

Global WtERT Congress 2023

Waste-to-Energy Research and Technology

Congress Agenda





Global WtERT Congress 2023

"Global cooperation to promote Waste-to-Energy technologies for a circular economy society"

November 7, 2023 | 8:30 am - 6:30 pm



Run Run Shaw Science Building in Zhejiang University Hangzhou – P.R. China

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Greetings!

Welcome to the Global WtERT Congress, the global gathering of all members of Global Waste-to-Energy Research and Technology Council (WtERT®). We appreciate your participation and contributions to this event that will take place at the campus of Zhejiang University in Hangzhou, China!

It is our great pleasure to bring you all together, members of WtERT family from around the globe, leading companies, and professional associations from Europe, USA and China to identify and advance the best available technologies for the recovery of energy and materials from residual non-recyclables wastes.

According to current GHG inventories, landfills are the third largest source of anthropogenic methane globally and account for approximately 11 percent of estimated global methane emissions. Addressing methane is critically important to combating climate change. Over a 20-year period, methane is 80 times as potent as carbon dioxide and is the 2nd largest driver of anthropogenic climate change. According to the United Nations Environmental Programme (UNEP), "cutting methane is the strongest lever we have to slow climate change over the next 25 years". In the near-term, reducing emissions of Short Lived Climate Pollutants like methane is more effective than reducing CO2.

Following those facts, WtERT can play a crucial role in addressing and developing effective responses by collecting, sharing knowledge and fostering a strong global commitment to divert waste from landfills, especially by bringing together USA and China to work together with other countries. Communities and policymakers can learn more about how Methane emissions will affect them, what they can do to divert residual non-recyclable wastes from landfills to mitigate, and reduce their climate footprint.

The time to act is now. Every year we delay placing a strong focus on the diversion of wastes from landfills, we add to a growing burden of methane emissions to the atmosphere, and a growing burden to our children.

We hope to meet you all at Hangzhou to learn and collaborate together to advance our common goal and continue the legacy of WtERT on global stage.

Yours sincerely,

Prof. Nickolas J. Themelis, Founder of Global WtERT Council Earth Engineering Center, Columbia University **Prof. Qunxing Huang, Ph.D** Vice-Dean, College of Energy Engineering, Zhejiang University President of Global WtERT Council



About the Organizers

Global WtERT Council

Founded in 2002, the Global Waste-to-Energy Research and Technology Council, WtERT®, is the foremost Non-for-Profit research association on Waste-to-Energy (WtE) worldwide, founded by the Earth Engineering Center of Columbia University, It bring together engineers and scientists from industry, government and Universities from 26 countries across the globe to collaborate together to advance both the economic and environmental performance of Waste-to-Energy technologies and disseminate all research and findings to the general public.

WtERT® is a registered 501(c)(3) nonprofit association (EIN: 45-3842166) that prides itself on being a unique Industry-Academia consortium to advance Waste-to-Energy technologies.

Website: wtert.org

Zhejiang University

Zhejiang University (ZJU) is one of China's top higher education institutions, as well as one of its oldest. Located in Hangzhou, one of China's most picturesque cities, the University is organized across 7 faculties and 37 schools. The University prides itself on a culture of innovation and entrepreneurship. ZJU is also renowned for the number of business start-ups it spins off. Over 100 of its alumni sit at the helm of domestic or overseas listed companies, making the University synonymous with excellence and leadership.

ZJU is a research powerhouse with 10 state key laboratories and 11 state engineering laboratories / centers. The University has set up over 40 international joint labs / centers with private and public sectors. Capitalizing on its broad research portfolio, ZJU has launched the Innovation 2030, a university-wide strategic framework to catalyze collaboration among discipline clusters and find innovative solutions to global challenges of tomorrow.

The University has partnerships in place with around 200 institutions all over the globe. With a cohort of over 7,000 international students and over 10,000 students who participate annually in various overseas mobility programs, ZJU fully harnesses its extensive network to nurture talent with a global outlook.

Website: www.zju.edu.cn/english/



About the Congress Venue

Global WtERT Congress 2023 will be held at the Run Run Shaw Science Hall at the campus of Zhejiang University (the Yuquan campus).



The address: South-East Gate of Yuquan Campus, Zheda Road 38#, Hangzhou, 310027, P. R. China. Map of Zhejiang University (The dotted red line shows the route from South-East Gate to Run Run Shaw Science Hall)

A: Run Run Shaw Science Building (the conference venue)

- B: Main Gate of Yuquan Campus, Zhejiang University
- C: The statue of Mao Zedong



About the Congress Accomodation

Yuanzheng Lingfeng Hotel

Yuanzheng Lingfeng Hotel, is situated in the beautiful city of Hangzhou regarded as "Heaven on the earth", It was built by Zhejiang University. The hotel is near Hangzhou's most popular attraction such as the world famous picturesque West Lake and within easy reach of the Jade Spring as well as the Arboretum. With Lingfeng to its southwest, which is a resort for appreciating plum blossoms, the hotel is a quiet and secluded place with fine scenery.

With the aim of serving Zhejiang University and the society wholeheartedly, having held successfully series of large meetings and international conferences, Yuanzheng Lingfeng Hotel has long been an important reception place for Zhejiang University. It enjoys a fairly high reputation in the hotel industry of Hangzhou, and is preferred by all walks of life.

Additional facilities at this Hangzhou hotel include a business center, a lobby bar with wireless internet access, a beauty salon and a games room.

Tel: +86 571 879 71456 / web: www.yz-hotels.cn Address: No.140 Yugu Road, Xihu District, Hangzhou, Zhejiang, 310013, China













Global WtERT Congress 2023 – Agenda

Monday, November 06, 2023

11:30 - 18:00	DAY 1 - Welcome Reception & Networking
11:30 - 18:00	Networking Lunch + Visit to Zhejiang Campus and Welcome Dinner of WtERT members at Lou Wai Lou, in West Lake scenic area.

Tuesday, November 07, 2023

8:30 - 19:30	DAY 2 – Congress Meeting		
9:00 - 9:30	Opening Remarks – Prof. Nickolas J. Themelis, Founder of WtERT and Director of Earth Engineering Center, Columbia University Introductory Remarks – Prof. Qunxing Huang, Ph.D, Vice Dean, College of Energy Engineering President of Global WtERT Council and WtERT-China 10 min Keynote address – Mrs. Ruilin ZHU, International Coordinator, College of Energy Engineering, Zhejiang University Chair of the Congress – Mr. Reda Kabbaj, VP International Relations, WtERT		
9:30 - 9:40	Group Photo		
9:40 - 11:00	Walter Ospina & Henrique Posada – WtERT Colombia, SAI Barriers and status of waste management and development of Waste-to-Energy technologies in Colombia		
	Yuri Schmitke A.B. Tisi – WtERT Brasil, ABREN The role of the ABREN and WtERT- Brasil association in advancing sustainable waste management in Brazil		
	Thanos Bourtsalas – WtERT USA, Columbia University An Overview of Earth Engineering Center-Columbia (EEC-CU) Recent Activities		
	Yong-Chil Seo – WtERT Korea, Yonsei University History of WTE Technologies and Recent Issues in Korea		
11:00 - 11:15	Break		



11:15 - 12:20	Werner Bauer – WtERT-Germany Reassessment of Waste Incineration Plants in Public Communication in the EU		
	Anna Kurbatova – WtERT Russia, RUDN University Energy Management of Municipal Solid Waste in the Context of Low Carbon Development (Case Study Russia)		
	Gregors Lisak – WtERT Singapore, Nanyang Technological University Beyond Conventional Waste-to-Energy: The Promise of High-Temperature Slagging Gasification		
	Mohamed Abdallah – WtERT Emirates, Sharjah University Strategic Assessment and Optimization of Waste to Energy Projects		
12:20 - 13:30	Lunch		
13:30 – 15:10	Arun Sawant – WtERT India Opportunities for Waste Management Business in India		
	Daniel Sindicic – WtERT Brasil, LARA Group Case: project of Maua Waste-to-Energy combining biogas		
	Hani Abu Qdais – WtERT Jordan, JUST University Potential of Waste to Energy in Jordan: Current and Future Prospects		
	Tamer Ismail – WtERT Egypt, Canal Suez University, EgyptHydrothermal treatment for waste Ionization gasification reactor		
	Saida Tayibi – WtERT Morocco, UM6P Waste To Energy: Challenges, Opportunities and Research		
15:10 - 15:30	Break		
15:30 - 16:50	Ella Stengler – CEWEP (The Confederation of European Waste-to-Energy Plants) WtE in Europe: New trends in climate policies		
	Stefano Consonni – WtERT Italia, Politecnico di Milano The MatER Study Center: activities and recent projects		
	Samet Öztürk – WtERT Türkiye, Bursa Technical University Current state and future projections of Waste-to-Energy in Türkiye		
	Chinnathan Areeprasert – WtERT Thailand, Kasetsart University Overview of waste management and current status of waste to energy project implementation in Thailand		
	Masaki Takaoka – WtERT Japan, Kyoto University Initiatives to achieve carbon neutrality in the waste management sector in Japan		
17:30 - 18:30	Dinner		



Wednesday, November 08, 2023

9:00 - 12:30	DAY 3 – Educational Site Tour & Closing Ceremony of 7th International Training Workshop of Waste to Energy		
9:30 - 10:30	Board Tour Busses	Tour 1 – Jiufeng Waste-to-Energy Plant	
1 1 : 0 0 - 1 2 : 0 0		Tour 2 – Qingshanhu Energy Research Center	
13:00 - 14:00	Box lunch at the Yuanzheng Lingfeng Hotel		
15:00 - 19:30	Closing Ceremony of the 7th International Training Workshop of Waste to Energy 5th International Symposium on Energy Utilization of Municipal Solid Waste for a Sustainable Development of City		
20:00 - 21:00	Dinner		

Jiufeng Waste-to-Energy Plant

Hangzhou Jiufeng Waste-to-Energy plant is a livelihood project to treat the rapid growth of waste in Hangzhou, to realize the harmlessness, reduction and resource utilization of waste. The daily treatment of waste is 3000t with 4 sets of 750 t/d mechanical grate furnaces and 2 sets of 45MW condensing steam turbines. The flue gas treatment technology adopts "SNCR + Semi-dry Deacidification + Dry Deacidification + Activated Carbon Adsorption + Bag Filter+ SCR (selective catalytic reduction denitrification) + Wet Deacidification +GGH (Gas-Gas Heater,)". The plant can not only greatly reduce the landfill of waste in Hangzhou, increasing the service life of the landfill, but also turns waste into power.



Qingshanhu Energy Research Center

The Qingshanhu Energy Research Center is a wholly-owned institution of Zhejiang University jointly established by Zhejiang University and Zhejiang Qingshanhu Science and Technology City. The center was officially put into use in June 2018, and ever since it has built a number of national-level scientific and technological innovation platforms such as the National Engineering Research Center of Solid Waste Energy Clean Utilization Technology and Equipment, the National Collaborative Innovation Center of Coal Graded Transformation and Clean Power Generation, and the State Key Laboratory of Clean Energy Utilization, as well as a number of industry-university-research platforms.

