JAGIELLONIAN UNIVERSITY

Invitation to international, practical workshop "Constructed wetlands for wastewater treatment, wetlands conservation and water recycling Kraków, 25-27 October 2005"

First Announcement

JAGIELLONIAN UNIVERSITY

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Constructed wetlands are an emerging technology around the world. Developed over the past few decades, primarily by wetland scientists in Europe and the United States, this approach to ecological engineering is finding useful application to solve problems of wastewater pollution from residential, agricultural and industrial sources.

The objective of the workshop is to share knowledge and experiences in constructed wetlands and other approaches to water treatment/recycling and reuse between researchers from EU countries and candidate states.

	 Institute of Environmental Sciences of Jagiellonian University Carpathian Heritage Society
Organizers	within the framework of the European Community CENTRE OF EXCELLENCE IBAES "Integrating Basic and Applied Environmental Sciences for the benefit of local communities"
About contructed wetlands	Constructed wetlands are an emerging technology around the world. Developed over the past few decades, primarily by wetland scientists in Europe and the United States, this approach to ecological engineering is finding useful application to solve problems of wastewater pollution from residential, agricultural and industrial sources. Constructed wetlands have also been used for the restoration or amelioration of natural wetlands, and to provide wildlife habitat and ecosystem diversity in the landscape. Currently there is increasing recognition of the shortage of fresh, potable water worldwide. This has begun to focus attention also on the potential of constructed wetlands and other allied approaches such as graywater recycling, composting toilets, to reduce the wastage of our water resources and to increase the amount of water recycling and reuse. This change of focus from "sewage treatment" to safe reuse of the "wastewater" is an important component in moving towards more environmentally- friendly and sustainable practices.
Topics of the workshop	 Constructed wetlands – overviews of technology and applications Surface flow wetlands Subsurface flow wetlands - horizontal and vertical Wetlands for ecological restoration/wildlife habitat Wetlands for sewage/industrial wastewater treatment Wetland vegetation - types of wetland plants, their role in treatment etc.
	 2. Role of wetlands and other alternative technologies in water conservation and reycling/reuse Present trends in water consumption Graywater recycling Composting toilets Uses of reclaimed water for irrigation/landscaping/recreation areas/groundwater recharge The Sustainable Society: the Role of Wetlands and waterconservation/recycling
	 Case Studies of Environmental/Health Problems Wetland applications as solutions Review of construction and installation methods Economics vs. competing systems
	4. Regulatory Environment - Current Situation and Proposals for Future
	5. Research Needs and Opportunities
Deadlines	 second announcement: 20 September 2005 registration: 15 October 2005. The number of participants is limited, due to the capacity of the Mogilany Conference Centre – so, please sign up for the workshop soon!

Accommodation

The workshop will take place in the beautiful Mogilany Conference Centre, about 10 kilometers from Krakow in south Poland, <u>http://www.okmogilany.pl/</u> (website in Polish). Hotel reservations are made through workshop organizer (contact person Dr Andrzej Czech).



Fees and costs

There is no workshop fee, participants should cover their expenses on food and

accommodation in Mogilany Guest House (total: about 100 EURO per day). They will be paid on site in cash or via credit card upon arrival.

Participants from CEE may apply for reimbursement of travel and accommodation costs. If you want to apply please contact Dr Andrzej Czech ac@naturalsystems.pl

Chairmen

Chairman: Dr. Mark Nelson Ph. D.: Director and primary advisor for WASTEWATER GARDENS INTERNATIONAL Projects

Dr Nelson is Chairman and CEO of the Institute of Ecotechnics and Director of the Birdwood Downs project in West Australia since 1978. He was the former Director of Space and Environmental Applications for Space Biospheres Ventures (1985-94), and a member of the 8-person closure team in BIOSPHERE 2, 1991-1993, where he managed the constructed wetland used for wastewater treatment in the facility. He completed his doctorate in Environmental Engineering Sciences at the University of Florida, with a dissertation on subsurface flow wetlands in tropical coastal environments. Mark has worked for several decades in closed ecological system research, ecological engineering, the restoration of damaged ecosystems, desert agriculture, orchardry and wastewater recycling. He was a summa cum laude graduate from Dartmouth College, Phi Beta Kappa and is a member of Phi Kappa Phi, the honors engineering society.

Co-Chairman: Dr. Andrzej Czech, Project Liaison/Regional Representative WASTEWATER GARDENS INTERNATIONAL

Ph.D. graduate of Jagiellonian University in Krakow. Andrzej Czech was a driving force in the establishment of the Carpathian Heritage Society in April 1999. He is coordinator of work package "Constructed wetlands - natural wastewater recycling systems" (http://www.eko.uj.edu.pl/?p1=ib&lang=en&p2=pro&p3=5) within project "European Community CENTRE OF EXCELLENCE IBAES: Integrating Basic and Applied Environmental Sciences for the benefit of local communities" (http://www.eko.uj.edu.pl/?p1=ib&lang=en) and representative of

Wastewater Gardens International in Poland and Eastern Europe. Dr. Czech established the first pilot-project demonstrations of the technology in Poland at the Magursky National Park University field station and in the Tri-Lateral Biosphere Reserve in the Carpathians near Lutowiska.

Contact

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