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The **10**th European Biosolids and Biowastes Conference Exhibition and Workshop

Sunday 13th November - Wednesday 16th November 2005
Cedar Court Hotel, Wakefield, UK

A Decade Of Change

Pre-Conference Workshop:

**"The Art of Selling" - Does it apply to Biowaste and
Biosolids Products and Engineering Services?**

Technical Sessions:

- Beneficial Reuse
- Biosolids Anaerobic Digestion -
Operating Experience and Uprating
- Biowastes
- Compliance, Monitoring and Control
- Destructive Technologies
- Drying Technologies
- Innovations
- Odour Removal
- Process Developments
- Pumping, Conveying and Storage
- Sludge Drying
- Strategic Management
- Sustainability

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THE 10TH EUROPEAN BIOSOLIDS AND BIOWASTES CONFERENCE EXHIBITION AND WORKSHOP

Cedar Court Hotel, Wakefield, UK - 13th - 16th November 2005

REGISTRATION FORM

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CONFERENCE FEES	RATE	VAT @ 17.5%	AMOUNT PAYABLE	NUMBER	TOTAL PAYABLE
FIRST NAMED AUTHOR ONLY:	£460	£80.50	£540.50		
CO- AUTHORS:	£510	£89.25	£599.25		
FULL DELEGATE FEE:	£555	£97.13	£652.13		
STUDENT FEE (3 DAYS):	£225	£39.38	£264.38		
CONFERENCE DINNER - 16TH NOVEMBER:	£40	£7.00	£47.00		
PRE-CONFERENCE WORKSHOP - SUNDAY 14TH NOVEMBER:	£75	£13.13	£88.13		

DAY DELEGATES	RATE	VAT @ 17.5%	AMOUNT PAYABLE	NO. OF PERSONS	NO. OF DAYS	TOTAL PAYABLE
DAY RATE: (Per person per day)	£265.00	£46.38	£311.38			

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or e-mail to franceseldon@aquaviro.co.uk **or** fax to +44 113 244 2166 **or** tel: +44(0) 113 2424200

Please note that as of 1st October 2005, our telephone/fax numbers will be changing - please visit the Aqua Enviro Website for updates.

or register online at www.european-biosolids.com or pay online at www.aqua-enviro.net

The 10th European Biosolids and Biowastes Conference Exhibition and Workshop

Message from the Conference Director



The Annual European Biosolids and Biowaste conference is the leading conference in Europe covering these important subjects. It draws professionals from around the world who come together on an annual basis to update each other on the science, engineering and operational practices.

The conference programme is dictated, not by the organisers, but by the many Authors who are keen to share the latest information, practical experience and research findings with their peers. Since its inception ten years ago the conference has been successful in placing in the public domain over 600 technical papers providing a compendium of knowledge and information for those involved with the treatment of sewage sludge, the reuse of biosolids and biowastes. All the latest developments are to be found and in many cases their progression from research subjects to full scale working plants can be traced. This year sees, yet again, new concepts emerging as well as the consolidation of established technologies as the race to meet ever-stringent environmental and quality standards goes on.

This being the 10th conference in the series, opportunity has been taken to reflect on past achievements but not without a forward look into the likely impact future legislation and regulation will have on the acceptable solutions for tomorrow.

This year's pre-conference workshop take a hard look at the interface between Suppliers and Customers as we examine in detail the issues surrounding the difficult task "selling" (as distinct from marketing) of products, process plant and engineering services. Our special guest speakers bring together experience from the US and Europe with opportunity for contributions from delegates; A workshop not to be missed.

Of course one of the attractions of the conference is meeting with likeminded people. We seek to encourage this through the conference exhibition and the conference dinner. This year the dinner will incorporate an awards evening where we shall be honouring those who have made a significant contribution to the compendium of knowledge within the conference proceedings of the past decade. This will be in the salubrious surroundings of the Leeds United Football Club Hospitality Suite. Entertainment will be provided by the Silver Leaf Jazz Band.

So if you are a regular attendee at the conference I look forward to meeting you once again. If this is to be your first conference then I am sure you will find it a most stimulating and rewarding experience.

Paul Lowe

Paul Lowe,
Conference Director.

**For the latest conference information please visit
www.european-biosolids.com**

Diary of Events 2006

Infrastructure Asset Maintenance and Management

11th January 2006

The National Motorcycle Museum, Birmingham

The applications of recycled glass as a sustainable option for water treatment and wastewater recycling

24th January 2006, The Royal Armouries, Leeds

The New Bathing Water Directive – What's our Approach?

February 2006

Endocrine Disrupting Chemicals in the Water Environment

March 2006

Energy and Water Treatment

March 2006

4th CIWEM National Conference

September 2006, St James' Park, Newcastle

11th European Biosolids and Biowastes Conference, Workshop and Exhibition

November 2006

Sponsorship & Exhibition Opportunities

Our events and conferences provide excellent opportunities for sponsorship and exhibiting, offering you many benefits including increased brand awareness and the opportunity to access niche markets and target audiences.

We are pleased to offer packages which are tailor-made to meet your specific requirements. Please contact Krista Braithwaite on tel. 0113 2424200 or email. kristabraithwaite@aquaviro.co.uk

The Venue

The Cedar Court Hotel is a luxury venue for both business and leisure visitors with 151 beautifully appointed bedrooms. The hotel is situated off Junction 39 of the M1 motorway, 3km from Wakefield City centre and the main line Wakefield Westgate Rail Station. There is an hourly service from London Kings-Cross to Wakefield. The nearest airport is Leeds/Bradford 22km from the venue. Manchester International Airport is 60 km from Wakefield by motorway. You can change at Leeds for the Wakefield Westgate train, or alight at Dewbury and take a taxi (6km) to the conference venue.

Delegates are required to make their own reservations at the Cedar Court, Tel. (+44) 1924 261 268, quoting Aqua Enviro to benefit from the reduced rate of £95 Bed and Breakfast.

There are wide range of alternative hotels in the Wakefield area within easy reach of the conference centre, for further details please visit the conference website www.european-biosolids.com.

The Exhibition

An informative exhibition provides a meeting point for delegates to discuss the latest development with exhibitors. Morning coffee, lunch and afternoon tea are all served in the exhibition area giving exhibitors maximum exposure to delegates. Monday evening there will be a 'Meet and Greet' session for all delegates in the exhibition area. Companies wishing to take advantage of limited exhibition space can reserve a place by contacting Krista Braithwaite on Tel +44 (0) 113 2424200 or email kristabraithwaite@aquaviro.co.uk.

The Conference Dinner

To celebrate the 10th anniversary of the conference we are holding a formal black tie dinner at Leeds United FC, Elland Road Stadium on Tuesday 15th November. Delegates will taken by coach from the conference hotel to the famous Leeds United Elland Road Stadium Bremner Suite. Here you will taste the "glory years" of this football club.

To celebrate 'a decade of change', included in the evening will be a special awards ceremony in which we shall honour those who have made a significant contribution to the success of the conference over the past 10 years. There will also be a live performance from the Silver Leaf Jazz Band. For more information about the band, please visit their website www.silverleafjazzband.co.uk/pages/index.php.

We are offering corporate tables at the standard price of £40 (+VAT) per person; this includes travel from the Cedar Court hotel, reception drink, a three-course dinner and 1/2 bottle of wine per person. To reserve your table or for further details please contact franceseldon@aquaviro.co.uk.

PRE-CONFERENCE WORKSHOP 13TH NOVEMBER 2005 - 2.15PM

The Art of Selling Biowaste and Biosolids Products

Ralph Waldo Emerson (1803-1882), U.S. essayist, poet and philosopher is quoted as saying in a lecture he gave in 1871:

"If a man can write a better book, preach a better sermon, or make a better mouse-trap, than his neighbour, though he build his house in the woods, the world will make a beaten path to his door."

In today's sophisticated society we have discovered the art of selling is a much more complex business than building a unique mousetrap. Bringing goods and services to the market place involves the deployment not only of marketing strategies but the ability and skills needed to "clinch the deal" and "deliver the goods and services". The art of selling is crucial to commercial success. Its importance is often underestimated and, in the biowaste and biosolids business, hardly ever discussed.

It is a misconception that compliance with regulations and standards will assure biowaste and biosolids producers a ready market for their products. Case history has shown how wrong this can be. Enthused Engineers are prone to promote the technical aspects of their technologies, only to find they cannot overcome the barriers to innovation at the point of sale, often complicated by "belt and braces" forms of contract. Of course customers expect what they buy to be fit-for-purpose, however their expectations are often unrealistic, promoted through the sales process, and may exceed what is delivered.

This workshop topic represents a first for this industry. It takes us beyond marketing into the hard interface between customer and producer. We have brought together people working at the sales interface to share their experience. From the US our speaker represents the longest and most successful biosolids sales programme in the world going back some 80 years and crossing international boundaries. From the UK we have drawn people whose business survival relies on successful selling of products and services.

This workshop is guaranteed to generate a stimulating and enlightening discussion. If you are biowaste or biosolids producer, an operations manager, a design engineer, a contractor or if you are involved in buying or selling processes this workshop is for you. If you are interested to learn why the best laid marketing plans may not be realised then this workshop should give you some clues as to the reasons why.

14.15	Chairman's Introduction
14.30	Marketing And Market Research - Crossing The Chasm From Selling to Enthusiasts to Selling to the Majority Steve Hallam, Hallam Marketing
15.00	Selling Process Plant and Engineering Services - A Contractor's Point Of View Tony Williams, Director, Biwater Treatment Ltd
15.30	Selling Engineering Design Services - A Consultants' Point of View Gareth Davies - Technical Director, Pell Frischmann Consulting Ltd
16.00	Refreshments
16.15	Dressing Biosolids Up for Sale: Tell the Truth, Do Not Eat, and Do No Harm Tom Crawford, Attorney, Milwaukee Metropolitan Sewerage District, Milorganite
16.45	Experiences of Creating Markets for Biosolids and Selling Biosolids Alexander Madden, Agrivert
17.15	Does The Brand Say It All? Is the Professional Market the same as the Fast Moving Consumer Goods Market? Tim Evans, Tim Evans Environment
17.45	Discussion
18.30	Close

MONDAY

14TH NOVEMBER

Opening of Conference

European Commission Directorate
G Environment Sustainable
Development and Integration

Opening Plenary Session

Keynote Address

- **The Biosolids Legacy of the Milwaukee's Sewer Socialist**
Crawford, T., Milwaukee Metropolitan Sewerage District

SESSION 01

Strategic Management 1

- **A decade of Biosolids development: 1995 to 2005**
Rowlands, C.L., Severn Trent Water Ltd
- **The future of Biowaste treatment and disposal**
Stentford, E., The University of Leeds
- **Biosolids Master Planning - An American Perspective**
*Barksdale, J.**, and *Hyer, C.***, *MWH, **Hillsborough County Water Development

SESSION 02

Strategic Management 2

- **Management of sewage sludge and biowaste in the Czech Republic - state of the art**
Michalová, M., and *Matulová, D.*, T G Masaryk Water Research Institute, Prague
- **The Sludge Management and the Kyoto Protocol**
Permy, D., and *Arauzo, I.*, STC, S.A.
- **Is the commercial success of sludge treatment processes a question of timing?**
Hudson, J. and *Lowe, P.*, Aqua Enviro Consultancy Services

SESSION 03

Strategic Management 3

- **Re Using Sludge, Sustainable solutions to the growing sludge production**
Olivier, Q., *Adams, B.*, *Van Renterghem, B.*, and *Pollet, O.*, Seghers Keppel Technology Group, Belgium NV
- **Using Integrated Operations and Maintenance to lower operating costs and improve the environment at the Mersey Valley Processing Centre (MVPC)**
*Robertson, N.**, *Pearce, A.***, *Johnson, K.**, and *Butler, R.**, *MWH, **United Utilities
- **Chemicals effluents sludge strategy**
Gray, A.V., MWH
- **An alternative approach to nitrogen management within sewage treatment works**
*Riddle-Black, D.**, *Godley, A.***, and *Davis, M.**, *Lupus Science, **WRc Plc

SESSION 04

Strategic Review 4

- **CAP reform, cross-compliance, and biosolids and biowastes**
Evans, T., Tim Evans Environment
- **Biosolids Compliance and End User Needs - A Common Goal**
Gunaratnam, M., and *Davies, G.*, Pell Frischmann Consulting Engineers
- **Analysis of conservative pollutants transport in saturated soil column**
Albuquerque, A. and *Bandeiras, R.*, University of Beira Interior, Portugal

SESSION 05

Compliance Monitoring and Control 2

- **Conventional Assessment of Toxicity of Effluents and Novel Low-Cost Toxicity Evaluations for Aquatic and Terrestrial Environments**
Wadhia, K. and *Thompson, C.K.*, ALcontrol Laboratories
- **Microbial biomass C dynamics in sewage sludge amended agricultural soil**
Viana, F.P., and *Smith, S.R.*, Imperial College London
- **Enteric pathogen decay kinetics in biosolids amended agricultural soil**
Cass, J., *Rogers, M.*, and *Smith, S.R.*, Imperial College London
- **Rapid Non-equilibrium Decompression (RnD)® - Continuing Development of the "Bug Buster" Technology**
Rigden, C., *Shepherd, S.*, and *Gill, N.*, Eco-Solids International Ltd

Invited Speakers



Tom Crawford, Attorney,
Milwaukee Metropolitan Sewerage District



Tony Williams,
Director, Biwater Treatment



Steve Hallam
Hallam Marketing



Alexander Madden
Managing Director Agrivert



Gareth Davies
Technical Director, Pell Frischmann

TUESDAY

15TH NOVEMBER

SESSION 06

Biosolids Anaerobic Digestion - Operating Experience 1

- **Engineering Aspects of Mesophilic Plug Flow Advanced Digestion Facilities**
Le, M.S., Harrison, D.**, and Brade, C.**,*
*United Utilities Plc, **Monsal Ltd
- **Modelling the influence of municipal sludge anaerobic digestion and co-digestion on downstream unit operations**
Barber, W.P., Atkins Water
- **Acid phase digestion - Experience of two stage anaerobic digestion at Swindon STW**
Asaadi, M. and Marsh, P., RWE Thames Water

SESSION 07

Biosolids Anaerobic Digestion - Operating Experience 2

- **Production of Biosolids by ATAD from a highly variable municipal source.**
Bartlett, J., and Layden, N.M., The Institute of Technology, Ireland
- **10 years operating experience of thermal hydrolysis projects worldwide**
Panter, P., Ebcor Ltd
- **Uncovering the benefits of cell disruption for anaerobic digestion of waste activated sludge to biogas**
Stephenson, R., Paradigm Environmental Technologies Inc
- **Collective experience of the Crown Sludge Disintegration System for carbon release for improved biological treatment Final results**
Froud, C., Weber, R.**, and Schmitt, W.***,*
*CSO Technik, **Biogest AG, ***Wiesbaden WWTW

SESSION 08

Biosolids Anaerobic Digestion - Uprating

- **Refurbishment of a 62,000m³ Digestion Facility in Orange County Using Fundamental Sludge Rheology and Digester Modelling**
Harrison, D. Wilson, T.**, and Dawson, M.***,*
*Monsal Ltd, **Earth Tech Inc, ***BHR Group Ltd
- **Digestion of WWTP sludge in Flanders (Belgium): experiences with mixed sludge versus prospects for biological sludge.**
Weemas, M., Thoeve, C., and de Gueldre, G., Aquafin NV
- **Start up of the MicrosludgeTM process to pre-treat waste activated sludge at Los Angeles county**
Stephenson, R., and Laliberte, S., Paradigm Environmental Technologies Inc

SESSION 09

Pumping, Conveying and Storage

- **Improving prediction of sludge pumping losses & mixing energy**
Dawson, M., and Harrison, D.**,* *BHR Group, **Monsal Ltd
- **Head Loss Reduction for Pumping Sludge**
Uby, L., Lindberg, A.E., and Gabryjarczyk, R., ITT Flygt AB
- **The Use of Pneumatic Conveying for Bulk Solids Transportation**
Farnish, R., The Wolfson Centre for Bulk Solids Handling Technology University of Greenwich

SESSION 10

Sludge Drying

- **Sludge Drying has introduced new types of safety devices to the waste water industry. When the HSE ask what integrity level that safety trip has, how do you answer?**
de Salis, C., Rowan House Ltd
- **Sewage sludge drying; A review of Fire and Explosion Hazards over the last decade**
Manchester, S.J., BRE Certification Ltd
- **Safety Enhancements for drum dryers - the design, installation and commissioning experiences**
Haitz, J., Andruz AG

SESSION 11

Drying Technologies 1

- **Integrating "new generation type" indirect vertical sludge dryers in the energy recovery system of the Poznan Central WWTP in Poland.**
Tize, R., BioSolidAir NV
- **Safe and Simple Drying Operations**
Mountford, L., Kruger UK
- **Centridry® - technology for the future**
Peter Godwin, Martin Denuell, Euroby Ltd
- **The INNODRY 2E dryer**
Prevot, C., Degremont

SESSION 12

Drying Technologies 2

- **10 Years Operational Experiences with Thermal Drying in Norway - Challenges and the Way Forward**
Tornes, O. Sundberg, C.**, and Norgaard, E.***,* *IVAR IKS Stavanger, **University of Agricultural Sciences, Sweden, ***Norsk Jordforbedring AS, Norway
- **Operational Experiences with Collaborative Co-operation: the UK Dryer Users Group**
Whipps, A. and Holden, C.**,* *Pell Frischmann Consulting Engineers, **Anglian Water Services Ltd
- **Understanding Product Quality and the impact of pelletizers on the final product.**
Lowe, P, Whipps, A.** and Hamilton, R.*,*
*Aqua Enviro Ltd, **Pell Frishmann Consulting Engineers

SESSION 13

Dewatering

- **The Belt Filter Press - Fact or Fiction. A review of real performance; the good the bad and the ugly together with an update on developments for the next 10 years.**
McLoughlin, P., Ashbrook Simon-Hartley
- **Polyelectrolyte Use in Sludge Dewatering and Thickening An Optimisation Feasibility Study in Anglian Water**
Gove, L. and Blanco, E., Anglian Water Services Ltd
- **Update on the Effects of Sludge Dewatering on E.coli enumeration**
Smith, S., Cass, J., and Rogers, M., Imperial College London

SESSION 14

Biowastes 1

- **Effect of aerobic waste processing on biogas yield in the anaerobic digestion of readily biodegradable wastes**
Akunna, J.C. Stewart, N.A.* and Goldie, P.**,*
*University of Abertay, Scotland, **Dundee City Council
- **Selection of the Best Available Techniques (BAT) for treatment and disposal of organic waste streams in Flanders**
Huybrechts, D., Linden, Van der., Torfs, R., and Vrancken, K., VITO, Flemish Institute for Technological Research
- **The effects of using Municipal Solid Waste (MSW) and vegetable compost in agriculture**
Kokkora, M., and Hann, M., Cranfield University

SESSION 15

Biowastes 2

- **The Efficacy of Municipal Organic and Green Wastes in Mine Site Rehabilitation**
Kelly, G., NSW, Science and Research
- **Choosing between green innovative technologies - Hydrothermal processing of biowastes**
Svanström, M.*, Patrick, T.N.*, Fröling, M.**,
Peterson, A.**, and Jefferson, W.T.**,*Chalmers
University of Technology, **Massachusetts
Institute of Technology
- **Experiences of commissioning the ATHOS® Unit at Truccazzano, Italy**
Gilbert, A.*, Crétenot, D.**, and Favali, G***,
*OTV, **Veolia Water Direction Technique,
***SIBA SpA, Italy
- **Dependency of the excess sludge production on the COD/TOC-ratio of organic wastewater compounds with respect to process design and cost efficiency**
Wolter, S.T., and Dockhorn, T., Technical
University of Braunschweig, Germany

SESSION 16

Sustainability

- **Waste management & minimization an approach for a sustainable development**
Raghupathy, L.*, and Raghupathy, C.K.**,
*Ministry of Environment and Forests, India,
**Lingaya's Institute of Management and
Technology
- **Meeting the waste incineration directive**
Jeavons, J.*, Potts, L.*, and Nyul, D.**,* Earth
Tech, **Severn Trent Water
- **Use of Biosolids on Radiata Pine Plantations - 15 years Research**
Kelly, G., NSW, Science and Research

SESSION 17

Process Developments

- **The effect of lime treatment on sludge rheological properties**
Remy, M.*, Hill, A.*, and Judenne, E.**,*Lhoist
Recherche et Développement S.A, **Lhoist
France
- **Process Improvements Achieved at IVAR's Composting Facility By Use of Hydrated Lime to Increase pH in the Biowaste or Increased Aeration Securing Mesophilic Start Up Conditions**
Tornes, O.*, Sundberg, C.**, and Norgaard,
E***,*IVAR IKS Stavanger, **University of
Agricultural Sciences, Sweden, ***Norsk
Jordforbedring AS, Norway
- **The digestibility of iron-dosed sludge**
Smith, J., The University of Birmingham
- **Effective wastewater treatment using Hydrated lime and Quicklime**
Birkinshaw, I., Portasilo Ltd

WEDNESDAY

16TH NOVEMBER

SESSION 18

Beneficial Reuse 1

- **The ecological impact of sludge application to agricultural soil**
Rogers, M., and Smith, S.R., Imperial College
London
- **Impact of Sewage Sludge Applications on the Biogeochemistry of Soils**
Devaney, D.*, Hodson, M.E.*, Godley, A.R.**,
Yamulki, S.*, Purdy, K.J.*, *University of
Reading, **WRc
- **Nitrogen transformations and the dynamics of microbial lock-up in biosolids-amended agricultural soil**
Rigby, H., and Smith, S.R., Imperial College
London

SESSION 19

Beneficial Reuse 2

- **Levels of antibiotic resistant bacteria and endotoxin associated with the land application of biosolids**
Pepper, I.L., Brooks, J.P., Maxwell, S.L., and
Gerba, C.P., The University of Arizona
- **A sustainable technology to co-utilise organic and mineral wastes in brown field site restoration.**
Chan, B.K.C., and Dudeney, A.W.L., Imperial
College London
- **Landspreading on agricultural land: nature and impact of paper wastes applied in the UK**
Gibbs, P*, Chambers, B*, Muir, I.*,
Richardson, S.*, Hickman, G.*, Hawkins,
C.**,* Barraclough, D**, Marsden, B**, Creed,
R**, and Davis, M**, *ADAS Gleadthorpe,
**Environment Agency
- **Use of Biosolids in Establishing Eucalypt Plantations for Mine Site Rehabilitation**
Kelly, G., NSW, Science and Research

SESSION 20

Destructive Technologies

- **Mechanical Sludge Disintegration: Providing an Alternative Carbon Source for Nutrient Removal**
R. Kampak*, S A Parsons*, P. Pearce**, S
Ledoux**, P Vale***, J Churchley***, and E
Cartmell*, * School of Water Sciences,
Cranfield University, ** Thames Water,
Severn Trent Water
- **Full-Scale Demonstration of the Plasma Assisted Sludge Oxidation Process**
Mulhern, T., and Bacon, M., Fabgroups
Technologies Inc
- **Autotrophic Air BioFiltration Using ALIZAIR® - Full scale results from different plants in the UK and from Budapest**
Guibelin, E.*, Bigot, B.**,* and Ducray, F***,
*Veolia Water Direction Technique, **OTV,
***Anjou Recherche

SESSION 21

Odour Removal

- **Assessment of odour from lime treated biosolids**
Winter, P., and Asaadi, M., RWE Thames Water
- **Use of nitrate solution (Nutriox®) for the prevention of health risk caused by offensive odour from biosolids**
Weissenberger, J.*, and Caldwell, S.**,*Yara
Internationa ASA, Norway **Yara Industrial, UK
- **Amenity impacts of episodic emissions from composting facilities**
Drew, G.H.*, Smith R.*, Pollard, S.J.T.*, Longhurst,
P.J.*, and Kinnersley, R.**,*Cranfield University,
**Environment Agency
- **The Effect of Operational Parameters on the Elimination of Solid Wastes Hydrogen Sulphide Air Pollution via Biofiltration Reactor**
Ghoreishi, S.M. and Rostami, H.R., Isfahan
University of Technology, Iran

SESSION 22

Innovations 1

- **Comparison of the use of various chemical additives for removing phosphorous from sludge**
Barber, B., Atkins Water
- **Towards the development of a novel wastewater treatment system incorporating drinking water residual: preliminary results**
Babatunde, A.O., Yang, Y., and Zhao, Y.Q.,
University College Dublin
- **Increasing number of chemicals from non point sources - an upcoming challenge for biosolids and waste water treatment**
Froling, M.*, and Svanström, M.**,*Massachusetts
Institute of Technology, **Chalmers University of
Technology

SESSION 23

Innovations 2

- **Experiences of Glasshouse Solar Drying Using SOLIA® Veolia Water's Automated Windrow Turning System**
Gilbert, A.*, Teulet, C.**,* and Levasseur, J.-P.**,*OTV,
**Veolia Water Direction Technique
- **A New Environmentally Acceptable Method for Reducing Production of Excess Biosolids from Biological Wastewater Treatment Processes**
Talbot, B.*, Louvel, L.*, Mottot, Y*, Edmunds, S.*,
Palfrey, R.**,* and Hearn, K.**,*Rhodia Uk Ltd,
WRc Plc
- **The development of Reed Beds for advanced treatment of sewage sludge**
Nielson, S., and Willoughby, N., ARM Ltd
- **Heliantis®: the sludge solar dryer**
Prevot, C., Degremont

SESSION 24

Final Plenary Session

- **Assessing the potential implications of future revisions of the EU Sludge Directive**
Davis, R., Godley, A.R., and Davis, M.R.H, WRc Plc
- **Yesterday, Today and Tomorrow - Would we start from here?**
Lowe, P. and Hudson, J., Aqua Enviro Consultancy
Services
- **Final Summary**
Nigel Horan, The University of Leeds