KEYNOTE

MONTHLY

LECTURES

Food for Brain

EVERY MONTH…

ONE HOUR LECTURE…

ONE SPECIALIST…

ONE HOT TOPIC…

More information is available at

- IWWG website www.iwwg.eu
- IWWG Secretariat info@iwwg.eu

Lecture #11

December 2022

Wednesday 21st

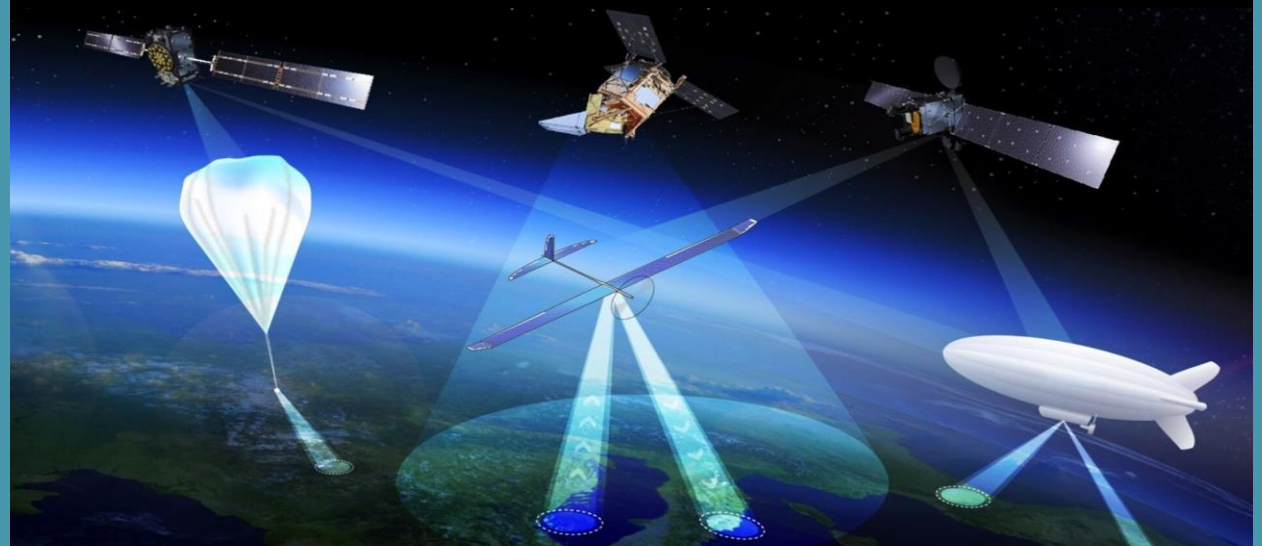
13:00 CET

REMOTE LANDFILL MONITORING WITH DRONE AND SATELLITE TECHNOLOGIES

Satellite technologies and unmanned aerial vehicles (UAV) have become common instruments for obtaining important analytical data in many fields. Although the use of remote sensing technologies at waste disposal sites (WDS) has a more than ten-year history, the active application of these technologies has increased in the last 3-4 years. Nowadays satellite data and UAV are widely used in waste management, particularly for collecting data on solid waste landfills.

Technologies for collecting and processing remote sensing air data (UAV, sensors for aerial imagery, software for photogrammetric processing of aerial imagery data, geographic information systems) makes it possible to identify and assess many environmental effects of landfills and dumps and to monitor compliance with the standards for the landfills operation. There are several main directions for the satellite technologies and UAV use in the field of waste management: recognition of waste disposal sites on the ground; analysis of the spatial properties of landfills; waste disposal sites inspection to assess its technological and environmental safety; gas and thermal monitoring.

This lecture shows the experience of using unmanned aerial vehicles in the management of municipal solid waste landfills and dumpsites – both from the point of view of current practice and from that of the opportunities and prospects offered by drone technologies





Prof. Natalia Sliusar

Perm National Research Polytechnic University
Russia

Natalia Sliusar, Professor at Perm National Research Polytechnic University, has experience in teaching and research in municipal, industrial and hazardous waste management, project management and environmental risk assessment.

She works with enterprises, local authorities and public administrations. She specializes in development of waste management concepts, environmental engineering design and consulting in environmental issues.

She is the leader of IWWG Regional Branch for Russia and New Independent States (IWWG-RUNISRB).