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RECYCLING • PLASTIC WASTE • BIO-WASTE • ECONOMY

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LECTURER

Viktoria Mannheim, PhD

Senior research fellow

Zoltán Siménfalvi, PhD

Associate professor

University of Miskolc
Miskolc-Egyetemváros
Hungary



PRESENTATION

[Life Cycle Assessment for waste management processes](#)

[Uplatnenie LCA \(Life Cycle Assessment\)
v procesoch odpadového hospodárstva](#)

KEYWORDS

Thermic treatment processes, Life Cycle Assessment, Enviro-management, Software GaBi

ANNOTATION

Nowadays, the questions about the environmental protection enlighten the demand of the innovative environmental protection in the industry. This research topic needs to be developed because the number of researches about the environmental protection and the environmental management in the industry is not significant. According to the integrated waste management, our primary aims are the prevention of waste generation and the decrease of danger of waste. The environmental and the economic methods play an important role in this research. The application of LCA method is an important method between the waste management technologies. Nowadays these are the best innovative methods on the area of environmental management and Life Cycle Assessment. The economic and environmental efficiency was determined in a new economic and environmental multi-component matrix. This paper summarises utilisation processes with a comparison between the different technologies, stressing factors affecting their applicability and operational suitability. According to LCA-s it can be possible to determine a priority order between each waste processing method. This research simultaneously covers the area of the environmental protection, waste management, and environmental management. One has to realize the lack of national and international literatures for these areas, and this is especially true for their interconnected areas.

LECTURER'S PROFILE

Dr. Viktoria Mannheim

researcher is investigated since 20 years in the context of several research projects at the University of Miskolc. She has good knowledge and an independent research career in waste management, enviro-management and environmental protection. She trains bachelor, master students and PhD students of the University of Miskolc in this specialization and will achieve knowledge in chemical and technical topics. She is training in project management, presentation and other skills with overview of the waste treatment and disposal. The researcher has been a member of different research teams in hungarian and national projects. Dr. Mannheim is one of the researchers with a leading knowledge on environment-friendly technologies in the chemical industry.

Dr. Zoltán Siménfalvi

was born in 1971. Graduated from the Faculty of Mechanical Engineering of the University of Miskolc, Specialisation of Chemical Industrial Engineering in 1995. Between 1995-1998 he was a PhD student and later a university lecturer. In 2000 he defended his PhD thesis on the Theoretical and Experimental Examination of a Spring-loaded Safety Valve. In 2001 he earned a PhD degree in summa cum laude. Since 2001 he has been assistant professor, since 2003 he is a associate professor, since 2007 he has been head of department, since 2013 he is head of institute, and since 2017 he has been dean of the faculty. He is a member of several professional organizations, he has several scientific and professional awards, holders of scholarships. Specialization: design of safety engineering, dust and gas explosion, design of pressure vessels.

ORGANIZATION'S PROFILE

Our University is the largest higher education institution of the region of Northern Hungary and a scientific centre of decisive significance both at regional and national levels.

The activities of universities, embodied in preserving, enhancing and imparting knowledge, have been today supplemented by the obligations of providing flexible responses to the demands of the economy and direct participation in developing the economy. The students studying in the Bologna-type programmes become participants in an up-to-date system of education aimed at meeting the demands of the labour market.

The University of Miskolc is an advanced university in Hungary with modern measuring instruments and systems for research. The researchers, Dr. Mannheim and Dr. Siménfalvi largely can contribute to the knowledge of University of Miskolc. Miskolc can also appear from Hungary and can have new competences, home and international co-operations in scientific areas, for example long-term co-operations with other institutes und industry partners.

Curiosity:

The predecessor of the University of Miskolc was the school of mining and metallurgy (Bergschule) established by Charles III in Selmecebánya in 1735, which was the world's first higher education institution giving instruction in these fields (in Freiberg, courses were launched in 1765, in Berlin in 1770, and in St Petersburg in 1773). In 1762, Maria Theresia gave the school academy status (Bergakademie).

KLÚČOVÉ SLOVÁ

procesy tepelného spracovania odpadu, Life Cycle Assessment (Posúdenie životného cyklu), Enviro-management, Software GaBi