

Technology Transfer Promotion ISCOWA TTPI FOUNDATION

WASCON 2006 Conference

Belgrade, Serbia & Montenegro 30 May – 2 June 2006 Final Programme

The International Conference on the Environmental and Technical Implications of Construction with Alternative Materials

Science and Technology
Raw and Rest Materials in Building Products

Organised under auspice of the International Society ISCOWA

Organising Committee TTPI Foundation:

Marina Ilic, TTPI and Institute for General and Physical Chemistry, Belgrade, Serbia and Montenegro Jan Senden, TTPI and ISCOWA, The Netherlands
Liliane Haverkort, Office Manager, The Netherlands
Rob Spoelstra, TTPI, The Netherlands
Klaus Schneider, TTPI, Germany
Robert Haverkort, TTPI, The Netherlands
Sasa Miletic, TTPI, Serbia and Montenegro
Hans Goumans, ISCOWA, The Netherlands
John Heynen, ISCOWA, The Netherlands
Slobodan Otovic, SGITS, Serbia and Montenegro
Prof. Dr. Kazimir Kurij, Serbia & Montenegro

Scientific Committee:

Dr. Hans Goumans, The Netherlands
Sasa Miletic M.Sc. Serbia & Montenegro
John Heynen M.Sc, The Netherlands
Dr. Marina Ilic, Serbia & Montenegro
Jan Senden B.Sc, The Netherlands
Prof. Dr. Kazimir Kurij, Serbia & Montenegro
Dr. Hans van der Slott Workston Leach YS

Dr. Hans van der Sloot, Workshop LeachXS, The Netherlands

Prof. Dr. Rob Comans, Workshop Organic Leaching, The Netherlands

Dr. Kevin Gardner, Workshop PASSIFy, USA

Dr. Julia Stegemann, United Kingdom

Dr. Colin Hills, United Kingdom

Dr. Radomir Folic, Serbia & Montenegro

Dr. Slobodan Otovic, Serbia & Montenegro

Conference Secretariat

TTPI Foundation

Office Manager: Mrs Liliane Haverkort

Beekstraat 17

6301 HV Valkenburg a/d Geul

The Netherlands

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Conference Address: SAVACENTER BELGRADE, Serbia&Montenegro

Goals and objectives of ISCOWA

ISCOWA is an international, non-profit organization which was formed in 1992 to promote and coordinate the exchange of information regarding the environmental and technical aspects of construction with industrial by-products. Industrial by-products include residues from industrial processes, such as flue gas desulphurisation sludge, metallurgical slags, power plant, and municipal and hazardous waste incinerator fly ashes, bottom ashes, foundry sand, blasting grit, mine tailings, as well as demolition wastes, soils contaminated by industrial activities, and stabilized or treated residues and soils, etc One of the major activities is the coordination of international conferences in the WASCON series, which aim at the exchange of information of all aspects concerning waste re-use. ISCOWA members are involved with the utilisation of these alternative materials in construction applications, such as fill, roadbase, cement, concrete, ceramic products, roofing materials, etc. The membership of ISCOWA provides the opportunity to contact fellow members for joint collaboration.

The 5th ISCOWA AWARD.

In order to stimulate research and development in the field of application of mineral waste materials and environmental assessment the ISCOWA AWARD has been introduced. The AWARD winner will be announced during the closing session of the conference, on June 2.

ISCOWA Members Meeting

May 30, 2006, Time 17.00 – 18.30

Goals and objectives of TTPI Foundation

TTPI Foundation

Goals:

Realise the objectives of the society ISCOWA. Creating solutions, coordinating and promoting knowledge and technology transfer in the field of:

- Reuse of wastes from Energy Production
- Reuse of wastes from industrial processes
- Energy Saving processes in industrial processes
- Promotion of new processes in building Industry and Civil Engineering

Take the lead in organising meetings, workshops and conferences. Organise publication of papers in book and digital form, like CD or web based technologies.

Bring together industrial problem holders and technology owners.

Promote technology to decrease the emission of energy production and industrial processes, including the emission of carbon dioxides. In general, transfer of technology, to re-use coal-ashes and other residues of combustion systems. ISCOWA members have the necessary knowledge and know how.

Name of the Foundation:

Technology Transfer Promotion ISCOWA Foundation, TTPI Foundation.

Seat of the Foundation:

Valkenburg aan de Geul

The Netherlands

ISCOWA Society and TTPI Foundation Secretary

Beekstraat 17 6301 HV Valkenburg aan de Geul

Fax: 00-31-43-6014039

E-mail: iscowa-ttp@hetnet.nl or secr@iscowa.org

Appointment of the board:

The board of the TTPI Foundation has seven members.

Termination of the foundation.

In case of termination of TTPI the positive result will go to NOVIB and/or the WNF.

Board members are:

Dr. Marina Ilic, chair
Jan Senden, B.Sc, secretary/treasury
Klaus Schneider Dipl. Ing.
Robert Haverkort, M.Sc.
Sasa Miletic, M.Sc.
Robert Spoelstra, M.Sc.
Mrs. Liliane Haverkort, office manager

Serbia & Montenegro
The Netherlands
The Netherlands
The Netherlands

TTPI Business Meeting SAVACENTER ROOM May 29, 2006

Conference schedule

May 30	Workshops	Parallel sessions	Plenary	Parallel session
			Registration Office Open	
			8.30 - 21.00 h	
_	Workshop/training			
	LeachXS 9.00 - 17.00 h		Posterboard	
	9.00 - 17.00 11			
_	ECN - VANDERBILT - DHI			
			ISCOWA Meeting 17.00 - 18.30	
			17.00 - 10.30	
			Welcome Reception	
			18.30 - 21.00	

31-mei	Workshops	Parallel sessions	Plenary	Parallel sessions
			Registration Office Open	
			8.30 - 19.30	
9.30			Opening and Welcome	
			Dr. Mrs. Marina Ilic	
			ISCOWA Welcome	
			Serbian Minister of Scienc Protecti	
			Dr. Aleksander Popovic	
			Belgrade Officer	
			Dutch Ministery of Enviro	onmental Protection
10.30			Rein Eikelboom	
10.30 – 11.00			Coffee	
			B. Policy and Planning	
11.00 – 11.20			1 (83) Gardner, USA	
11.20 – 11.40			4 (10) Mulder, The Netherlands	
11.40 – 12.00			5 (26) Schiopu, France	
12.00 – 12.20			7 (42) Mihajlov, Serbia	
12.20 – 12.30			Pannel Disc.	
12.30 – 13.30			Lunch	

31-mei	Workshops	Parallel sessions	Plenary	Parallel sessions
			C. Policy and Planning	
13.30 - 13.50			8 (55) Astrup, Denmark	
13.50 - 14.10			9 (56) Astrup, Denmark	
14.10 - 1430			10 (28) Todic, Serbia	
14.30 - 14.50			11 (43) Jovanovic, Serbia	
14.50 - 15.00			Pannel disc.	
15.00 - 15.30			Coffee	
		D1		D2
		- •		
		Application of residues		Civil Eng. and Road Constr.
				Comoun
15.30 - 15.50	Workshop	12 (80) Kostovic, Serbia		19 (86) Hjelmar, Denmark
15.50 - 16.10	Leaching organic contaminants	13 (25) Ribbing, Sweden		20 (81) Bergfeldt, Germany
16.10 - 16.30		14 (40) Kanafek, Poland		23 60) Akhtar, Pakistan
16.30 - 16.50	Rob Comans, ECN	16 (85) Hjelmar, Denmark		22 (73) SudarshanaFernando, UK
16.50 - 17.10	Jette Bjerre, DHI	17 (54) Wilkes, Uk		Pannel discussion
17.10 - 17.30	-	18 (79) Malolepsz,y Poland		
		Panel discussion		

			Free Belgrade city walk	
1-jun	Workshops	Parallel sessions	Plenary	Parallel sessions
			Registration Office Open 8.30 - 19.00	
		E1		E2
		Leaching and model studies		General Product Development
8.30 - 8.50		26 (72) van der Sloot, The Neth.		34 (57) Cioffi, Italy
8.50 - 9.10		27 (37) Bendz, Sweden		35 (59) Greaves, UK
9.10 - 9.30		29 (4) Rendek, France		36 (1) Freire, Brazil
9.30 - 9.50		30 (68) Kentaro Miyawaki , Japan		37 (11) Rutten, The Neth.
9.50 - 10.10		31 (12) Diaz, USA		38 (44) Monteiro, Portugal
10.10 - 10.30		32 (45) Honders, The Neth.		39 (46) Guerrero, Spain
10.30 - 11.00			Coffee	
		F1		F2
		Leaching and model studies		General Product development
11.00 - 11.20		40 (92) Hirofumi Sakanakura, Japan		47 (9) Jevtic, Serbia

11.20 - 11.40 11.40 - 12.00 12.00 - 12.20 12.20 - 12.40 12.40 - 13.00		42 Van Zomeren, The neth. 43 (36) Hyks, Denmark 44 (19) Cornelis, Belgium 45 (27) Schiopu, France 83 (75) Carpenter, USA		49 (52) Pytel, Poland 50 (93) Kida Akiko, Japan 52 (69) Pollettini, Italy 53 (74) Engelsen, Norway 48 (53) Arslan, Turkey
13.00 - 14.00			Lunch	
1-jun	Workshops	Parallel sessions	Plenary	Parallel Sessions
		G1 Leaching and model studies		G2 Product Development
14.00 - 14.20		46 (58) Esteves, Portugal		60 (14) Lalinde, Payá, Spain
14.20 - 14.40		54 (70) Bröns-Laot, France		61 (5) Pavlovic, Serbia
14.40 - 15.00		56 (90) Meeuwsen, The Neth.		62 (16) Arickx, Belgium
15.00 - 15.20		57 (77) Nielsen, Belgium		63 (51) Pytel, Poland
15.20 - 15.40		58 (94) Kida Akiko, Japan		64 (18) Van Gerven,
15.40 - 16.00		59 (65) Engelsen, Norway		Belgium 65 (48) Vegas, Spain
16.00 - 16.20		Н1	Coffee	H2
16.20 - 16.40		Leaching and model studies 67 (29) Miller, USA		Product Development 72 (17) Van Gerven,

16.40 - 17.00 17.00 - 17.20 17.20 - 17.40 17.40 - 18.00		68 (71) Johnsson, Switserland 69 (87) Mostbauer, Austria 70 (89) Quaghebeur, Belgium 71 (88) Dijkstra, The Neth.		Belgium 73 (62) Liska Vandeperre, UK 51 (66) Al-Ansary, UK 75 (63) Liska, UK 76 Miletic-Ilic, Serbia
			Conference Dinner 20.00 - 24.00	
2-jun	Workshops	Parallel sessions	Plenary	Parallel sessions
			Registration Office Open	
			8.30 - 16.00	
	Workshop PASSIFy	11		l2
	9.00 – 11.00	Quality Control		Stabilization and
9.00 - 9.20	1 Carey UK	79 (91) Masahiro Osako, Japan		Landfill 84 (23) Lidelöw, Sweden
9.20 - 9.40	2 Gardner USA	80 (50) Urzela,i Spain		85 (2) Freire, Brazil
9.40 - 10.00	3 Magnie France	81 (49) Birgisdottir, Denmark		86 (3) Hidalgo, Spain
10.00 - 10.20	4 Antimir Uk	82 (34) Arm, Sweden		87 (78) Wahlström, Finland
10.20 - 10.40	5 Boardman UK	78 (84) Gardner, USA		88 (47) Takayuki Shimaok , Japan
10.40 - 11.00	discussion	Discussion		Discussion
11.00 – 11.30			Coffee	

11.30 - 11.50 11.50 - 12.10 12.10 - 12.30	Meeting IWMG Thomas Astrup a.o.	J1 Quality Control 90 (21) Andrés, Spain 92 (22) Laugesen, Norway 96 (95) Chang-Hwan Jung, Japan		J2 Stabilization and Landfill 89 (24) Mácsik, Sweden 97 (67) Danek, Czech Republic 95 (41) Calderon, Spain
12.30 - 13.30			Closing Session	
			WASCON 2009	
			ISCOWA AWARD	
13.30 - 16.00			Buffet and Toast	
			13.30 - 16.00	

WASCON 2006 PROGRAMME

Tuesday May 30, 2006

Registration Office SAVACENTER Time 8.30 – 21.00

Workshop LeachXS

SAVACENTER ROOM C. ECN – VANDERBILT – DHI

Chairman: Dr. Hans van der Sloot Time 9.00 – 17.00

ISCOWA Members Meeting SAVACENTER ROOM B.

17.00 - 18.30

Welcome Reception

SAVACENTER ROOM 18.30 – 21.00

Poster Presentation

SAVACENTER ROOM Tuesday 10.00 till Friday 17.00

Wednesday May 31, 2006

Registration Office Time: 8.30 – 21.00

A: Plenary Opening and Welcome

SAVACENTER ROOM A Time: 9.30 - 10.30

Welcome

By Dr. Marina Ilic, chair TTPI Foundation

Introduction by chair ISCOWA

Serbian Minister of Science and Environmental Protection Dr. Alexander Popovic.

Belgrade Officer

Dutch Ministry of Environmental Protection Rein Eikelboom M.Sc.

Coffee/Tea Break

Time: 10.30 – 11.00

Session B: Policy and Planning

SAVACENTER ROOM A Time: 11.00 – 12.30

Chairman: Dr. Julia Stegemann Secretary: Dr. Ksenija Jankovic

Carbon Sequestration Via Recycled Materials Used in Construction.

Environmental Research Group, University of New Hampshire, USA K.H. Gardner, et al.

Closed Cycle Construction: an integrated process for the separation and reuse of C&D waste.

TNO Science and Industry, The Netherlands

E. Mulder, et al.

Technical and environmental feasibility of the use of secondary raw materials (SRM) in the construction materials and product.

CSTB-sustainable development department ,France.

N. Schiopu, et al.

Towards sustainable use of natural resources: Product development from sustainable consumption and production perspective.

Faculty of technical Sciences University of Novi Sad, Serbia and Montenegro.

A. Mihajlov

Lunch

SAVACENTER ROOM Time: 12.30 – 13.30

Session C: Policy and Planning

SAVACENTER ROOM A Time: 13.30 – 15.00

Chairman: Prof. Dr. Kazimir Kurij Secretary: Dr. Julia Stegemann

Treatment and utilization of MSWI bottom ashes in Denmark.

Technical University of Denmark, Denmark T. Astrup

Treatment and utilization of MSWI fly-ashes: trends and outlook.

Technical University of Denmark, Denmark.

T. Astrup

New elements of the system of environmental Protection in Serbia and their importance for environmental. policy-making and governance.

Univ. of Applied Sciences, Serbia and Montenegro.

D. Todic, V. Vukavosic

Management of plastic waste.

University BK, Serbia.

L. Jovanovic

Coffee/Tea Break

Time: 15.00 – 15.30

Workshop Leaching Organic Contaminants

SAVACENTER ROOM C. Time 15.30 – 17.30 ECN – DHI

Chairman: Dr. Rob Comans Secretary: Dr. Jette Bjerre Hansen

session D1: Application of residues

SAVACENTER ROOM A Time: 15.30 – 17.30

Chairman: John Heynen Secretary: Ljijana Loncar

Fly-ash utilization in cement production - some Serbian experience.

Faculty of Mining and Geology, Serbia and Montenegro. M. Kostovic, et al.

Environmentally friendly use of non-coal ashes in Sweden.

The Swedish Thermal Engineering Research Institute, Sweden C. Ribbing

Marketing of 1,8 mln ton of PFA, the main methods of using ashes in different kinds of industry and achievements of new technologies.

UTEX, Poland.

J. Kanafek

A one-stage treatment process for improving the leaching characteristics of APC residues from MSWI's.

DHI-Water & Environment, Denmark.

O. Hjelmar

The effect of sodium silicate on the stabilisation of MWSI FLY ASH.

Ineos Silicas Ltd., United Kingdom.

T.I. Wilkes, et al.

The effect of FBC ash in cement on the thaumasite formation.

AGH University of Science and Technology, Poland

J. Malolepszy,et al.

Session D2: Civil Engineering and Road Construction

SAVACENTER ROOM B Time: 15.30 – 17.00

Chairman: Maria Arm Secretary: Jan Senden

Environmental aspects of utilization of MSWI incinerator bottom ash as sub-base in road construction.

DHI-Water & Environment, Denmark.

O. Hjelmar et al.

Wastes from Highway Maintenance - New Disposal Ways.

Forschungszentrum Karlsruhe, Institute for Technical chemistry- Thermal Waste Treatment, Germany. B. Bergfeldt, et al.

Use of recycled municipal solid waste (rubber and shredded tyres) in highway construction.

director Progressive International Engineers & Contractors, Pakistan.

Engr. Hafiz M. Akhtar

Shredded Tyres as a Granular Material in Geo technical Engineering Applications.

Environmental Agency - Diversity Student, United Kingdom.

Sudarshana Fernando, et al.

Free Belgrade city walk

Thursday June 1, 2006

SAVACENTER Registration Office Time 8.30 – 19.00

Session E1: Leaching and Model Studies

SAVACENTER ROOM A *Time:* 8.30 – 1030

Chairman: Dr. Kevin Gardner Secretary: Andjelka Mihajlov

European standardisation, regulatory developments and modelling in relation to release from construction products to soil and groundwater.

ECN, Energy Research Centre, The Netherlands

H. van der Sloot, et al.

The accumulated effects of long-term leaching of MSW bottom ash in a sub-base layer in a test road.

Swedish Geotechnical Institute, Sweden.

D. Bendz. et al.

Predicting the MSWI bottom ash behavior according to waste input and incineration technology.

INSA de Lyon, France.

E. Rendek.et al.

Cr(VI) Leaching Characteristics from the Recycled Material on Dry-wet Repetition Test.

Department of Environmental systems, Meisei University, Japan.

Kentaro Miyawaki, et al.

A multisurface geochemical modeling approach to characterize sorption of trace metals in biosolids.

Department of Civil Engineering, University of Toledo, USA.

M Diaz. et al.

Leachability of heavy metals and anions in soils- an analysis.

SenterNovem/ Bodem, The Netherlands

A. Honders, et al.

Session E2: General Product Development

SAVACENTER ROOM B Time: 8.30-10.30

Chairman: Dragica Jevtic Secretary: Sophia Lidelow

Geopolymer-based building materials from coal fly-ash.

Dipartimento de Chimica, Università di Napoli Frederico II, Italy. S.Andini, R. Cioffi, et al.

Early Age Studies of Sulphate Activated Pozzolans

Imperial college, Department of Materials, United Kingdom R. Greaves, et al.

Physical and mechanical evaluation of soil-cement bricks added of rice Husk.

College of Agricultural Engineering, State University of Campinas, Brazil. A. P. da Silva Milani and W.J. Freire.

<u>Transition from MWSI bottom ash to construction material; a combination of treatment techniques for environmental quality improvement.</u>

AVR. The Netherlands.

S. Rutten, et al.

Processing and properties of clay based ceramics with coal fly ash addition.

New University of Lisbon, Department of Materials Science, Portugal.

R. C.C. Monteiro and M.M.A.R. Lima

Innovative Matrices for Immobilizing Cesium.

Instituto de Ciencias de la Constucción "Eduardo_Torroja', Spain.

S. Goni, A. Guerrero, et al.

Coffee/Tea break

Time: 10.30-11.00

Session F1: Leaching and Model Studies

SAVACENTER ROOM A Time: 11.00 – 13.00

Chairman: Kevin Gardner Secretary: Andjelka Mihajlov

Evaluation of Secondary Materials Used For Road Base by Combination of Accelerating Exposure Test and Tank Leach Test.

National institute for environmental studies, Japan. Hirofumi Sakanakura. et al.

Environmental impact assessment of alternative materials in road construction and embankment

ECN, The Netherlands. Andre van Zomeren, et al.

Removal of readily soluble compounds prior to pH-static leaching experiments: effect on leaching predictions..

Technical University of Denmark, Denmark.

J. Hyks, et al.

Leaching of Antimony and Molybdenum from Municipal Solid waste Incinerator Residues.

Laboratory of applied Physical Chemistry and Environmental Technology, K.U. Leuven, Belgium.

G. Cornelis, et al.

Horizontal environmental assessment of building products in relation to the construction products directive (CPD).

CSTB and INSA de Lyon, France

N. Schiopu, et al.

Life cycle based risk assessment of recycled materials in roadway construction.

Recycled Materials Resource Center, USA

A.C. Carpenter, et al.

Session F2: General Product Development

SAVACENTER ROOM B Time: 11.00 – 13.00

Chairman: Sophia Lidelöw Secretary: John Heynen

Testing of different composite materials based on recycled brick aggregate.

University of Belgrade, Faculty of Civil Engineering, Serbia and Montenegro. D. Jevtic, et al.

Investigation of physical properties of sand-lime bricks produced with addition of ground limestone.

University of Science and Technology, Department of Building Materials, Poland. Z. Pytel

Impact of co-incineration of wastes on trace element concentration of cement.

National Institute for Environmental Studies, Japan. Kida Akiko, et al.

Hydrothermal zeolitization of MSWI bottom ash.

Dept. Hydraulics, Transportation and Roads- University of Rome "La Sapienza", Italy. A.Polettini, et al.

Deterioration of recycled concrete aggregate under the influence of steady water drainage.

SINTEF Building and Infrastructure, Norway.

T. S. W. Plesser, C.J. Engelsen, et al.

Recycling of waste sludges of various treatment plants.

Firat University, Faculty of Engineering, Environmental Engineering Department, Turkey E. I. Arslan, et al.

Lunch

SAVACENTER ROOM Time: 13.00 – 14.00

Session G1: Leaching and Model Studies

SAVACENTER ROOM A Time: 14.00 – 16.00

Chairman: Ljubica Pavlovic Secretary: Rob Comans

Leaching tests performed on low strength concrete.

Laboratório Nacional de Engenharia Civil, Portugal. A. Esteves, et al.

Analysis of the implementation of ENV12920 European standard

INSAVALOR division POLDEN, France G. Bröns-Laot, et al.

Predicting Leaching Behaviour of Cement-Based Construction Materials.

Energy Research Centre of the Netherlands ECN, The Netherlands. J.C.L. Meeussen, et al.

Environmental quality assessment of construction and demolition waste: comparison of percolation and batch leaching tests.

VITO, Flemish Institute for Technological Research, Belgium. Peter Nielsen, et al.

Leaching characteristics of trace elements in cement by co-incineration of wastes.

National Institute for Environmental Studies, Japan. Akiko Kida, et al.

Constituent release predictions for recycled aggregates at field site in Norway.

SINTEF Building and Infrastructure, Norway.

C.J. Engelsen, et al.

Session G2: Product Development

SAVECENTER ROOM B Time: 14.00 – 16.00

Chairman: Julia Stegeman Secretary: Vid Vukasovik

Reusing of fly ashes in glass fibre reinforced cement: a new generation of high-quality GRC composites.

ICITECH, Universidad Politécnica de Valencia, Spain.

J. Payá, L.F. Lalinde, et al.

Sulfur polymer cement, sulfur concrete-new materials on the bases of hazardous industrial wastes.

Institute for Technology of Nuclear and Other Mineral Raw Materials, University of Belgrade, Serbia and Montenegro. A.Terzic, et al.

Influence of treatment techniques on different organic fractions in MWSI bottom ash leachate.

Department of Chemical Engineering, K.U. Leuven, Belgium.

S. Arickx, et al.

The effect of curing on the sulphate resistance of cements containing ashes from fluidised bed combustion installations.

University of Science and Technology, Department of Building Materials Technology, Poland.

Z. Pytel

Upgrading MWSI-bottom ash by extraction, heating or dense medium separation, in view of recycling.

Department of Chemical Engineering, K.U. Leuven, Belgium.

T. van Gerven, et al.

Scientific and technical aspects on the use of Thermally-treated paper sludge in cement.

Fundación LABEIN, Spain.

I. Vegas, et al.

Coffee/Tea break

Time: 16.00 – 16.20

Session H1: Leaching and Model Studies

SAVACENTER ROOM A Time: 16.20 – 18.00

Chairman: Hans van der Sloot Secretary: Ljubica Pavlovic

Release of metals from asphalt concrete to road runoff

University. of Toledo, Department of Civil Engineering, USA. L. E. Miller, et a.l

Predicting heavy metal and metalloid solubility from solid-phase concentrations; a progress report.

Swiss Federal Institute for Water Research, Switzerland.

C. A. Johnson, et al.

Weathering of MWSI bottom ash in laboratory test cells and under field conditions; effect on metal and metalloid mobility.

Institute of Waste Management, Austria.

P. Mostbauer, et al.

Assessing the environmental quality of soils that are used in construction works: comparison of column and batch leaching tests in a regulatory context.

VITO, Flemish Institute for Technological Research, Belgium.

M. Quaghebeur, et al.

Local chemical equilibrium makes column test protocol TS14405 suitable for model predictions.,

ECN. The Netherlands

J. J. Dijkstra, et al.

Session H2 Product Development

SAVACENTER ROOM B Time: 16.20 – 18.00

Chairman: Vid Vukasovic Secretary: Rafaele Cioffi

Influence of the degree of carbonation on leaching from cement-bound waste-containing cement matrices. Department of Chemical Engineering, K.U. Leuven, Belgium.

T. van Gerven, et al.

Mixtures of pulverized fuel ash, Portland cement and Magnesium oxide: strength evolution and hydration products.

Department of Engineering, University of Cambridge, United Kingdom.

L.J. Vandeperre, et al.

Stabilisation/solidification of raw and synthetic North Sea petroleum drill cuttings for conversion into construction products. Cambridge University, Engineering department, United Kingdom.

M.S. Al-Ansary et al.

Mixtures of pulverised fuel ash. Portland cement and Magnesium oxide: characterisation of pastes and setting behaviour. University of Cambridge, department of Engineering, United Kingdom M.Liska, et al.

Investigation on Sulphate Degradation of Portland Fly Ash cement Concrete

Galenika Fitofarmaciija, Serbia and Montenegro.

S. Miletic and M. Ilic

Conference Dinner

Time: 20.00 – 24.0

Friday June 2, 2006

Registration Office Time: 8.30 – 16.00

Workshop PASSIFy

SAVACENTER ROOM C Time: 9.00 – 11.00

Chairman: Colin Hills Secretary: Kevin Gardner

Introduction to PASSify: Background, Project Objectives and Consortium Activities. CCLR, University of Greenwich Colin Hills/Paula Carey

Long-term Performance Assessment of 5 Solidification/ stabilization Sites in the US. ERG, University of .New Hampshire Kevin Gardner et al.

Sampling and Compliance Testing on 5 year-old Stabilised Hazardous Waste. INERTE.

Marie-Claire Magnie et al.

Evaluation of Performance of Stabilised/Solidified Soils using Different Binder Systems. <u>CCL</u>R, University of Greenwich Aurora Antimir et al.

Geotechnical Properties of Carbonated and Non-Carbonate Stabilised/Solidified Soils,. University of Birmingham David Boardman et al.

Session I1: Quality Control

SAVACENTER ROOM A Time: 9.00 – 11.00

Chairman: Evert Mulder Secretary: Slobodan Otovic

A Methodology to Determine an Environmental Safety Level for Secondary Products Based on Sustainability Concept – Case Study on MSW Incineration Ash... Material Cycles Engineering Section, National Institute for Environmental Studies, Japan.

Masahiro Osako, et al.

Environmental assessment of the use of recycled aggregates from C&D waste in civil works and concrete., Fundación LABEIN, Spain. A. Urzelai, et al.

Life cycle assessment of residue use in road construction (ROAD-RES).

Institute o Environment & Resources, Technical University of Denmark, Denmark. T. H. Christensen, H Birgisdóttir, et al.

Gas generation in incinerator ash.

Swedish Geotechnical Institute, Sweden. M. Arm, et al.

Long Term Contaminant Leaching and Transport from Base Layers in Road.

University of Toledo, Department of Civil Engineering, USA.

D.S. Apul, K. Gardner& T. Eighmy

Session I2: Stabilization and Landfill

SAVACENTER ROOM B Time: 9.00 – 11.00

Chairman: Sasa Miletic Secretary: Raffaele Cioffi

Management of iron stabilised CCA contaminated soil

Division of waste Science and Technology, Luleå University of Technology, Sweden.

S. Lidelöw et al.

Destructive and non destructive combined methods for evaluating the mechanical behavior of chemically stabilized soils.

College of Agronomy and food engineering, Federal University of Goiás, Brazil

R. de Castro Ferreira, W.J. Freire.

Microstructure of cement-based materials processed with supercritical CO₂ comparison with natural carbonation processes.

Instituto de Ciencias de la Construcción 'Eduardo Torroja', Spain.

A. Hidalgo, et al.

Environmental acceptability of industrial by-products in landfill constructions.

VTT Processes, Finland.

M. Wahlström, et al.

Stabilized municipal solid waste incineration residues in a landfill for beneficial use as construction materials.

Department of Urban and Environmental Engineering ,Kyushu University, Japan.

Takayuki Shimaoka, et al.

Coffee/Tea break

Time: 11.00 – 11.30

Meeting Workgroup IWMG

SAVACENTER ROOM C Time: 11.30 – 12.30

Chairman; Thomas Astrup

Session J1 Quality Control

SAVACENTER ROOM A Time: 11.30 – 12.30

Chairman: Slobodan Otovic Secretary: Evert Mulder

Testing of solidified-stabilized products at industrial-scale prior to disposal using new compliance leaching tests.,

ETSIIT, Universidad de Cantabria, Spain.

A. Andrés, et al.

Cost-benefit analysis for stabilisation of contaminated sediments with residual materials.

Norwegian University of Science, Department of Civil and Transport Engineering, Norway. J. Laugesen, et al.

Environmental Safety Management System for Recycled Materials in Korea.

Research Center for Material Cycles and Waste Management, National Institute for Environmental Studies, Japan Chang-Hwan Jung, et al.

Session J2: Stabilization and Landfill

SAVACENTER ROOM B Time: 11.30 – 12.30

Chairman: Raffaele Cioffi Secretary: Sasa Miletic

Pilot study with fly-ash stabilised sewage sludge (FSS) as hydraulic barrier layer in top cover construction.

LTU, Ecoloop, Sweden.

J. Mácsik, et al.

Sludge from iron and steel industry stabilised with coal fly-ash for geotechnical application. Vysoka Skola Banska - Techn. University, Czech Rep.

T. Danek

Use of soft "ALBUFERA" lagoon mud in earth fills for paved tracks.

Universidad Politécnica de Valencia, Spain.

P. Calderon, et al.

Plenary Closing Session

SAVACENTER ROOM A Time: 12.30 – 13.30

Final Remarks by the chair of TTPI, Dr. Marina Ilic

Remarks by the chair of the International Society ISCOWA

ISCOWA AWARD 2006

Promotion WASCON 2009

Buffet and Toast SAVACENTER ROOM Time: 13.30 – 16.00

See you again in?

End May/beginning June, 2009

Poster Presentation

An Innovative Stabilization/Solidification Treatment for Soil Remediation: Demonstration Project in Murano (Venice). Consorzio Venezia Ricerche, Venice, Italy, Petra Scanferla*,

We would like to thank the following organizations and institutes for the support of WASCON 2006

- 1. RMRC
- 2. STAMICARBON
- *3. ECN*
- 4. VANDERBILT
- 5. *DHI*
- 6. SWEDGEO
- 7. INSA-LYON
- 8. ISCOWA
- 9. ATM Moerdijk
- 10. Schreurs Milieu Consult

General Information

Language

The official language of the conference will be English. No simultaneous translation will be provided.

Proceedings

The text of the conference papers will be handed out as an ISCOWA publication. Selected papers can be submitted for publication in "The International Journal Waste Management"

Liability

Please arrange your own and health insurance. The organizers can not be held liable for personal accidents, loss of or damage to private property of participants and accompanying persons, either during or directly arising from the WASCON 2006 meeting, nor delays or any modification in the program due to unforeseen circumstances.

WASCON 2009

Please remark the date May/June 2009 of next conference in your mind. Don't forget and don't organize other meetings in the same time. We will meet you again.

Social Program

Informal get-together	May 29,	18.00 - 20.00
Welcome Reception	May 30,	18.30 - 21.00
Free city walks,	May 31	19.00
Conference Dinner,	June 1,	20.00 - 24.00
Closing Buffet and Toast,	June 2,	13.30 - 16.00

Program for accompanying persons are at the conference secretariat desk

Notes: