

International Symposium

MBT 2005

**Mechanical-biological Treatment of municipal solid
Waste**

Bilingual Conference with simultaneous Translation

**23. – 25. November 2005 in Hanover
Germany**

Conference Programme

Commercial Exhibiton

Registration Form

Arrival

wasteconsult
INTERNATIONAL

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International Symposium MBT 2005

Wednesday, 23rd of November 2005 Session A, general Session

9:00 – 11:05 Overview and Basics of MBT

1. Basics of MBT and the Waste Management System in Germany. *Dr. M. Kuehle-Weidemeier, Wasteconsult international, Langenhagen, Germany.*
2. Could MBT become the most significant Waste Management Option? *Dr. E. Archer, J. Schwager, Dr. K. Whiting, Juniper Consultancy Services Limited, Gloucestershire, UK.*

MBT in different Countries

3. Significance and perspectives of MBT in Europe. *M. Steiner, Technical Office for Environmental Protection, Innsbruck, Austria.*
 4. Practical Experience with MBT in Emerging Nations – Example Brazil. *C. Dias Pereira*, W. Toenges**, *Faber Servico Ltda., San Sebastiao, Brazil, **Wilhelm Faber Ltd., Alzey, Germany.*
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Coffee break

5. Application of the Dome Aeration Method in South Africa. *Prof. Dr. K. Vorster, Tshwane University of Technology, Pretoria, South Africa*
 6. Management of bioorganic Waste in China - Is mechanical biological Treatment an Option for the Future? *Prof. Dr. B. Raninger, Prof. Dr. W. Bidlingmaier*, Li Rundong**, Wang Qi**, CIM/GTZ expert at ICEEE, CIM Germany, Mining University Leoben, Austria, *Bauhaus University Weimar, Germany, **Institute of Clean Energy & Environmental Engineering, Hangkong Universitaet, Shenyang, China.*
 7. Ex situ Bioremediation of old Landfills by MBT. *H-J. Kahle, L. Krzystek*, S. Ledakowicz*, Lausitzer Naturkundliche Akademie e.V., Cottbus, Germany, *Department of Bioprocess Engineering, Faculty of Process and Environmental Engineering, Technical University of Lodz, Poland.*
 8. Mechanical-biological Pre-Treatment in Asian Context. *C. Visvanathan*, J. Tränkler*, C. Chiemchaisri**, * Asian Institute of Technology, Pathumthani, Thailand, **Kasertsart University, Bangkok, Thailand.*
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Lunch

9. Potentials for MBT in Hungary. *Dr. G. Fueleky, Dr. L. Alexa; Hungarian Compost Association, Goedoelló, Ungarn.*
 10. MBT before Landfilling in France – State of the Art and Results of Mass Balance in SDEE – Mende Landfill. *J. de Araújo Morais, F. Achour, G. Ducom, R. Bayard, Laboratory of Environmental Analysis of Industrial Systems and Processes, National Insitute of Applied Science, Villeurbanne, France.*
 11. Sustainable Landfilling and mechanical biological Treatment of MSW: A Japanese View. *B. Inanc, Y. Inoue, M. Yamada, National Institute for Environmental Studies, Ibaraki, Japan.*
 12. Appraisal of MBT in Great Britain. *M. Niesar, Dr. W. Mueller, T. Turk, H. Bulson*, IGW, Witzenhausen, Germany, *Organic Resource Agency Ltd. Worcestershire, England.*
 13. The Australian Experience of MBT Submissions. *M. Selvaraj, WSN Environmental Solutions, Sydney, Australia.*
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Coffee break

17:15 – 19:15 New Building and Refitting of MBT plants

14. Best available Technique for Waste Treatment Plants in EU: The significance of BREFs (Best Available Techniques Reference Document). *S. Kalmbach, Federal Environment Agency, Dessau, Germany.*
 15. Aerobic and anaerobic MBT Versions: Economics and Service Experience. *T. Dippert; HORSTMANN Recyclingtechnik, Bad Oeyenhausen, Germany.*
 16. Service Experience at MBT Schwanebeck. *Dr. M. Kleinke, Waste Treatment Society Havelland Ltd., Nauen, Germany.*
 17. Experience with Enlargement and Alteration of the MBTs Linkenbach and Singhofen. *Dr. J. Dach, Bjoernsen Consulting Engineers Ltd., Koblenz, Germany.*
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Dinner

International Symposium MBT 2005

Wednesday, 23rd of November 2005 Session B, special Session

11:35 – 13:35 Mechanical treatment, Process Control, Exhaust Gas Treatment

18. Energy Saving Automation Drive for Shredders. *A. Moeller; VECOPLAN Machine Factory Ltd., Bad Marienberg, Germany.*
 19. Material Flow and Process Analyse in MBT Plants. *Dr. B. Zwisele, ARGUS Ltd., Berlin, Germany.*
 20. Reproduction of MBTs in SAP Solutions for Waste Management. *M. Goetzinger; SAP Inc., Walldorf, Germany.*
 21. Overview of Application, Functionality and Need for future Development of thermal Exhaust Gas Treatment with regenerative Exhaust Gas Preheating. *T. Reindorf, Clausthal Environmental Technique Institute Ltd., Clausthal-Zellerfeld, Germany.*
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Lunch

14:35 – 16:35 Biological Treatment, Aeration, Methane

22. Improvement of Water and Air Permeability of Landfilling Sludge by Mixing Treatment with the other Waste. *Hiroshi Asakura, Yuzo Inoue, Masato Yamada, Kazuto Endo, Yusaku Ono, National Institute for Environmental Studies, Ibaraki, Japan.*
 23. Improvement of the biological post Processing in MBT by the Dome Aeration Method. *Dr. J. Brummack, Technical University Dresden – Institute for Process and Environmental Technique, Dresden, Germany.*
 24. Aeration as an Instrument for Process Optimisation of intensive Processing in MBT plants. *B. Maehl, Hanover, Germany.*
 25. Combination of MBT-Biogas and Landfill Gas. Technique and Security Aspects at the MBTs Heisterholz, Luebeck and Goettingen. *W. Stachowitz, S. Meier, DAS-IB Ltd., Kiel, Germany.*
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Coffee break

17:15 – 19:15 Liquid Media

26. Study of the organic matter contained in leachate resulting from two modes of landfilling: leachate recirculation and mechanical-biological pre-treatment before landfilling. *C. Berthe, G. Feuillade, E. Redon*, Laboratory of Water an Environmental Sciences, Limoges, *Environment Energy and Waste Research Center, Limay, France*
 27. Effluent free Conditioning of Sand from Compost Conditioning. *O. Haub, Hans Huber Inc., Berching, Germany.*
 28. Percolate Water Conditioning between Percolator and Fermenter. *R. Dalhoff, Hans Huber Inc., Berching, Germany.*
 29. Purification of Processing Water and Leachate by ZeeWeed UF Membranes. *Dr. M. Brockmann, Zenon Ltd., Hilden, Germany.*
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Dinner

Wednesday, 23rd and Thursday 24th of November 2005, Exhibition Area

Whole day

Poster Presentation

30. Mechanical-Biological Treatment and residual waste landfill in France: a case study. *R. Bayard, C. de Bauer, G. Ducom, J. Morais de Araujo, F. Achour, R. Moretto*, P. Naqun*, B. Sarrazin*, J-P. Gourc**, L. Riquier***, J. Berthet***, Laboratory of Environmental Analysis of Industrial Systems and Processes, Nat. Insitute of Applied Science, Villeurbanne, *POLDEN, INSAVALOR Batiment du CEI, Villeurbanne, **LIRIGM Laboratory, University of Grenoble, ***VALDECH, Inc. Lons Le Saunier, France.*
 31. Mechanical – biological treatment of wastes: overcoming barriers and reducing risk in the UK. *C. Velis, R. Smith, A. Garg, S. Pollard, D. Hill; Integrated Waste Management Centre, Cranfield University, UK.*
 32. Glue produced by recycling Polystyrene. *L. I. Tsikritzis, G. I. Triantafillou, Technological Educational Institute of West Macedonia, H. Lianas, Municipality of Kozani, Greece.*
 33. Bioaugmentation for the Biosolids Conversion of Anaerobically Transformed Intermediates of Anti-Biotic Pharmaceutical Waste Sludge - A Case Study. *Prof. R. Saravanane, B. B.Srimuruganandam, Pondicherry Engineering College, Pondicherry, India.*
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International Symposium MBT 2005

Thursday 24th of November 2005, Session A

8:30 – 10:30

Landfilling of MBT Output

34. Basics and Concepts for Landfilling of MBT Output. *Dr. M. Kuehle-Weidemeier, Wasteconsult international, Langenhagen, Germany.*
 35. Environmental Impacts of Landfilling MBT Residues. *H. Robinson, Enviros Consulting Limited, Shrewsbury, England.*
 36. The Role of MBT in Reducing Greenhouse Gas Emissions from Landfill Disposal of MSW. *J. Pan, N.Voulvoulis, Department of Environmental Science and Technology, Imperial College, London, UK.*
 37. Status Quo of Landfilling of MBT Output in Lower Saxony. *W. Braecker, Governmental Trade Supervisory Office, Hildesheim, Germany.*
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Coffee break

11:00 – 13:00

Treatment of Exhaust Gas

38. Results of continuous Measurements of Exhaust Gas from intensive Processing. *Dr. M. Kuehle-Weidemeier, Wasteconsult international, Langenhagen, Germany.*
39. Treatment of MBT Exhaust Gas – Example MBT Luebeck. *Dr. J. Stockinger, HAASE Energietechnik Inc., Neumuenster, Germany.*
40. Suitability of Biofilter Concepts for Exhaust Gas Cleaning. *Dr. C. Cuhls, Dr. A. Clemens, gewitra Ltd., Hanover / Bonn, Germany*

Conditioning and Utilisation of MBT Fractions

41. Producing an agriculturally utilisable fine fraction by MBT of municipal solid waste. *B. Morvan, Cemagref (Public Institute), Rennes, France.*
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Lunch

14:00 – 16:10

42. Marketing experiences with refused derived fuels and recycled materials from MBT. *H. Roth, GOA Ltd., Germany.*
 43. European Market Development – Solid Recovered Fuel from MBT Plants. *C. Ibbetson*, J. Chappell*, Dr. K. Wengenroth**, *Regen Fuels Ltd., UK, **B&T Umwelt GmbH, Germany.*
 44. Aggregates for Conditioning of Waste and Refuse derived Fuel: Troubles, Damages, Abrasion and Verification of non-forfeiture values. *M. Kanthak, Kanthak & Adam civil Law Assoc., Berlin, Germany.*
 45. Thermal Utilisation of Refuse derived Fuel in the circulating fluidised bed: Example Neumuenster. *H. Anderl, E. Offenbacher, Austrian Energy & Environment Inc., Graz-Raaba, Austria.*
 46. High calorific Fractions from MBT and their Significance for future Fuel in Germany. *P. Schrum, Federal Association biogenous Fuel Membership Corp., Erkner, Germany.*
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Coffee break

16:40 – 18:45

Analytics, Material Flow and Process Supervision

47. Allocation criteria for waste landfilling and their implementation. *Dr. A. Bockreis., I. Steinberg, Prof. Dr. J. Jager, Technical University Darmstadt, Germany.*
 48. From Research to Practice: Infrared Spektroskopy and thermal Analyse. *Dr. E. Smidt, Prof. Dr. P. Lechner, Institute for Waste Management, University of Natural Resources and Applied Life Sciences (BOKU), Vienna, Austria.*
 49. Comparison of the SRI and DR4 biodegradation test methods for assessing the biodegradability of untreated and MBT treated municipal solid waste. *A. R. Godley, W. Mueller*, J. Frederickson**, H. Barker***, WRc plc, Wiltshire, England, *IGW, Witzenhausen, Germany, **Integrated Waste Systems, Milton Keynes, UK, ***Environment Agency, Bristol, UK.*
 50. Characterisation of organic matter in Municipal Solid Wastes: a pertinent tool for the assessment of a mechanical-biological treatment. *F. Achour, J. Morais de Araujo, M. Rouez, C. de Bauer, G. Ducom, R. Bayard, Laboratory of Environmental Analysis of Industrial Systems and Processes National Institute of Applied Science, Villeurbanne, France.*
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Dinner

International Symposium MBT 2005

Friday, 25th of November 2005

8:15 – ca. 17:30

Excursion to MBT plants

Departure from and arrival at Hotel Wienecke XI. (lunch included)

The conference session chairs:



Dipl.-Ing. Wolfgang Butz

works since 1991 in the German environment agency (UBA). In the department of waste treatment and landfills he works on mechanical biological waste treatment and landfill technique. He was significantly involved in the conception of the legal requirements for MBT in Germany.



Dr.-Ing. 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.



Dr.-Ing. Dipl.-Geogr. Matthias Kuehle-Weidemeier

has been working for a long time as a consulting engineer in landfill construction and operation at two leading German companies. Afterwards he worked as a 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 in the area of waste treatment, landfills, contaminated sites and photovoltaics. He is organiser of 3 conferences: International Symposium MBT, Days of Waste Research (German) and conference on landfill practice (German).



Dipl.-Ing. Klaus Stief

is the former head of the department of waste treatment and landfilling of the German environment agency (UBA). He is the architect of groundbreaking legal regulations for waste treatment and landfill design in Germany, which also influenced the European landfill directive. When he retired, he started operating the most important website about landfills and aspects of waste treatment in Germany (www.deponie-stief.de).



Dr.-Ing. Dipl.-Chem. Dipl.-Ing. Joerg Stockinger

handled the federal research project "Proving of a non catalytic thermal oxidation for the treatment of MBT exhaust gas" at the institute for water quality and waste management (ISAH) at the university of Hanover. In his doctoral thesis he created the basics for handling and treatment of exhaust gas in modern MBTs. Afterwards he went to Haase-Energietechnik, where he works on regenerative thermal oxidation as well as landfill- and biogas.

International Symposium MBT 2005

Wednesday, 23rd and Thursday 24th of November 2005, Exhibition Area

Commercial exhibition

Designers and manufacturers of MBT plants and other companies present themselves.

The conference is accompanied by a commercial exhibition. There are many possibilities of advertisement and endorsement at the International Symposium MBT 2005 and in the conference proceedings. Take the chance to meet an exclusive international circle of potential customers. Most of the exhibition space is already rented, book on time! First come, first served! Please get further information from our [website](#) and contact us! - tagung@wasteconsult.de



International Symposium MBT 2005

Binding registration for the International Symposium MBT 2005

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).

Please note, that this form doesn't register you to the accommodation!

Wasteconsult International

Robert-Koch-Strasse 48b

D – 30853 Langenhagen

Germany

FAX ++49 511 23 59 384

Please select (X)

	Registration fee net if we receive your registration until 30 th of September 2005	Registration fee net in case of registration after 30 th of September 2005
23. November 2005 1 st conference day	<input type="checkbox"/> 186,00 €	<input type="checkbox"/> 215,00 €
24. November 2005 2 nd conference day	<input type="checkbox"/> 186,00 €	<input type="checkbox"/> 215,00 €
25. November 2005 Excursion	<input type="checkbox"/> 50,00 €	<input type="checkbox"/> 60,00 €
3 day ticket 23. – 25. November 2005	<input type="checkbox"/> 399,00 €	<input type="checkbox"/> 449,00 €
	Each plus 16% VAT	Each plus 16% VAT
<input type="checkbox"/> My conference language is German	<input type="checkbox"/> My conference language is English	
<input type="checkbox"/> Mr. <input type="checkbox"/> Mrs.		
Title / Name:	First name:	
Firm / Institution:	Phone:	
Address:	Fax:	
Postcode, City:	Email:	
Date, signature, chop:	Make sure to enter a valid email address! Invoice and your conference ticket will be sent via email (PDF documents)!	
	VAT-ID (EU-members)	

Terms and conditions, services

Conference organizer:

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

Fon ++49 (0)511 / 23 59 383 • FAX ++49 (0)511 / 23 59 384 • 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

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 30th of October.2005 (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 excursion day includes lunch. All delegates receive an issue of the conference proceedings. 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 and deaths.

International Symposium MBT 2005

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

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 65 Euro/day. Other hotels and information about Hanover can be found at <http://www.hannover.de/english/language/sprache.htm>

Arrival:

Flights to Hanover:

Hanover has an international airport, which is served by many airlines. www.hlx.com, which is based in Hanover, has budget flights to many European destinations. www.air-berlin.com connects Hanover to many European and North African destinations at budget rates too. www.lufthansa.com has world wide service. Many other airlines have well-priced flights to Hanover too. Please contact your local travel agency! These flight informations are 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. Deboard at the station Dorfstrasse



1 minute 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.

Get maps and description of your approach at map24

http://www.wienecke.de/Pages/en/unten/b_routenplaner.html). You just have to enter your point of departure.

You can get detailed maps of Hanover at www.stadtplandienst.de .