





ecosan - newsletter - no.6 - 10/2002 - english

This regular electronic news bulletin from the ecosan project of GTZ, Germany, addresses a network of friends and professionals involved in initiatives and projects in the field of closed-loop wastewater management and sanitation.

Dear friends and colleagues!

Welcome to GTZ's ecosan newsletter in English, French, Spanish and German; issue no. 6!

The latest editions of the English version are distributed directly via e-mail in the globally-readable, text-only format. You can also download German, French, Spanish and English versions as easy-to-read pdf files from our website.

!!! Downloads:

German: http://www.gtz.de/ecosan/docs/nl6dt.pdf
Spanish: http://www.gtz.de/ecosan/docs/nl6esp.pdf
French: http://www.gtz.de/ecosan/docs/nl6erg.pdf
Http://www.gtz.de/ecosan/docs/nl6erg.pdf

Your ecosan team hopes you enjoy our current issue!

Your contributions

This medium lives through interaction. So please keep sending your suggestions, requests and information to be published via this newsletter to the addresses at the end of this issue. Thank you for any contribution!

In-house News

2nd International Symposium on Ecological Sanitation

including IWA Specialist Group Conference on Sustainable Sanitation

7-11 April 2003, Lübeck, Germany

In the run-up to an exciting event, we are continuing preparations for the second ecosan symposium in the beautiful little town of Lübeck. We are looking forward to numerous interesting papers (and speakers), and a very varied program of excursions and side events is already taking shape. We will be publishing further practical information and the registration form over the next few weeks and keeping you updated through the ecosan distribution list.

!!! For all the latest information and relevant documents on the symposium, please go to:

http://www.gtz.de/ecosan/symposium-2003.html

Interesting vacancies in the GTZ ecosan project

Beginning in November 2002 and January 2003 the GTZ ecosan project offers diverse vacancies for a project officer, a project assistant and trainees!

The jobs will be based at GTZ's Head Office in Eschborn but can be expected to include several foreign assignments.

We are looking for communicative, energetic professionals / students with a college degree / academic background, preferably in environmental engineering/economics, water supply and sanitation management, civil engineering, town planning, agronomics, or a relevant post-graduate degree. Very good written and spoken German and sound working knowledge of another world language are required, as are communication skills





and a capacity for interdisciplinary, intercultural and most of all independent work routines. If you would enjoy learning and experiencing a broad range of project management skills and getting to know GTZ through participation in pilot projects, all as part of a dynamic team, while acquiring useful professional perspectives and participating in the ongoing development and dissemination of ecosan strategies via development cooperation, take a closer look at the vacancies touch and get in touch with us!

- Beginning November 2002 until June 2003 there will be vacancies for 2-3 trainees, duration 3-6 months. They will most of all take part in the preparation and organization of our International Symposium, that offers a whole range of interesting and communicative tasks for all members of the team.
- Beginning January 2003, there will be a vacancy for a part time (50%) project officer
- Beginning around May 2003, there will be a two-year vacancy for a **project** assistant on the ecosan project as part of GTZ's junior employee training program. Beware of closing date for applications:October 31!

!!! Further information about these jobs:

trainees: Just apply directly to us!

project assistance: See the following page, Code No 44-2!

http://www4.gtz.de/personal/deutsch/nachwuchs/assistenz/Ausschreibungen/44.html

Project officer:

http://www.gtz.de/ecosan/docs/stellenbeschreib_ma.doc

Recent News

India: Reveling in the rain – New Rain Centre in Chennai

Located in the heart of Chennai, the Rain Centre is the last word on rainwater harvesting. A joint venture between CSE and Chennai's Akash Ganga Trust, the Rain Centre will open later this month and feature comprehensive information on traditional and state-of-the-art rainwater harvesting initiatives in India. A permanent exhibition includes a live rainwater harvesting model. Electronic simulations and water scenarios in different regions detail the urban water status in India. A comprehensive directory of contacts and information on water testing kits will also be available. As part of its outreach program, the Centre will also host eco tours for school students.

!!! For further information, please go to:

http://www.rainwaterharvesting.org/network/raincentre.htm

or visit:

RAIN CENTRE No.4, 3rd Trust Link Street (off Santhome High Road) Mandavelipakkam, Chennai 600 028

India: Setting a good example – child-friendly toilets in Tamil Nadu

Every morning and evening, two hundred and thirty-five children are using a child-friendly toilet (CFT) facility developed by the non-governmental organization Gramalaya in cooperation with WaterAid. In the August issue of the newsletter "Water and Sanitation Weekly", WSSCC and IRC reported how the project began on the initiative of women's self-help groups in the slums. In a clean, colourfully painted environment and accompanied by their mothers, the children began by learning a few things about personal hygiene. The facility is now being maintained by a caretaker, who also shows the children how to wash their hands, etc. Pay toilets for adults have also proven extremely successful and are even yielding profits to be invested in other initiatives.

!!! For more on the work being done by Gramalaya, go to: http://gramalaya.org/.

!!! The entire newsletter can be found at: http://www.wsscc.org/source/





Germany: Hamburg's Urban Sanitation Department plans venture into urine separation

People at Hamburg's Urban Sanitation Department have begun to ponder the chances of implementing alternative sewage systems in a major German city. As Ulf Volker Rakelmann, one of ecosan's innovative thinkers explained to a visiting group of colleagues from GTZ and KfW in September, Hamburg is planning to focus on urine separation, because every drop of yellow water that can be taken out of the wastewater treatment system helps take the strain off the facilities. Energy consumption aspects also play a major role: It currently costs approximately 25 kWh per person and year, or roughly half of the overall energy input for waste treatment, to eliminate nutrients. In combination with minimized flushings (little or no water consumption), separating the urine at the place of origin through the use of separating toilets and waterless urinals would allow a smaller nitrogen elimination stage, and sewage treatment plants would therefore no longer need an independent energy source. This would substantially facilitate the elimination of endocrinological substances and residues from wastewater, because 70–80% of such substances are contained in the urine.

Potential pilot projects in and around Hamburg include a planned enlargement of the Port City (new housing for 12,000 people and 20,000 new jobs), which is located near the city's high-capacity sewage treatment plant and would therefore offer advantages such as short alternative urine conveyance systems. Moreover, if Hamburg's bid to host the 2012 Olympics is successful, the sporting facilities would also be a worthwhile project. In terms of sewage collection and handling, serious consideration is being given to the gradual conversion of Hamburg's huge storm-water retention tanks into service reservoirs to transfer urine through the sewer network during the night (when the load is relatively light) for specific treatment or collection and removal of the separated urine.

Recent Publications

Miscellaneous

The Rainwater Harvesting CD

CTA, FAKT, NEDA (2002): The Rainwater Harvesting CD; Ed.: Hans Hartung, 680 pages, EUR 27-34 (Germany/EU/non-EU), EUR 17 (NGOs)

This new CD contains 680 pages, 200 photographs and 60 illustrations and covers the entire spectrum of rainwater harvesting, focusing on domestic usage. The information presented was gathered in rural and urban areas throughout the world. The target group includes development cooperation organizations (particularly NGOs), administrators, planners and advisers.

The CD can be opened in Acrobat Reader and can therefore be read on any computer. It comes with a 24-page brochure full of explanations, photographs and pertinent projects, as well as conference documentation and addresses.

!!! To order, please contact: order@margraf-verlag.de

New GTZ brochure "Partnerships for Sustainable Development – Inputs for International Cooperation"

The GTZ brochure "Partnerships for Sustainable Development – Inputs for International Cooperation", which was produced for this year's World Summit in Johannesburg, sheds some light on GTZ's work in various areas.

It includes articles on poverty alleviation, water, energy, transportation, urban and rural development, health, crisis prevention, and much more.

!!! Download English: http://www.gtz.de/ecosan/docs/E_wssd_Brochure.pdf
!!! Download German: http://www.gtz.de/ecosan/docs/D_wssd_Broschuere.pdf





GTZ publications "Improving Sanitation in Poor Urban Areas"

GTZ (2001): Improving Sanitation in Poor Urban Areas: Fundamentals / Module 1 - Technical Concepts; Eds.: GTZ Sector Project Improving Sanitation in Poor Urban Areas, 111 or 139 pages (2 versions), Universum Verlagsanstalt Wiesbaden

The GTZ sector project "Improving Sanitation in Poor Urban Areas" is authoring various written modules on technical concepts, participation, self-help, public relations, financing and organization. The basic volume (fundamentals) and the first module are already available at no cost from the publishing house Universum Verlagsanstalt Wiesbaden, and the other modules will be available this autumn.

!!! To order your copy, please contact Horst-Dieter Herda, Tel.: ++49 (0) 611-9030252, Fax ++49 (0) 611-9030556 or send an e-mail to: horst-dieter.herda@universum.de

!!! Download: http://www.gtz.de/ecosan/docs/Periurban.pdf

Sandec project overview: Applied Research on the Management of Sludges from On-Site Sanitation Systems in Developing Countries

A major problem with faecal sludges collected from on-site sanitation installations is that they are often not treated before being disposed of. In larger cities, haulage distances to outlying treatment or disposal sites are long, and traffic congestion prevents efficient emptying and haulage of faecal sludges. Land within city boundaries is often expensive and might therefore not be available for waste treatment. The sludges are therefore dumped untreated as close as possible to where they come from, either on open ground, in drainage ditches and watercourses, or in the sea. Growing urbanisation leads to increasing quantities of faecal sludge being disposed of and hence to a rise in environmental pollution and health risks.

Appropriate means and ways of treating, using and disposing of faecal sludges are thus urgently needed. To solve some of these problems, SANDEC started an applied research project on this subject in 1992. Information on the project can be downloaded from the SANDEC website.

!!! For further information, please go to: http://www.sandec.ch/sos/index.html

Recent Publications

Studies, Reports, etc.

Available for downloading: BMBF Study on "The International State of Development of Alternative Water Systems"

BMBF (2001): Investigation of the International State of Development of Alternative Water Systems; Prof. Dr.-Ing Dr. K.-U. Rudolph, Dipl.-Ing. Dirk Schäfer, Witten Herdecke University, 123 pages, German only

This study (available in German only) was conducted by the Institute for Environmental Engineering and Management at Witten Herdecke University on behalf of the German Federal Ministry of Education and Research (BMBF). It contains an illustrated international survey of water and wastewater management options, including a characterization of the main components of water supply and sanitation systems, various system descriptions, economic aspects, and results from 65 pilot projects and other selected projects.

!!! Download: http://www.gtz.de/ecosan/docs/schlussbericht_altwatersys_D.PDF

Also available for downloading: BMBF Study on "Integrated Water Supply and Sanitation Systems for Urban Areas"

BMBF (2001): Integrated Water Supply and Sanitation Systems for Urban Areas; Prof. Dr.-Ing Dr. h.c. P.A. Wilderer, Dipl.-Ing. Stefania Paris, Munich Technical University, 101 pages, grman only

The final report (in German only) of this study conducted by the Munich Technical





University's Water Quality and Waste Management Department and Research Institute examines the dissemination and use of decentralized water supply and sanitation systems in Germany and abroad, identifying both their advantages and their knowledge deficits and technological inadequacies. The study also analyzes perspectives and marketing opportunities in Germany, other European countries and Asia.

!!! Download: http://www.gtz.de/ecosan/docs/Integr_Ver_Entsorgsys_D.pdf

British study in Ghana: Why hygiene education for women fails

Hygiene education for women is a standard component of water supply projects. However, evaluations frequently reveal little change in hygiene and sanitation behaviour, and so water-borne illnesses persist. Why is it so hard to convey water-related health messages?

Researchers from the University of Bradford in the UK tackle this issue in an assessment of *Ghana's Upper Region Water Supply Project (URWSP)*. They advocate a more rigorous analysis of the cultural and gender-related factors that influence women's acceptance and understanding of these messages. Participation by women has been minimal. Lessons learned and factors that planners must be aware of or need to find out are described.

!!! For further information, please go to:

http://www.id21.org/zinter/id21zinter.exe?a=0&i=h10sk1g1&u=3d88944b

Recent Publications

Highlights of the CEMSA Conference, Johannesburg, 27–30 August

Conferences

The 3rd International **C**onference and Exhibition on Integrated **E**nvironmental **M**anagement in **S**outhern **A**frica, held last August in Johannesburg, was organized by the Centre for Innovative Environmental Management (SCIEM), the University of the Witwatersrand, the South African Institution of Chemical Engineers; Johannesburg and Gerhard-Mercator University of Duisburg, Germany.

A week before the Johannesburg Summit, this interesting conference enabled participants to share the latest information and know-how on environmental management in Africa and related problems; it was also design to identify major priorities for developing appropriate solutions to manage the African environment and environmental education in southern Africa. Several courses and workshops were organized.

!!! A selection of very interesting lectures showing practical experiences from abroad is available at the following addresses:

B. Gumbo et al.: "Ecologising Societal Metabolism: The case of phosporous" http://www.gtz.de/ecosan/docs/Gumbo.pdf

Mashauri and Senzia: "Reuse of nutrients from ecological sanitation toilets as a source of fertiliser"

http://www.gtz.de/ecosan/docs/Mashuari.pdf

E. Chaggu and E. John: "Ecological sanitation toilets in Tansania" http://www.gtz.de/ecosan/docs/Chaggu.pdf

P.E. Odendaal: "Integrated Water Resources Management (IWRM) with special reference to sustainable urban water management"

http://www.gtz.de/ecosan/docs/odendaal.pdf

M. Koettner: "Dry fermentation – a new method for biological treatment in ecological sanitation systems (ecosan) for biogas and fertilizer production from stackable biomass suitable for semiarid climates"

http://www.gtz.de/ecosan/docs/Koettner CEMSA.doc





Presentations on water supply and sanitation during the World Bank Water Forum 2002

The World Bank's Water and Sanitation Sector Board, the Water Resources Management Group, and the Water and Sanitation Program hosted Water Forum 2002 at the Bank's headquarters on 6-8 May.

This year's Water Forum was co-organized by both the Private Sector and Infrastructure network (PSI) and the Environmentally and Socially Sustainable Development network (ESSD) of the World Bank. The Forum brought together the World Bank Group's water sector community and external participants including clients, international and donor organizations, NGOs, and private sector representatives dealing with water issues.

!!! The full range of presentations (including WRM, Irrigation and Drainage, and Environment) can be found at

http://lnweb18.worldbank.org/essd/essdext.nsf/18docbyunid/86d08ce33c3b5e4685256bbb007f4f72?Opendocument

Recent Publications

New French-language newsletter "Sources Nouvelles"

Online

WSSCC, IRC, H2Onet and CREPA began jointly publishing the new French-language newsletter "Sources Nouvelles" on water and sanitation last June. As of this autumn, a printed version of the newsletter will be made available to readers without access to the Internet.

!!! To register, please contact: leborgne@irc.nl

"Water / Sanitation Webliography" on the Internet

The "Environmental Health Project" (EHP) recently began publishing a continually updated "Water / Sanitation Webliography" on the Internet, offering numerous links to the latest relevant texts from EHP, IRC, WHO and other sources to be downloaded.

!!! Address: http://www.ehproject.org/Library/WebliographyWSS.htm

Recent Events

The following events are scheduled for the general period covered by this issue of our newsletter (which unfortunately we are never able to time exactly). If any of these events have already taken place before you receive this newsletter, please remember that you can still use the indicated contacts to obtain conference documentation etc.

Germany: 5th Conference on Membranes in Drinking and Industrial Water Production (MDIW), 22–26 September 2002, Mülheim/Ruhr

Organizers: Institute for Water Research IWW, KIWA (The Netherlands)

Support: DVGW, Gerhard Mercator University, Duisburg

Sponsors: IWA, EDS, AWWA, JWWA

This conference (the fifth in the series after Paris in 2000) provided an overview of the latest developments in membrane technology.

The theme of the conference was membranes in drinking and industrial water production. The treatment of groundwater, water from rivers, lakes and the sea, filter backwash water, and industrial and domestic waste waters with membrane-base processes such as reverse osmosis, nanofiltration, ultrafiltration, microfiltration and electrodialysis was covered in detail.

!!! For information about the conference, please go to: http://www.mdiw2002.de





The Netherlands: International Conference on OZONE in Global Water Sanitation, 1–3 October 2002, Amsterdam

Organizers: The International Ozone Association and the Board of European-African-Australasian Group (EA3G)

Subtitle: Integrating Ultra-violet Light, Catalytic, Synergic and Advanced Oxidation Processes

Ozonation of pollutants, ozone regeneration of activated carbon and ozone mass transfer were some of the topics of the conference, as were disinfection of water using chlorine-free water and UV rays and oxidation technologies for organic pollutants removal.

!!! For further information: www.aquatech-rai.com; mailto: aquatech@rai.nl

Forthcoming Events

Germany: Conference on Ecological Sanitation Concepts versus Utility / Rainwater Harvesting, 5 November 2002, Frankfurt/Main

Organizers: Fachvereinigung Betriebs- und Regenwassernutzung e.V. (fbr)

fbr-sponsored conferences deal with innovative projects and developments concerning the harvesting and use of rainwater, greywater and industrial process water. They also serve as a forum for new developments and innovations in the field of process / rainwater harvesting. This one-day conference *cum* exhibition is aimed at consulting engineers, industrial enterprises, manufacturers of industrial water facilities, and representatives of public institutions and the specialized trades. Various systematized solutions are illustrated by presenting various projects and practical experience. The event focuses on user acceptance of such systems, along with the question of how they supplement or compete with existing systems for harvesting and using process water and rainwater.

The conference will last from 9.30 a.m. to 5 p.m. and will include an exhibition in the lobby.

!!! For further information, please go to: http://www.fbr.de/veranstaltung/fachtagung.htm

Germany: Conference on Green Gas[™] and Energy Farming, 18–19 November 2002 in Potsdam

Organizers: EUROSOLAR, ETI Brandenburg, Fachverband Biogas e.V., eco Naturgas Handels GmbH, and ATB Potsdam

This conference will be the first in Europe to feature energy yields and potentials of energy plants harvested in certain growth states, the technology of wet gas scrubbing, new energy services, DVGW-specific and legal requirements for line entry, and – as the conference's highlight – ecobalances representing the entire chain of processes from the farm to the household's Green GasTM outlet (condensing boilers, fuel cells, etc.) and to the vehicle's fuel tank — all in a new, innovative overall context. How well, for example, does the energy and ecobalance of biogas as a fuel compare with those of liquid biofuels and fossil fuels? Is it better to generate and consume electricity on the spot than to inject Green GasTM into the gas supply grid? These and similar issues are to be critically examined.

!!! For further information, please go to: http://www.biogas4all.de

or contact: Mr. Wolfang Tentscher, eco Naturgas Handels Gmbh; Tel.: ++49-(0)30 79780447; Fax: ++49-(0)30 79780448





Germany: Workshop on Fostering Rural Economic Development Through Agriculture-Based Enterprises and Services, 20–22 November 2002, Berlin

Organizers and Sponsors: GTZ, DFID, IFAD, CTA, the World Bank

The workshop aims to explore the promotion of non-farm income generation and rural livelihood diversification through activities that are linked to agricultural production. Based on available country-level experience, intervention priorities for various stakeholders in the framework of poverty reduction strategies will be identified.

Each development agency is expected to bear its own costs for attending the workshop. Additional trust fund resources will be identified to support participants from developing countries and to publish the results.

!!! Information: http://www.gtz.de/agro-based-development/index.html

Italy: IWA Leading Edge Conference on Sustainability in the Water Sector, 25–26 November 2002, Venice

Organizer: IWA

The conference will profile innovation and excellence in sustainable water solutions from across the globe, presenting case studies and posters and providing an opportunity for strategic debate on the concept of sustainability in the water sector and its technical challenges.

It will present the following major themes:

- addressing the problem of water scarcity using sustainable utilities management
- national policy and practical approaches in sustainable river basin management
- creating a mandate for change (and budgets) with stakeholders and partners
- practical urban water management approaches and selecting the best pathway
- sustainability theory and what it means in the water sector

Anticipated participants:

- members of IWA's Strategic Council
- Programme Committee for the sustainability programme
- invited speakers and leaders in sustainable water and river basin management and sustainability
- interested professionals

!!! For further information, please go to:

http://www.iwahq.org.uk/template.cfm?name=sustainability2002

India: International Regional Symposium "Water for Human Survival", 27–29 November 2002, New Delhi

Organizers: The Geographical Committee of the International Water Resources Association (India) and the Central Board of Irrigation and Power

The symposium will deliberate on: how to secure water for crucial purposes such as drinking water and food production; how threats from water pollution can be minimized by restructuring the industry; awareness and education for achieving water security; and the rules and obligations that have to be linked to the "human rights approach" to water provision.

Between 150 and 200 top experts on water resources development, water treatment and distribution, urban and rural water supply, irrigation water management and sanitation from all over the world are expected to attend.

The Water 2002 Exposition will take place during the first three days of the symposium.





!!! For further information, please contact: sandeepj@coxkings.com
or mishkata@coxhings.com

or: Mr. Sandeep Joshi, Manager – Conferences and Conventions Cox & Kings Limited; Indra Place, H_Block, Connaught Place, New Delhi-110 001, India; Tel.: +91-11-3738398/373-8811; Fax: +91-11-375-2616/331-7373

Future Events

France: Water and Wastewater Europe Conference Exhibition (W&WE), 4–6 March 2003, Nice

Organizer: PennWell

The conference will bring together industry experts and decision-makers from the water and wastewater sector.

Topics of the conference will include: desalination, water re-use, water quality, sludge treatment, and privatization.

Products such as valves, pumps and desalination equipment will also be presented, along with services from companies from around the world.

!!! For more information, please go to: http://www.wweurope.com

Egypt: Seventh International Water Technology Conference, 28-30 March 2003, Cairo

Organizers: The National Organization of Potable Water and Sanitary Drainage (NOPWASD), The American Society of Civil Engineers (ASCE) and the Center for Future Studies, Assiut University

The International Water Technology Conference has been held annually, since 1996, in Cairo, Egypt. The Conference organizing committee includes university professors, experts, decision makers from different ministries and representatives of the private sector. Over 300 participants attend this event annually. The topics of the technical sessions will be: water treatment technology, hydraulics and water resources and desalination technologies.

Technical presentations and applied papers are solicited in English. Full papers should be sent to the organizers according to their topics by October 15, 2002.

!!! More information about the paper guidelines: http://www.maxpages.com/iwtcivegypt

!!! Information about the Conference: e-mail: mrayan@usa.com, or mrayan@mans.edu.eg

Prof. Magdy Abou Rayan, Conference Secretary General, Mansoura University, Faculty of Engineering, El-Mansoura 35516, Egypt, or P.O. Box 415, 21321 Ibrahimia, Alexandria, Egypt; Tel & Fax: 203-5920641

Spain: Il International Conference on Efficient Use and Management of Urban Water Supply, 2-4 April 2003, Tenerife, Canary Islands

Organizers: IWA and others

The objective of the Second International Conference on Efficient Use and Management of Water in Urban Areas is to provide a forum for the exchange of the most recent ideas, techniques and experiences in all areas of water management that could contribute to more efficient water use.





Professionals from around the world (water managers, regulators, consultants, scientists, environmentalists, researchers and providers of equipment and solutions) should attend the conference.

The technical, legal, environmental, economic and service quality perspectives will be comprehensively examined in order to identify the main driving factors, problems and solutions.

The language of the conference will be English.

!!! Extended Deadline for abstracs and proposals submission: 31 October 2002 !!!

!!! More information at the web page: http://www.iwatenerife2003.org

Malaysia: Water and Drainage Conference, 28–29 April 2003, Kuala Lumpur

Organizers: Malaysian Water Association (MWA) and the Malaysian National Committee on Irrigation and Drainage (MANCID)

The first jointly organised conference of MWA and MANCID will also include an exhibition on 28–30 April 2003 and technical visits.

Topics of the conference will include: water scarcity, the importance of good drainage and the changing value of water.

The first announcement and the call for papers have already been published. Authors are asked to present papers related to policy issues and strategies, research and development, technology and economic aspects. The abstracts should not exceed 300 words.

!!! Deadline for submission of papers: 15 October 2002

!!! For more information, please contact: mailto:kchin@pd.jaring.my or mailto:jmcng@pd

or: MWA – MANCID Conference Secretariat, C/o Protemp Conferences Sdn Bhd, 60B, Jalan SS21/58, Damansara Utama, 47400 Petaling Jaya, Selangor – Darul Ehsan, Malaysia; Tel.: 603-7726 2760 / 7726 7361; Fax: 603-7727 0614

Findland: Dry Toilet 2003, 20-23 August 2003, Tampere

Organizers: Global Sanitation Club of Finland – Käymäläseura Huussi ry and the Association of Ecological Information – Ekoinfo ry

The goal of the conference is to discuss worldwide sanitation problems and present dry toilets as a viable option to waste management especially in areas with water shortages or inadequate drainage systems. Main topics of the conference will be: controlled rural and urban environmental management, re-use of human excreta as fertiliser, technical development of dry toilets, and toilet culture. The language of the conference is English.

!!! For more information, please visit the conference web page: http://www.dry-toilet2003.com or mailto: drytoilet@tavicon.fi

Thailand: Aquatech Asia 2003, 2–4 October 2003, Bangkok

Organizer: RAI Exhibitions (Thailand)

Exhibition on water and wastewater technology, products and services for Asia, with a focus on Thailand, Malaysia, Indonesia, the Philippines and Singapore and on developing markets such as Cambodia, Laos, Myanmar and Viet Nam.





At Aquatech Asia, international water technology, water management, new technologies and innovations will be presented at an event concentrating solely on water, which means it will be the best place for buyers and sellers in the Asian water market to meet.

!!! For further information, please go to the symposium website: http://www.aquatech-asia.com/ or contact auatech@bkkrai.com

or: Mr. Sarnit Karunyavanij, Bangkok RAI; Fax: +66-2-9600140

Morocco: EUROMED 2004 Desalination Strategies in South Mediterranean Countries, 4–6 May 2004, Agadyr

Organizers: European Desalination Society (EDS), National Water Supply Agency and the Université IBN Tofall Kenitra

The topics of the symposium will include: the challenges and potential of desalination; water strategies in south Mediterranean countries; new trends in desalination technologies; distillation/membrane distillation; groundwater desalination; renewable energies (solar, wind, nuclear); environmental impact of desalination plants; water treatment and reuse; and financing and privatization.

Deadline for abstracts: 15 January 2004

!!! For more information, please go to: http://www.edsoc.com/

or contact: Miriam Balaban at: miriam.balban@aquila.infn.it

European Desalination Society, Science and Technology Park of Abruzzo, Via Antica Arischia 1, 67100 L'Aquila, Italy; Tel.: +39 (0862) 3475-308; Fax: +39 (0862) 3475-213

Links and Tips

Links on the GTZ ecosan homepage

An extensive list of interesting links is available on our homepage at:

http://www.gtz.de/ecosan/links.html

If you know of another other interesting links, please send them to: ecosan@gtz.de

New tips (in alphabetical order)

Citynet

http://www2.unife.it/care-w/citynet.html

Site of an interdisciplinary European Network of Excellence on integrated urban water management, initiated by six European research and development projects.

Environmental Health Project

http://www.ehproject.org

Development, implementation and promotion of new and improved, cost-effective environmental health interventions at the household and community levels. Framework providing access to hardware, hygiene promotion and enabling environments.





Ecological solutions

www.eco-solutions.org

Site dedicated to designing, demonstrating and promoting ecological sanitation on the Indian sub-continent. Recently showing results of the First Ecological Sanitation Workshop and Training Course in Sri Lanka.

Greywater recycling

www.greywater.com

Technical advice on greywater treatment systems.

Groundwater risks from on-site sanitation

http://bgs.ac.uk/hydrogeology/argoss/manual.htm

Guidelines for assessing the risks to groundwater from on-site sanitation.

Oxfam DelAgua water-testing kit

http://www.eihms.surrey.ac.uk/delaguarcpeh.htm

The kit helps users to obtain rapid and reliable information about the safety of water supplies in emergency situations where no laboratory facilities are available. Information on the kit, ordering etc.

Watsan

http://www.worldbank.org/watsan/topics/tech_sanitation.html

Basics concerning ecosan from a Worldbank point of view

Water-agenda

http://www.wasser-agenda.de

German Website of Iclei and the Umweltbundesamt concerning the "Aktionshandbuch "Nachhaltige Wasserwirtschaft und Lokale Agenda 21"

Homepage

Would you like to know more about GTZ's sectoral project ecosan or about the subject in general?

If so, visit our homepage (expansion and update in progress):

http://www.gtz.de/ecosan

Newsletter

If you would like to contact the administrators of this newsletter please send an e-mail to:

owner-ecosan@mailserv.gtz.de

Your proposals for contributions to the newsletter, and any inquiries and comments you may have are always welcome.





Contact:

The GTZ ecosan team:

Christine Werner, Heinz-Peter Mang, Jana Schlick and Susanne Becker GTZ

Div. 44, Water and Solid Waste Management

ecosan project – ecologically and economically sustainable wastewater management and sanitation systems

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

Postfach 5180

D-65726 Eschborn, Germany Phone: ++49-6196-79-1740 Fax: ++49-6196-79-6105 <u>christine.werner@gtz.de</u> <u>heinz-peter.mang@gtz.de</u> jana.schlick@gtz.de

Mailing list / Newsletter - user information

How to use the ecosan mailing list

You can interact with the Majordomo software of our mailing list server by e-mailing commands to:

majordomo@mailserv.gtz.de

Commands must be the only text in the e-mail, and not as part of the subject line! You can send several commands in one and the same e-mail message. Just be sure to start a new line for each command.

If you attach a signature block to the end of your e-mailed messages, the Majordomo software could perhaps mistake it for another command, so please enter the word "end" by itself in the line below the last command.

Useful mailing-list commands:

subscribe ecosan

Use this command to subscribe to the ecosan mailing list

subscribe ecosan your.name@xy.org

Use this command to receive the newsletter at an address other than that listed in your registration (e.g., if you send the e-mail from your workplace account, but wish to have the newsletter sent to your private e-mail address).

unsubscribe ecosan

Use this command to cancel your subscription.

unsubscribe ecosan your.name@xy.org

Use this command to de-register your receiving address, if this differs from the one which you are currently using to send the request.

info ecosan

Use this command to request general introductory information about the ecosan mailing list.

index ecosan

Use this command to obtain a list of files sent so far via the mailing list.





get ecosan <filename>

Use this command to obtain a specific file sent via the mailing list (e.g., an archived newsletter).

help

Use this command to obtain information on how to use the Majordomo software.

end

Use this command to terminate a list of commands, e.g., especially if your mailer attaches an automatic signature.