

# Waste-to-Resources 2011

## IV International Symposium MBT & MRF

[www.waste-to-resources.eu](http://www.waste-to-resources.eu)

Conference, Exhibition, Site Visits

Patronage: Dr. Norbert Röttgen  
German Minister of Environment

### International Committee:

Prof. Dr. Pinjing He, Tongji University, China; Dr. Matthias Kühle-Weidemeier, Wasteconsult international, Germany; Prof. Dr. Mark Milke, University of Canterbury, New Zealand; Dr. Abdallah Nassour, University of Rostock, Germany; Prof. Dr. Michael Nelles, University of Rostock, Germany

24<sup>th</sup> – 26<sup>th</sup> / 27<sup>th</sup> of May 2011, Hanover, Germany  
additional introduction seminar 19<sup>th</sup>-20<sup>th</sup> of May

Conference with simultaneous translation  
English – German – Spanish – French

Programme, Registration Form,  
Information about Exhibition / Fair,  
Arrival and Accommodation

Organiser

**wasteconsult**  
**INTERNATIONAL**

Robert-Koch-Str. 48b • 30853 Langenhagen • Germany  
Tel. +49 (0)511 23 59 383 • FAX +49 (0)511 23 59 384  
info {at} wasteconsult . de • [www.wasteconsult.de](http://www.wasteconsult.de)

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[www.asa-ev.de](http://www.asa-ev.de)



<http://iwwg.eu/>

# Waste-to-Resources 2011

## 4<sup>th</sup> International Symposium on mechanical-biological Treatment of MSW, Waste Sorting and Material Recovery Technology

2 days small group introduction seminar (19<sup>th</sup>-20<sup>th</sup> of May 2011)

3 days international conference (24<sup>th</sup>-26<sup>th</sup> of May 2011)

Site visits / technical tour (27<sup>th</sup> of May)

Take part in world's largest conference on advanced, material specific MSW treatment technology and enjoy a wonderful time in German spring

Learn about the benefits you will get from applying up-to-date waste treatment technologies

### What is MBT?

MBT is a combination of mechanical and biological process steps to give individual waste components a treatment that is appropriate to their material properties, emission potential and economical value. MBT is a modular concept that ranges from simple, cheap but still efficient to highly sophisticated concepts.

### What are the benefits of MBT for you?

- Reducing landfill gas production (greenhouse gas)
- Reducing leachate contamination and leachate treatment cost
- Reducing the volume of material to be landfilled -> saving precious landfill volume
- Shorter and cheaper aftercare period
- Producing a (more) homogeneous landfill content
- Gaining high energy combustible material, leaving less burdens for future generations
- Extraction of recyclable materials with commercial value

### Advantages of MBT compared to other technologies

#### Vs bioreactor landfill

- Full control and avoidance of gaseous emissions in encapsulated systems
- Industrial process. All of the waste is affected (no dry zones like in a landfill)
- Valuable resources (metals, wood, plastic...) are extracted and not wasted / lost in the landfill
- Leaves better stabilised material in the landfill (aerobic degradation is more efficient than anaerobic on hardly degradable substances)
- Higher usable gas yield (intensive treatment and no loss via open surfaces and leakages like in a landfill)

#### Vs MSW incineration

- Usually cheaper in investment and operation
- Modular system that can be adopted to the local situation and changing requirements
- Lower financial risks because existing plants can be easier adopted to changing waste quantities and qualities
- Allows economic operation of smaller (decentralized) units
- Not burning water and stones, only feasible materials will be incinerated
- Lower potential of toxic emissions because the production of highly toxic organic compounds at incineration temperatures is avoided (except at the RDF incineration)

# Waste-to-Resources 2011

## The venue

Conference centre and hotel Wienecke XI



(C) Matthias Kühle-Weidemeier, 2010

## The town

The town of Hanover has famous historical buildings, parks, museums, a beautiful Zoo and an international airport. It is located at the interchange of major European east-west and north-south motor- and railways.



(C) of the town photos: Hannover Marketing und Tourismus GmbH (HMTG)

By the way, there is a lot of night life in Hanover too!

## Discover Germany

It is just about 1½ hour from Hanover to Berlin in the comfortable high speed ICE-Train (InterCityExpress). Depending on the track, ICE trains drive with a speed of up to 300km/h.



(C) DB AG/Annette Koch, 2007



(C) DB AG/Bartłomiej Banaszak, 2008



(C) DB AG/Robert Fishman, 2006

# Waste-to-Resources 2011

## Conference and Exhibition

The previous conference in 2009 has had delegates from 41 nations.



The conference is accompanied by a commercial exhibition. Take the chance to meet an exclusive international circle of potential customers. Further information including **Gold and Silver Sponsor packages** is available at [waste-to-resources.eu](http://waste-to-resources.eu). Don't hesitate to contact us! [tagung@wasteconsult.de](mailto:tagung@wasteconsult.de)

### Previous exhibitors



# **Waste-to-Resources 2011**

## **The week before the conference**

### **Two day introduction seminar to mechanical-biological treatment**

19<sup>th</sup> – 20<sup>th</sup>, May 2011, 9.30 – 18:00. Presenter: Dr. Matthias Kuehle-Weidemeier, Wasteconsult Int'l.  
Seminar limited to 50 persons. Coffee break, lunch & dinner incl, 2<sup>nd</sup> day without dinner.

- 1. Introduction, what is MBT, targets**
- 2. MBT technologies and examples**
  - 2.1. Mechanical treatment**
  - 2.2. Biological treatment**
    - 2.2.1. Aerobic technologies**
      - 2.2.1.1. MBT prior to landfill
      - 2.2.1.2. Biological drying for refuse derived fuel (RDF) production
    - 2.2.2. Combined anaerobic-aerobic technologies**
      - 2.2.2.1. Partial flow dry digestion
      - 2.2.2.2. Full flow dry digestion
      - 2.2.2.3. Partial flow wet digestion
      - 2.2.2.4. Full flow wet digestion
      - 2.2.2.5. Percolation plants
  - 2.3. MBT related technologies**
    - 2.3.1. Wet mechanic separation technology**
    - 2.3.2. Mechanical-physical stabilisation**
- 3. Quality supervision of the major solid MBT output fractions and MBT process control**
  - 3.1. Taking representative samples, analytics, which parameters make sense?**
    - 3.1.1. Landfill material
    - 3.1.2. RDF
- 4. Control of Gaseous emissions**
  - 4.1. Emitted substances, variation of emissions during the process
  - 4.2. Encapsulation
  - 4.3. Air management
  - 4.4. Biofilter
  - 4.5. Regenerative thermal oxidation (RTO)
- 5. Practical experience with MBT in Germany**
  - 5.1. History and legal background
  - 5.2. Results of an evaluation of all German MBTs in 2007
  - 5.3. Current situation
- 6. Landfilling of MBT output**
- 7. Is agricultural application of MBT output a good solution?**
- 8. MBT compared to other technologies**
  - 8.1. Incineration
  - 8.2. Bioreactor landfill
- 9. Costs of MBT**
- 10. Adoption of MBT to the local situation**

# Waste-to-Resources 2011

Tuesday the 24th of May 2011

9:00 – 11:00

## General Topics and Basics of Mechanical-Biological Waste Treatment

1. MBT Processes and Identification of the Appropriate Technology. *M. Kühle-Weidemeier, Wasteconsult international, Langenhagen, Germany*
2. Importance, Targets and Technical Concepts of Mechanical-Biological Treatment in Various Countries. *W. Müller, University of Innsbruck, Austria*
3. A Comparison of Two Biological Treatment Processes for Residual Waste Management. *T. Yates, SLR Consulting Limited, Wiltshire, UK*

## International Aspects of MBT and MRF

4. Composting of Municipal Solid Waste in the Districts of Lomé (Togo): Experimental Process Study and Agronomic Use Potential. *K.E. Koledzi\*, G. Baba\*, G. Tchangbedji\*, K. Agbeko\*, G. Metejka\*\*, G. Feuillade\*\*, J. Bowen\*\*\*, \*University of Lomé, Lomé, Togo, \*\* University of Limoges, Limoges, France, \*\*\*University of North Carolina at Charlotte, USA*

Coffee Break

11:30 – 13:30

5. The Role of MBT in Increasing the Number of Composting Facilities in Iran. *N. Mokhtarani, M. Khaleghi Sarnamy, B. Mokhtarani, Trabiab Modares University, Tehran, Iran*
6. German GHG Mitigation Lighthouse Project MBT Plant Gaobeidian (PR China). *F. Kölsch\*, M. Ginter\*\*, K. Fricke\*\*\*, \*Dr. Kölsch Geo- und Umwelttechnik, \*\*AWN Umwelt GmbH, \*\*\*Technische Universität Braunschweig, Germany*
7. Waste Management in the Arabian World. *A. Nassour, University of Rostock, Germany*
8. Management of Municipal Solid Waste (MSW) in Santiago de Chile. Part I: Recycling and Pre-Treatment of MSW. *K.-R. Bräutigam, Tahnee Gonzalez; Karlsruhe Institute of Technology (KIT), Germany*  
Part II: Mechanical-biological Pre-Treatment of MSW. *J. Vogdt, \*, B. Wens\*\*, \*Ingenieria Alemana S.A., Chile, \*\*I.A.R. – RWTH Aachen, Germany*

Lunch

14:30 – 16:40

9. MBT/MRF State of Art in Norway and Possible Development within Norwegian Landfill Regulation and Local Conditions. *F. Syversen, Mepex Consult AS, Norway*

## Waste Management Strategies

10. Comparing the Carbon Benefit of Material Recovery in Contrast to Energy Recovery from Waste and the Need for Regulatory and Financial Mechanisms to Encourage Best Practice. *N. Cawthorne, S. Kay, Golder Associates (UK) Ltd, Nottinghamshire, UK*
11. Municipal Solid Waste Sorting and Treatment in Romania: Strategies of Energy Recovery from Two Pilot Case Studies. *G. Ionescu\*, E.C. Rada\*\*, A. Badea\*, M. Ragazzi\*\*, T. Apostol\*, \*University of Bucharest, Romania, \*\* University of Trento, Italy*
12. Municipal Solid Waste Management Policies and Problems in Naples. *S. Romano, Regional Environmental Centre for Central and Eastern Europe, Szentendre, Hungary*

Coffee Break

17:10 – 19:10

13. From Waste- to Resource-Management. *G. Schock, DGAW Deutsche Gesellschaft für Abfallwirtschaft e.V., Berlin, Germany*

## MBT Technology

14. Maximum Recovery of Residual Waste with Maximum Yield Technology. *G. Person\*, M. Schreiber\*\*, \*Zweckverband Abfallbehandlung Kahlenberg, Ringsheim, \*\*Schreiber Umwelt- und Bioverfahrenstechnik, Gießen, Germany*
15. Mechanical-Biological Waste Treatment Using VM-Press Instead of a Conventional Mechanical processing step. *K. Dirkes, VM Press Technologies GmbH, Nordhorn, Germany*
16. KOMPOFERM® - Modular Waste Transforming Systems for MBT Technology: Case Study MBT Varna (BG). *I. Steinberg, Eggersmann Anlagenbau, Bad Oeynhausen, Germany*

19:45

Dinner

# Waste-to-Resources 2011

Wednesday the 25<sup>th</sup> of May 2011

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9:00 – 11:00 **MBT Plants and Operational Experiences**

17. Current Status and Prospects of Mechanical-Biological Treatment in Germany. *T. Grundmann, Working Group for Material Specific Waste Treatment (ASA e.V.), Ennigerloh, Germany*
  18. The Impact of Increased Differentiated Collection On Existing MBT Plants and Possible Upgrading Scenarios: The Experiences of a Central Italian Plant. *F. Di Maria\*, M. Marionni\*\*, \*Dipartimento de Ingegneria Industriale, Perugia, Italy, \*\*Centro Ambiente s.p.a., Foligno, Italy*
  19. Plant Interconnection and Gas Supply to the Regional Gas Grid at the Waste Management Centre Pohlsche Heide. *B. Schulte, GVoA GmbH, Hille, Germany*
  20. Pre-Processing of Municipal Solid Waste Before Anaerobic Digestion – CAPEX and OPEX as Model Calculation. *M. Langen, HTP Ingenieurgesellschaft, Aachen, Germany*
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Coffee Break

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11:30 – 13:30 **Optimisation of Mechanical-Biological Treatment**

21. Ways to Increase the Gas Yield of Anaerobic MBT Plants. *R. Wallmann, Fachhochschule Hildesheim/Holzminde/Göttingen, Göttingen, Germany*
  22. Optimisation of MBT Considering Energy Efficiency and Protection of Resources and Climate. *K. Ketelsen, K. Kanning, C. Cuhls\*, iba Ingenieurbüro für Abfallwirtschaft und Energietechnik GmbH, Hannover, \*gewitra mbH, Troisdorf, Germany*
  23. Refitting MBTs for Extended Recovery of Renewable Energy / Refuse Derived Fuels (RDF). *U. Wiegel, ICU-Partner Ingenieure, Berlin, Germany*
  24. Experimental Optimisation of Static Composting Reactors. *K. Weichert, Technische University of Dresden, Germany*
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Lunch

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14:30 – 16:30

25. Mechanical Dewatering of Digestate. – Necessity and Potentials. *P. Schalk, InnoWaste, Teningen, Germany*
  26. Turning of MBT Windrows with Simple Technology – Investigations of the Process Performance. *K. Runge, BACKHUS GmbH, Edewecht, Germany*
  27. Large-Scale Composting of Biowaste and MSW by Using the TAIM WESER Composting-System. *D. Polster, TAIM WESER GmbH, Bad Oeynhausen, Germany*
  28. Adaption of a German MBT Process to the Boundary Conditions of Newly Industrialized Countries - Results of a pilot plant operated in Thailand. *S.M. Platz\*, M. Schaub\*\*, U. Menzel\*, J. Amrehn\*\*\*, \*Institute of Sanitary Engineering, Water Quality and Solid Waste Management, Stuttgart, Germany, \*\*WEHRLE Umwelt GmbH, Emmendingen, Germany, \*\*\*King Mongkut's Institute of Technology Ladkrabang (KMITL), Bangkok, Thailand*
  29. Efficient Processing of Household Waste and MBT Scrap with BHS-Rotorshredder. *C. Hein, BHS-Sonthofen GmbH, Sonthofen, Germany*
  30. MBT Larnaka, Cyprus – Waste Treatment Technology from Komptech. *M. Wellacher, Komptech GmbH, Frohnleiten, Austria*
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Coffee Break

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17:00 – 19:00

31. Construction of MBT (KBA) Hard. *R. Schu, SCHU AG, Schaffhausen, Switzerland*

## **Emissions and their Treatment**

32. Emission, Leakages and Measures for Emission Reduction in Anaerobic MBT Plants. *C. Cuhls, Gewitra, Troisdorf, Germany*
  33. Release of VOCs and Leachate During Bio-Drying of MSW with Higher Water Content. *N. Yang, N. Qiang, L. Shao, P. He, College of Environmental Science and Engineering, Tongji University, Shanghai, China*
  34. Municipal Solid Waste Bio-Drying : Odour Problem of Three Configurations, *E.C. RADA.\*/\*\*, M. RAGAZZI\*\*, \*Politehnica University of Bucharest, Romania; \*\*University of Trento, Italy*
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19:35

Dinner

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Blue font: 15 minutes presentation, black font: 20 minutes presentation

# Waste-to-Resources 2011

Thursday the 26<sup>th</sup> of May 2011

8:30 – 10:30

## Minimising Emissions and Purification of Biogas

35. Emissions of the Aerobic Waste Treatment in Dependence of Shape and Method of Operation of the Windrows. *B. Gamerith, R. Lugmayr, A. Lübke, Compost Systems, Wels, Austria*
36. Efficient Desulphurization of Biogas based on a newly designed technology. *J. Stockinger, S & H Umweltengineering Vertriebs GmbH, Nauen, Germany*

## Landfilling of Pre-Treated Waste

37. Economic Comparison of Landfilling with and without Anaerobic Pre-Treatment. *G. Burkhardt, N. Müller, L. Streff, ICP Ingenieurgesellschaft Karlsruhe, Germany*
38. Potential of the Microbial Methane Oxidation to Mitigate Lean Gas Emissions of MBT Waste. *S. Bohn, J. Jager, Darmstadt University of Technology, Germany*

Coffee Break

11:00 – 13:00

## Waste Analytics and Process Control

39. New Findings on the Chlorine Analysis of Refuse Derived Fuels (RDF). *S. Schade-Dannewitz, Fachhochschule Nordhausen, Germany*
40. Heating Value of Residues and Waste Derived Fuels from Different Waste Treatment Methods. *I.-S. Antonopoulos\*, A. Karagiannidis\*, E. Kalogirou\*\*, \*Aristotle University, Thessaloniki, Greece, \*\*Hellenic Waste-to-Energy Research and Technology Council (SYNERGIA)*
41. Certainty of investigations for the determination of biogenic carbon content. *R. Ketelhut, Stoffstromdesign, Neumünster, Germany*
42. The Role of MBT on the Stabilization of Residual Household Waste Before Landfilling at MBT Alveol (France): Physical and Chemical Assessment. *T. Chantou\*, G. Feuillade\*, D. Mausset\*\*, G. Matejka\*, J. Bouzid\*\*\*, \*ENSIL, Limoges Cedex, France, \*\*SYDED, Limoges Cedex, France, \*\*\*Laboratoire Eau, Environnement et Energie (LEEE), Sfax, Tunisia.*

Lunch

14:00 – 16:00

## Sensor Based Sorting in MBT Plants and Processing of RDF

43. Current Status and Perspectives for Processing Commercial Waste for Material and Energy Recovery. *R. Oetjen-Dehne\*, M. Kanthak\*\*, \*Umwelt- und Energie-Consult GmbH, Berlin, \*\*Kanthak & Adam GbR, Berlin, Germany*
44. Sensor Based Sorting of the Heavy MBT Fraction to Comply with Landfill Acceptance Criteria. – Practical Experience and Comparison to Other Solutions. *M. Meirhofer, A. M. Ragossnig\*, S. Pieber, M. Sommer, BIOENERGY 2020+ GmbH, Graz, \*Fachhochschulstudiengänge Burgenland GmbH, Pinkafeld Austria*
45. Splitting of Heterogeneous Waste by Sensor-based Sorting as a Basis for Optimized Material-Specific Waste-Routing. *S. Pieber\*, A. M. Ragossnig\*\*, M. Sommer\*, M. Meirhofer\*, A. Curtis\*\*\*, R. Pomberger\*\*\*, \*BIOENERGY 2020+ GmbH, Graz, \*\*Fachhochschulstudiengänge Burgenland GmbH, Pinkafeld, \*\*\*Saubermacher Dienstleistungs-AG, Graz, Austria*

## Avoiding and Fighting Fires in MBT and Recycling Plants

46. Self-Ignition of Deposits Containing Recycling Materials – an Underestimated Phenomenon? *A. Berger, S. Krüger, U. Krause, K.D. Wehrstedt, BAM Federal Institute for Materials and Testing, Berlin, Germany*

Coffee Break

16:30 – 18:30

47. Stationary Compressed Air Foam Fire Extinguishing Technique. *J. Meyer, One Seven of Germany GmbH, Luckenwalde, Germany*

## Production, Material Flow Balance and Commercialisation of Secondary Materials

48. Processing and Energy Recovery from the High Calorific M(B)T Output Fractions. *M. Nelles, University of Rostock, Germany*
49. Production and Utilization of Solid Recovered Fuels (SRF) in Austria. *K. E. Lorber, R. Sarc, Montan University of Leoben, R. Pomberger, Saubermacher Dienstleistungs AG, Graz, A.*
50. Decoding interdependencies between primary and secondary raw material markets by means of the Capacity Model. *H. Klampfl, R. Pomberger, G. Schmidt, Saubermacher Dienstleistungs AG, Graz, Austria*

**End of the Conference**



# Waste-to-Resources 2011

24<sup>th</sup> – 26<sup>th</sup> of May 2011 Posters

- Biological Mechanical Treatment of Municipal Solid Waste in China: Lab and Field Application, *F. Lv, N. Yang, L. Shao, P. He, College of Environmental Science and Engineering, Tongji University, Shanghai, China*
- An Innovative Approach for Grape Marc Treatment: Bio-drying before Combustion. *S. Ciuta\**, *E. C. Rada\*\**, *A. Badea\**, *M. Ragazzi\*\**, *C. Marculescu\**, *T. Apostol\**, *\*Politehnica University of Bucharest, Bucharest, Romania, \*\*Department of Civil and Environmental Engineering, Trento, Italy*
- Municipal Waste Treatment in Poland – Facts and Myths. *M. Rybaczewska-Błażejowska Państwowa Wyższa Szkoła Zawodowa w Ciechanowie, Poland*
- Practical Experience with Catalytic Diffusion and Depolymerisation for Conversion of Biomass and Organic Waste to Diesel Fuel. *S. Kaiser ; CPD - Global Future Solution GmbH, Freiburg i.Br., Germany*

## Friday the 27<sup>th</sup> of May 2011: Site Visits

**Additional offer, English and German explanations only, available for conference participants only. Limited to 100 participants.**

Site visits are not included in the free ticket for authors.

### **In the morning: MBT in the waste management centre of Hanover**

The municipal waste management centre comprises the former landfill, composting plant for green waste and biowaste from households (source separated collection) and the MBT plant with full flow dry anaerobic digestion. Next door there is the private waste incinerator operated by EON.



More information about the site visits on the next page.

# Waste-to-Resources 2011

## Continuation of site visits

### Lunch in the historical hotel Kaiserworth in Goslar



Hotel Kaiserworth at the marketplace in Goslar



Medieval Royal Palace Goslar

### Afternoon: Exner separation technology

Exner separation technology separates mixed metal waste fractions. The cleanliness factor of the produced aluminium-, copper-, brass- and zinc granulates is 90 %.

The granulates are produced from the following input:

- Aluminium cans and compounds from waste sorting plants
- Non-ferrous metal mix fractions from MBT plants
- Aluminium bottle caps
- Aluminium window sashes
- Cans from the can deposit system
- Commercial waste containing non-ferrous metals



### Schedule site visits Waste-to-Resources 2011, 27.5.2011

- estimated time, unsecured -

Time	Action
08:30	Departure Hotel Wienecke
09:00	Beginning tour MBA Hannover
11:45	Departure for Goslar
13:05	Arrival Goslar
13:15	Lunch Hotel Kaiserworth
14:30	Meeting to return to the bus
14:45	Departure bus
15:00	Arrival Exner Trenntechnik
17:00	Departure for Hannover
18:25	Arrival Hotel Wienecke (bus 1)
18:40	Arrival Hannover airport (bus 2)

# Waste-to-Resources 2011

## Conference session chairmen:



**Dr. Carsten Cuhls** has been researcher at the Universities Hanover and Halle. Since 2000 he is a managing director at gewitra Ltd. In Bonn and Hanover. He is doing consultancy, design engineering and research in the area of biological waste treatment and especially emission reduction. He has done pioneer work in measurement, documentation and evaluation of gaseous emissions from MBT plants. He certainly is the most experienced expert concerning emission measurement from MBT plants.



### **Thomas Grundmann**

is CEO of ECOWEST waste management company. He also is chairman of „Arbeitsgemeinschaft Stoffspezifische Abfallbehandlung, ASA e.V.“, the organisation of the German MBT operators.



**Dr. Matthias Kuehle-Weidemeier** has been working long time as consulting engineer in landfill construction at two leading German companies. Afterwards he was scientist at the institute for water quality and waste management (ISAH) at the university of Hanover. He was working on MBT process optimisation, MBT landfills and an evaluation of all German municipal household waste landfills. He wrote his doctoral thesis about landfilling of MBT waste. Afterwards he founded Wasteconsult international, consulting engineers on waste treatment, landfills, contaminated sites and photovoltaics. He is organiser of 4 conferences: Waste-to-Resources, EU Waste Management, Days of Waste Research (German) and Conference on Landfill Practice (German).



**Dr. Wolfgang Mueller** has more than 20 years experience in the field of solid waste management. His specialist areas are mechanical and biological waste treatment. He currently works at Innsbruck University as senior scientist where he is focusing on lifecycle analyses of different biowaste treatment strategies and treatment systems. Before he worked in the engineering companies IGW Fricke & Turk GmbH, and "Pöyry Environment" for almost 20 years. From 2000 he was responsible for the coordination of the collaboration with the Organic Resource Agency (ORA). He has been involved in the development of governmental guidance on mechanical and biological waste treatment both in Germany and the UK.



### **Dr. Abdallah Nassour**

Studied mechanical engineering at the University of Tishreen in Syria. In 1993 he got his PhD at the University of Rostock (Germany). In 2005 completed his Habilitation (postdoctorate lecturer qualification) at the Waste and Resource Management Institute of the University of Rostock. He works as a senior scientist at this institute since 1996. In 2008 he became CEO of the company ENVERO GmbH



**Prof. Dr. Michael Nelles** is executive director of the Institute of Environmental Engineering and head of the Department of Waste and Material Flow Economy at the University of Rostock. After his study of Environmental Engineering at the Technical University of Berlin, he worked as scientific Associate at the University of Leoben (Austria) where he gained his PHD degree in the subject area of MBT. During this time he influenced the development of MBT in Austria. He worked as a professor for environment technique at the University of Applied Science in Göttingen from 2000 to 2006 with a major focus on MBT too. The current MBA activities at the University of Rostock are mainly internationally oriented.



**Nigel Naisbitt** is National Technical Lead of the Waste and Resources Management Team at SKM Enviro. He has 20 years experience in the environmental and waste management field. His key areas of expertise are Waste Strategy and Policy Development, Environmental Legislation, Waste Regulation and Waste Minimisation. Nigel has directed or managed the development of over 20 municipal waste management strategies in the last 10 years, which have incorporated the data analysis, the analysis and modelling of the cost and performance of recycling schemes, BPEO assessment, SEA, technical review of treatment and disposal options including MRF and MBT, facility capacity assessments and detailed implementation plans. Nigel has undertaken a number of projects covering national policy and regulation in the UK, including Landfill Directive implementation, landfill tax, waste survey and legislation development.

# Waste-to-Resources 2011

## Binding registration for Waste-to-Resources 2011 (IV International Symposium MBT & MRF)

I sign up binding for the participation at the marked symposium days. I will pay the registration fee within 14 days after receipt of the invoice. I recognize and accept the terms and conditions (see below).

v09

**Please note, that this form does not register you to the accommodation!**

### Wasteconsult International

Robert-Koch-Strasse 48b

**D – 30853 Langenhagen, Germany**

**FAX ++49 511 23 59 384**

**Please select (X)**

### Tickets for the conference

	Registration fee net if we receive your registration until 16 <sup>th</sup> of February 2011	Registration fee net in case of registration after 16 <sup>th</sup> of February 2011
24 <sup>th</sup> of May 2011 1 <sup>st</sup> conference day (single day)	<input type="checkbox"/> 199 €	<input type="checkbox"/> 239 €*
25 <sup>th</sup> of May 2011 2 <sup>nd</sup> conference day (single day)	<input type="checkbox"/> 199 €	<input type="checkbox"/> 239 €*
26 <sup>th</sup> of May 2011 3 <sup>rd</sup> conference day (single day)	<input type="checkbox"/> 199 €	<input type="checkbox"/> 239 €*
3 day ticket 24 <sup>th</sup> – 26 <sup>th</sup> of May 2011	<input type="checkbox"/> 499 €	<input type="checkbox"/> 649 €*
3 day ticket for students up to 29 years (proof!)	<input type="checkbox"/> 149 €	<input type="checkbox"/> 239 €*
27 <sup>th</sup> of May site visits	<input type="checkbox"/> 99 €	<input type="checkbox"/> 139 €*
Two day MBT introduction seminar 19 <sup>th</sup> -20 <sup>th</sup> of May	<input type="checkbox"/> 399 €	<input type="checkbox"/> 449 €

**Each plus 19% VAT**

**Each plus 19% VAT**

My conference language is:  English  French  German  Spanish

Mr.  Ms.

Title / Name: .....

First name: .....

Firm / Institution: .....

Phone: .....

Address: .....

Fax: .....

Postcode, City: .....

Email: .....

**Make sure to enter a valid email address! Invoice and your conference ticket will be sent via email (PDF documents)!**

Date, signature, chop: .....

\*iwwg Members get a 10% discount on the regular conference fees if they present their membership certificate with the registration. This discount does not apply on the early bird prices and the introduction seminar.

### Terms and conditions, services

#### Conference organizer:

Wasteconsult, Robert-Koch-Str. 48 b, 30853 Langenhagen, Germany

Fon ++49 (0)511 / 23 59 383 • FAX ++49 (0)511 / 23 59 384 • [www.wasteconsult.de](http://www.wasteconsult.de)

#### Conference venue:

Wienecke XI. Hotel, Hildesheimer Str. 380, 30519 Hannover,

Fon ++49 (0)511 / 126 110 • FAX ++49 (0)511 / 12 611 511 • [www.wienecke.de](http://www.wienecke.de)

**Registration** has to be in written form (letter or fax) using this form. After receipt of your registration you will get the invoice which has to be paid within 14 days. After reception of your payment your conference ticket will be sent. The registration is binding. In case of being prevented alternative participants of the same institution are accepted without extra costs. **Cancellations** must be received in written form. In case of cancellation before 30<sup>th</sup> of April.2011 (date of reception at Wasteconsult) your payment less an administration charge of 50 Euro will be refunded. In case of later cancellation the registration fee will not be refunded, the conference documents are forwarded. If the conference is cancelled by Wasteconsult (this will only happen because of unanticipated reasons), the registration fee will be completely refunded. Further pretensions / requirements are excluded.

**Included services:** Lunch (inclusive 1 soft drink), dinner (inclusive 1 soft drink or beer) and 2 coffee breaks with coffee and pastry are included at the first and second conference day. The third day includes coffee breaks and lunch. All delegates receive an issue of the conference proceedings in English language (if you selected German, you get the original language edition). Conference programme and programme sequence are subject of alterations.

**Arrival and accommodation are not included in the registration fee and have to be organised and paid by the participants themselves.**

**Judicial:** Only German law applies. Jurisdiction is Hanover, Germany. The organizer / Wasteconsult takes no obligatory supervision and is not liable for lost or broken objects, injuries, accidents, deaths and acts of god.

# Waste-to-Resources 2011

## Accommodation:



**Wienecke XI. Hotel**, Hildesheimer Str. 380, 30519 Hannover,  
Phone ++49 (0)511 / 126 110 • FAX ++49 (0)511 / 12 611 511 [www.wienecke.de](http://www.wienecke.de)

The hotel holds a limited room contingent for the conference. With reference to the conference participation you can get a single room inclusive breakfast for 89 Euro/day. Other hotels and information about Hanover can be found at [www.hannover.de](http://www.hannover.de) and hotels at [www.hrs.com](http://www.hrs.com) (for finding Hanover, type Hanover with double "n" (Hannover) or at the bottom of the arrival page of our website. <http://www.waste-to-resources.eu/venue.html> .

## Arrival:

### Flights to Hanover:

Hanover has an international airport, which is served by many airlines. [www.tuifly.com](http://www.tuifly.com) , which is based in Hanover, has budget flights to many European destinations. [www.air-berlin.com](http://www.air-berlin.com) connects Hanover to many European and North African destinations at budget rates too. [www.lufthansa.com](http://www.lufthansa.com) has world wide service. Many other airlines have well-priced flights to Hanover too. Please contact your local travel agency! This flight information is just a hint. Wasteconsult has no relation to any of the mentioned airlines and doesn't recommend any of them more than other not directly mentioned airlines.

**Non EU residents should check if they need a visa for Germany  
and apply for it as soon as possible!**

### Railway, Underground and Tram:

#### Starting at Hanover airport:



Take urban railway ("S-Bahn") S5 direction Hameln and get off the train at Hanover main station ("Hauptbahnhof"). Go down 2 floors to the Underground station.

#### Starting at Hanover main station (DB):



Take Underground line 1 direction Laatzen/Sarstedt or Underground line 2 direction Rethen. De-board at the station Wiehbergstrasse



2 minutes footpath to hotel Wienecke XI.

## By car:

Take Motorway A2 or A7 until interchange Hanover east ("Autobahnkreuz Hannover Ost"). Follow Motorway A7 heading south (if you are coming from the south, your description starts now):

Leave the Motorway A7 at exit Hannover – Anderten. Follow road B65 ("Suedschnellweg") direction Hanover fair ("Messe") until exit Doehren / Zentrum. Turn left at the first traffic light. Now you have reached the Hildesheimer Strasse. The conference Hotel "Wienecke XI." is 2 km ahead (direction south) on the right side of the road.

You can get a detailed map of Hanover at [www.stadtplandienst.de](http://www.stadtplandienst.de) .