "ECVAM prevalidation study on skin sensitisation alternatives: update on progress"

16:30 - 16:50	Bart Vander Velpen, Haskoning (BE), "Chemical Leasing – an innovative business approach for sustainable production and materials use"	Koen Van Aken, EcoSynth (BE), "The EcoScale as a transparent and time-efficient metric tool to select reaction conditions for scale-up"	Naten Van Hemelrijck, VSEP (BE), "Membrane filtration on heavily loaded process or waste streams"	Ron Schuermans, Thenergo (BE), "Combined heat and power for greenhouses and industries "	V. Ozhukil Kollath, VITO/Ulg (BE), "Force spectroscopy on implant materials using various ligand-receptor combinations"		B. Laenen, "Carbon sequestration leadership forum: Recognized Project on CO2 Storage in Limburg Coal and Sandstone Layers"	S. Freeman, Farino Consulting (UK), "Prospective Validation Study of Reconstructed Human Tissue Models for Eye Irritation Testing: An Update on Progress"
16:50 - 17:10	Stef Kranendijk, DESSO (BE), "Cradle-to-Cradle implementation at DESSO"	TO BE CONFIRMED Han Vervaeren, Hogeschool West-Vlaanderen (BE), "Increase in biogas production from energy crops by biologic ensilage additives"	J.C. Remigy, Toulouse University (FR), "Green ultrafiltration membranes"	Tim Brauckmüller, Jade University of Applied Sciences Oldenburg, Germany (DE), "Energy management and climate change as a transnational task"	E. Berneel, Ghent University (BE), "The construction of the gelatinous core of a bio-active meniscus: preliminary experiments"		D.Lewis, "Assessment of Potential for Geological Storage of CO2 for the island of Ireland"	Ph. Vanparys, CARDAM (BE) "The Syrian Hamster Embryo and Balb/c 3T3 cell transformation assays: an ECVAM coordinated pre-validation study"
17:10 - 17:20	Wrap-up by chairman - Site of Old Saint-John's							
17:20 - 19:00	Free time							
19:00 - 22:30	Medieval evening - Celebrations: departure at site Old Saint-John's at 19: 00 pm							
Wednesday, April 21, 2010								
08:40 - 08:50	Welcome and practical info for all participants - Ludo Diels - Organizing Committee i-SUP2010 Introduction of keynote speaker for all participants							
08:50 - 09:25	Keynote speaker Conference CARDAM - Bjorn Hansen (DG Environment, Chemicals Unit - EU), "Sustainable development and alternatives for animal testing"							
09:25 - 10:00	Keynote speaker Conference Sustainable Energy- Guido Bartels (Global Energy & Utilities - IBM), "Third Industrial revolution & Energy (US + international context)"							
10:00 - 10:20	Coffee break - Site of Old Saint-John's							
10:20 - 12:20	Parallel Scientific Sessions - Site of Old Saint-John's							
Themes	Theme 4: No production without consumption: the two sided coin form SCP		Theme 1, session 2: Biorefineries and biorenewables (From biomass to product)	Theme 3: Energy connects technology (smart residential and transport)	Theme 1: Materials for Energy and Environment	Theme 3: New Materials Processing Routes	Theme 1: Capture	Theme 3: New concepts of test strategies for hazard and risk assessment
	Chair: Arnold Tukker		Chair: Evan Beach, Matthias Bechtold	Chair: Ronnie Belmans	Chair: J. Vande Voorde / M. Innocentini	Chair: F. Markert	Chair: P. Mathieu/J. Van Noyen	Chair: G. Schoeters
10:20 - 10:40	Arnold Tukker, Netherlands Organisation for Applied Research, TNO (NL) "Sustainable Consumption and Production a two sided coin"		Invited: Evan Beach, Yale University (USA), "Green Chemistry: Successes, Challenges and State of the Art"	Invited: Ronnie Belmans, European Smart Grid Technology Platform "The opportunities of the Strategic Energy Technology Plan for smart grids"	Invited: M. Innocentini, University of Ribeirao Preto (BR), "Characterization of ceramic and metal foams for pollution control applications"	Invited: J. Jokiniemi (FI), "Gas phase synthesis and coating of functional nanoparticles"	D. Zilnik, "Is carbon capture the answer for heavy Oil"	Invited: R. Thomas, The Hamner Institutes for Health Sciences (USA), "The development and application of Genomic Tools for Hazard Identification and Risk Assessment"
10:40 - 11:00			A. Verween, Ghent University (BE), "Microalgae: R&D in Flanders"	Marinda Gaillard, Enexis (NL), "Modelling and combining profiles of future residential load elements for network planning"	M. Scheppers, OVAM (BE), 'i-SUP2010: Ecolizer 2.0 towards Ecolizer 3.0"	L. Silvestroni, CNR-ISTEC (IT), "Production and characterization of hafnium carbide-based ceramics"	M. Lucquiaud, "Water management of coal plants"	
11:00 - 11:20	Veronique Van Hoof, VITO (BE), "The first Flemish action plan on Sustainable Public Procurement (SPP)"		K.M. Van Geem, Ghent University (BE), "Accurate chemistry for combustion and pyrolysis of alternative fuels: bio-butanol"	Mattijs Ghijsen, VITO (BE), "Coordinated charging of Electric Vehicles: Impact on the Low-Voltage Distribution Grid"	B. Minnaert, Ghent University (BE), "Which type of solar cell is best for low power indoor devices?"	L. Ruys, Centexbel (BE), "CHANGE2BIO: Novel developments in biopolymer based textile applications"	W. Nijs, "CO2 scenarios up to 2050, the role of CCS in steel production"	J. Kleinjans, Maastricht University (NL), "Toxicogenomics-based in vitro assays for predicting genotoxicity and carcinogenicity in vivo".
11:20 - 11:40	Simon Clement, ICLEI (DE), "Driving Sustainable Innovation through Early Market Engagement in Public Procurement"		Maarten De Coninck, Catholic University College Ghent (BE), "Mechanical downstream processing of single cell oils"	Lampropoulos Ioannis, Technical University of Delft (NL), "Electric vehicles integration within low voltage electricity networks & possibilities for distribution energy loss reduction"	H. Lefakis, University of Western Macedonia (GR), "Boroaluminide coated ferritic-martensitic steel for power plant applications"	A. Van Hoeck, VITO (BE), "A new biomolecule immobilization strategy using atmospheric pressure plasma technology"	Aronu, " Vapour pressure and activity coefficient determination for amine amino acid salt solution (166)"	G. Maxwell, Unilever (UK), "Replacing Animal Testing for Assessing Consumer Safety"

11:40 - 12:00	De Boeck Ann, OVAM (BE), "Three pilot projects on environmentally responsible consumption at the consumption junction in Flanders"		Markus Wolperdinger - Thomas Hirth, Fraunhofer Institute for Interfacial Engineering and Biotechnology – IGB (GE), "Requirements for sustainable chemical manufacturing:the Chemical-Biotechnological Process Center CBP in Leuna"	Dexters A., Catholic University College Limburg (BE), "Protection issues in microgrids: an overview"	J. Vande Voorde, OCAS NV(BE), "Economical and environmental advantages of UHSLA steel in Gondola wagons"	E. Yasa, Catholic University of Leuven (BE), "Investigation of island scanning in selective laser melting"	R. Pacciani/R. Quin, "Measuring the uptake of CO2 by Lithium orthosilicate under realistic flue gas conditions"	E. Roggen, Novozymes (DK), "Integrated testing strategies as a building block of strategies for safety assessment"
12:00 - 12:20	Vercalsteren An, VITO (BE), "Environmentally extended input-output tables (EE-IO) at the regional level – Potential for policy purposes in the Flemish region of Belgium"		Matthias Bechtold, Bioprocess Laboratory - ETH Zurich (CH), "Integration of biotransformation and SMB separation for the high-yield production of fine chemicals"	Grietus Mulder, VITO (BE), "Storage development for households with solar panels"	S. Milis, SIRRIS (BE), "The use of sustainable material technology in Flanders"	T. Jacobs, Ghent University (BE), "Penetration of plasmas into porous materials"		H. Spielman, Freie Universität Berlin (DE), "Accelerating the transition to a toxicity pathway-based paradigm for chemical safety assessment through internationally co-ordinated research and technology development"
12:20 - 12:30	Wrap-up by chairman - Site of Old Saint-John's							
12:30 - 14:00	Closing ceremony room Ambassador - Site of Old Saint-John's Lunch - Site of Old Saint-John's							





