



MATERIALS & ENERGY RECOVERY DIVISION

NEWSLETTER, JUNE 2022

WTERT-2022 Call for abstracts:

The call for abstracts is now open through **June 15th, 2022**. The conference is expected to include speakers from around the world collectively representing the global perspective on best waste management practices. The abstract submission will be screened for suitability for presentation by the scientific committee and the conference coordinators. Please indicate your preference of poster or oral presentation at the time of submission of your abstracts.

We welcome researchers, engineers, students, academicians, and people from all segments of the sustainable waste management hierarchy to attend the conference and share the experiences and lessons with other enthusiasts and develop opportunities for cooperation. **The conference dates are October 13-14th 2022.**

Editor's pick:

Presentation of Dr. Douglas Wicks, Program Director at the Advanced Research Projects Agency-Energy (ARPA-E), on 'Monetizing Innovative Disposal Applications and Solutions (MIDAS)'.

Link [here](#)

How Amazon, American Airlines and Subaru Burn Waste to Make Energy

Burning waste to make energy is a \$10 billion industry in the U.S., and the fastest growing part of the business is waste from big companies like Amazon, Subaru, Quest Diagnostics and American Airlines. They're part of a growing corporate movement toward "zero landfill" as pressure mounts to reach sustainability requirements. CNBC got an inside look at a waste-to-energy plant where trash is incinerated to power 18,000 homes in northern California. Link [here](#)

Interesting items:

Waste-to-Energy in a Circular Economy: Friend or Foe?

Leaving a linear economy behind in favour of a circular one is the motto of the moment. But how and where does waste-to-energy fit in this system? Link [here](#)

The Power of Recycling Plastic

To help reduce the amount of plastic pollution, the United Nations Environment Programme looks to invest in new methods of reusing and recycling plastics. Link [here](#)

Waste management companies warn against incorrect disposal of batteries

Batteries should only be disposed of separately in the collection boxes provided, either in shops or at the rubbish tip, the Association of Austrian Waste Management Companies warn. If they end up in the residual waste, this is a fire hazard. Only at Easter, two major fires in waste and recycling companies were in the media coverage. Link [here](#)

German scientists make big step to recycle silicon solar cells

Currently, the aluminum, glass and copper of discarded photovoltaic modules are reprocessed, however, the silicon solar cells are not. German researchers have developed a solution, in which the silicon in the discarded modules was recycled on an industrial scale and reused to produce PERC solar cells. Link [here](#)

New solutions for EV battery recycling are urgently needed

Batteries are relevant in so many areas of our lives and their number is ever growing. Alas, they still present a challenge for recyclers. Especially e-car batteries. Link [here](#)

Turning Plastic Waste into Carbon-Capture Master That Can Soak Up Excess Carbon Dioxide

Rice University lab turns hard-to-process trash into carbon-capture master. Heating plastic waste in the presence of potassium acetate produced particles with nanometer-scale pores that trap carbon dioxide molecules. These particles can be used to remove CO₂ from flue gas streams. Link [here](#)

Amazon Joins NREL-Led BOTTLE Consortium to Help Change the Way We Recycle

Short for “Bio-Optimized Technologies to keep Thermoplastics out of Landfills and the Environment,” BOTTLE is a U.S. Department of Energy (DOE)-funded consortium that brings together an interdisciplinary team of experts from 10 partner institutions to meet the critical need for new technology on plastics recycling and upcycling. The main areas are: i) Development of chemical upcycling strategies for today's plastics, and ii) Redesign of tomorrow's plastics to be recyclable by design. Link [here](#)

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