

Society And Materials International Conference SAM 9

11-12 May 2015, Luxembourg

Program



LUXEMBOURG
INSTITUTE
OF SCIENCE
AND TECHNOLOGY



Day 1 – 11th May

9.00 Introduction by Jean-Pierre Birat, ESTEP

9.10 Welcome address by Paul Schosseler, LIST

Session 1: Circular economy

9.20 Keynote lecture by Eric Pirard, University of Liège

10.00 Development of a circular economy approach for construction materials in Luxembourg
Alina Belousova, LIST

10.20 A review of methodologies to assess the value of waste management & the circular economy: a case study of Flanders (Belgium)
Maarten Dubois, KU Leuven

10.40 Closing the loop for aluminium cans
Monia Niero, DTU

11.00 Coffee break

Session 2: LCA applications and new developments

11.30 Keynote by Julian Allwood, University of Cambridge

12.10 Global algorithms for LCA-based multi-goal constrained optimization of potable water plants
Florin Capitanescu, LIST

12.30 Approach to put local environmental impacts in context to local added value - the example of ship scrapping within the lifecycle
Nathanael Ko, University of Stuttgart

12.50 Ready-to-use and advanced methodologies to prioritise the regionalisation effort in LCA
Laure Patouillard, CIRAIG

13.10 Lunch

14.10 Keynote lecture by François Maréchal, EPFL

14.50 Characterization of urban building stocks in a life cycle assessment framework: a case study in Luxembourg
Alessio Mastrucci, LIST

15.10 A simplified tool to evaluate the sustainability of buildings in steel in early stages of design
Paulo Santos, University of Coimbra

15.30 Reducing burdens in LCA : Overriding Life Cycle Assessment in Small-Medium Enterprises for the Wood Product Industry
Heather M. Davidson, FCBA

15.50 Comparing upcycling vs downcycling for construction & demolition waste: the case of concrete aggregate
Andrea Di Maria, KU Leuven

16.10 Coffee break

Session 3a: Material flow analysis & Critical raw materials

- 16.40 Narratives and materials
Jean-Pierre Birat, ESTEP
- 17.00 Material System Analysis of Critical Raw Materials in Europe
Charlotte Petiot, C., BIO Intelligence Service
- 17.20 Conceptual Evaluation Model and Methodology for criticality of materials in a Product and Industrial Level
Yanya Jin, UT Troyes

17.40 End of sessions day 1

18.45 Luxembourg city tour (meeting point: POST office, 25 Rue Aldringen)

20.30 Dinner at Brasserie du Cercle (2A, Rue des Capucins)

Day 2 – 12th May

Session 3b: Material flow analysis & Critical raw materials

- 9.00 Keynote lecture: "Social innovation: a new paradigm for sustainable material development?" by Antonius Schröder, University of Dortmund**
- 9.40 Critical aspects of the application of material flow analysis on plant level
Verena Trinkel, TU Wien
- 10.00 Elaborating the history of our cementing societies: an in-use stock perspective
Gang Liu, University of Southern Denmark
- 10.20 The recycling rate of steel
Philippe Russo, Arcelor Mittal
- 10.40 Dynamic MFA of steel in Europe
Daryna Panasjuk, IRT

11.00 Coffee break

Session 4: LCA and biomass

- 11.30 From trees to electricity, the physics beyond LCA
Olivier Mirgaux, University of Lorraine
- 11.50 Implementing industrial ecology: what the bio-based construction materials case can teach us?
Jérémie Joubert UT Troyes
- 12.10 Variability of the environmental impacts of raw cork
Dias, A. C., University of Aveiro

- 12.30 Life cycle assessment of wood construction products fabricated in the Walloon region (Belgium) - comparison of process and input-output LCA
Zeller, V.R., Université Libre Bruxelles

12.50 Lunch

Session 5: Societal, economics and sustainability issues

14.00 Keynote lecture by Ichiro Daigo, University of Tokyo

- 14.30 Overview of concrete experiences and exchange of best practices in the field of sustainability assessment
Isabelle Chaput, RDC Environnement
- 14.50 Society and materials in the European policies for responsible research and innovation
Andrea Declich, Laboratory of Citizenship Sciences
- 15.10 The social value of a steel product: the launch of an action research based on the theory of value in economics
Mélodie Caraty, Arcelor Mittal
- 15.30 Coffee break**
- 16.00 Property-based structural value of steel
Daisuke Matsui, University of Tokyo
- 16.20 Monitoring the environmental and energy impacts of electric arc furnace making
Valentina Colla, Scuola Superiore Sant'Anna
- 16.50 Key sustainability performance indicators selection for the recycling carbon fibers sector
Baptiste Pillain, University of Bordeaux
- 17.10 SAM 9 Conclusions
Jean-Pierre Birat, ESTEP

Venue

Luxembourg Institute of Science and Technology (LIST)
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Posters

Life Cycle Assessment and functional unit to assess product's refurbishing and reuse within multiple scenarios as second applications use

J.L. Amaya, Escuela Superior Politécnica del Littoral

Testing and developing LCA tools and methodologies in a multi-industrial and -academic project

Gael Fick, IRT

Towards a midpoint indicator for including noise impacts from mobility in LCA

Rodolphe Meyer, LIST

Improving the life cycle impact assessment of ecosystem services through the use of an integrated model

Benoît Othoniel, LIST

Environmental impact assessment of rail freight intermodality

Angel L. Merchan, University of Liège

Taking into account the dynamics of electricity demand and supply of a school

Emil Popovici, LIST

Electrical and electronic equipment environmental product declarations: towards a harmonized system?

Axel Roy, Bureau Veritas

Resource optimized product design from a holistic lifecycle perspective

Roberta Graf, Fraunhofer IBP

LCA education: overview about the Belgian situation

Angélique Léonard, University of Liège

Life cycle assessment of anthropic water

Sylvie Groslambert, University of Liège

Prognostic evaluation of environmental and energy impacts in electric arc furnace steelmaking through process modelling and simulation

Ismael Matino, Scuola Superiore Sant'Anna

Life cycle assessment of four municipal solid waste management scenarios in Irkutsk, Russia

Olga Ulanova, National Research Irkutsk State Technical University

Organizing Committee

The conference is organized by:

E. Igos, C. Goncalves (LIST), S. Belboom (University of Liège), G. Fick, S. Remy (IRT-M2P), M. Chiappini (ArcelorMittal).

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