

RIPOK's Council Conference "Current situation and trends in waste management" 31.05.2022

Ksawery Kuligowski, The Szwalski Institute of Fluid-Flow Machinery Polish Academy of Sciences (IMP PAN)

The event took place on May 31, 2022 in Tłokinia Kościelna near Kalisz and was organized by the Employers' Union of the Council of Regional Waste Processing Installations (RIPOK) in Kalisz. It gathered over half of the people (63 participants) representing all RIPOKs in Poland. At the meeting, apart from new directions in waste management, also legal and administrative issues as well as conclusions and experiences from the conducted public consultations, within the scope of approval of investments in the field of waste management, were discussed.

IMP PAN presented the results on the technological treatment of source-segregated kitchen waste, leachate from composting plants, leachate from quarters, including the use of effective microorganisms (EM) in methane fermentation and biogas production, as well as methods of producing fertilizers from raw organic and fermented waste.



The results of the influence of EMs on methane fermentation and the comparison of the effectiveness of fertilizers from kitchen waste between the winter and summer seasons as well as economic and social issues were presented. Subsequent methods and technologies of plastic waste management were discussed, showing implementations and examples at different levels of technological readiness. A POSTER with key results of the WASTEMAN project was also presented, and samples of processed kitchen waste (pickled, heat sterilized, 1x and 2x EM inoculated, fermented) were demonstrated.



The presentation raised many questions, especially in the context of using the acquired knowledge in the production of fertilizers from more polluted fractions, i.e. from the recycled organic fraction of municipal waste, which, due to mixing with other waste, may contain heavy metals and microplastics. Therefore, in the first step, one should focus on increasing separate collection and improving the quality of separate collection. In the second step, the production of fertilizers from the recycled organic fraction of municipal waste can be considered, but it will be more problematic.

Annexes:

1. Agenda of the meeting
2. Meeting invitation
3. Presentation of IMP PAN