



Circular economy for biodiversity Unlocking the green potential

*Skills for sustainable,
resilient, and socially
fair communities*

**EUROPEAN
YEAR OF
SKILLS**

Date

June

5



Łukasiewicz
Institute of Heavy
Organic Synthesis
BLACHOWNIA

Justyna Błaszkwicz

Specialist of **Analytics Research Group**

3-11 June 2023

#EUGreenWeek
PARTNER EVENT

Łukasiewicz Research Network – Institute of Heavy Organic Synthesis "Blachownia"

(PIC: 892054778) is a Polish **R&D institute** working within the sector of organic chemistry and chemical technology.



Poland
Kędzierzyn-Koźle

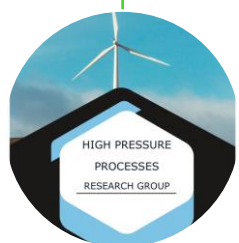




Łukasiewicz
Institute of Heavy
Organic Synthesis
BLACHOWNIA

Łukasiewicz Research Network –

Institute of Heavy Organic Synthesis "Blachownia"



**High-Pressure
Processes
Research Group**



**Bioeconomy
Research
Group**



**Analytics
Research
Group**



**Catalytic
Processes
Research Group**



**Advanced
Materials
Research Group**




**Specialty
Chemistry
Research Group**

About us

Analytics Research Group provides comprehensive research analytics in the field of:

- gas chromatography (GC, GC/Headspace) with TCD, FID, MS, MS/MS detection,
- liquid chromatography (HPLC) with UV detection, RI, ELSD, Corona, MS/MS with ion trap,
- gel chromatography (GPC) with UV detection, RI;
- UV/VIS spectroscopy, infrared spectroscopy with Fourier transformation (FTIR),
- thermal analysis (TG-DTA, DSC),
- mass spectrometry MALDI-TOF/TOF, TOC carbon analyzer,
- CNSCI elemental analyze.

We provide research for registration and licensing processes in accordance with OECD, EU, EPA, ISO, FAO, and CIPAC guidelines under the GLP system. We have extensive experience in registration studies of active substances, plant protection products, biocides, and chemicals under REACH. Our strength also lies in the determination of contaminants, impurities, residues, and by-products.



ANALYTICS
RESEARCH GROUP

Innovative methods for safety and sustainability assessments of chemicals and materials



We are able to develop and validate specific and advanced analytical methods for the determination of active substances in various matrices and perform ILV studies (Independent Laboratory Validation). Our specific interests include persistent organic pollutants (POPs) of anthropogenic sources, i.e., pesticides, per- and polyfluoroalkyl substances (PFASs), and substances of very high concern (SVHC).

We have full analytical capabilities for the determination of the main substances, as well as for the analysis of the ecological footprint by studying the resulting metabolites to assess the safety and sustainability of chemicals and materials.



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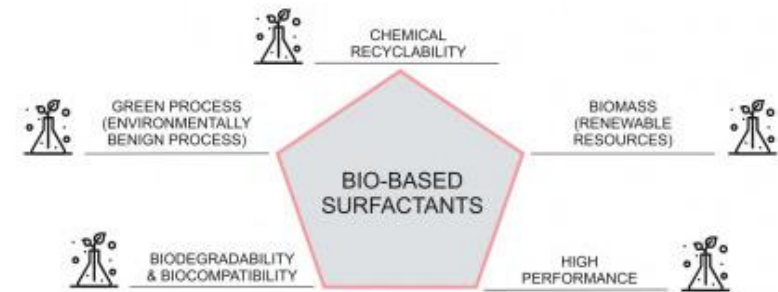
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Safe and sustainable by design biobased platform chemicals, additives, materials or products as alternatives

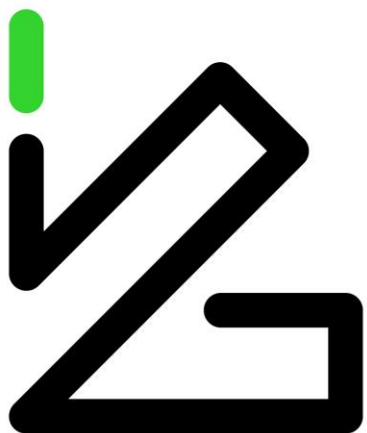
We perform the following R&D works within the topic:

- formulation of cosmetics and detergents,
- manufacturing technology and new forms of cosmetics and detergents,
- quality evaluation of cosmetics and detergents,
- raw materials for the manufacture of cosmetics and detergents,
- isolation from biomaterials and determining the effect of new bioactive substances for use in cosmetics,
- physico-chemical properties of surfactant solutions, and properties of dispersed systems (emulsions, suspensions, foams, etc.).



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Thank you for your attention

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