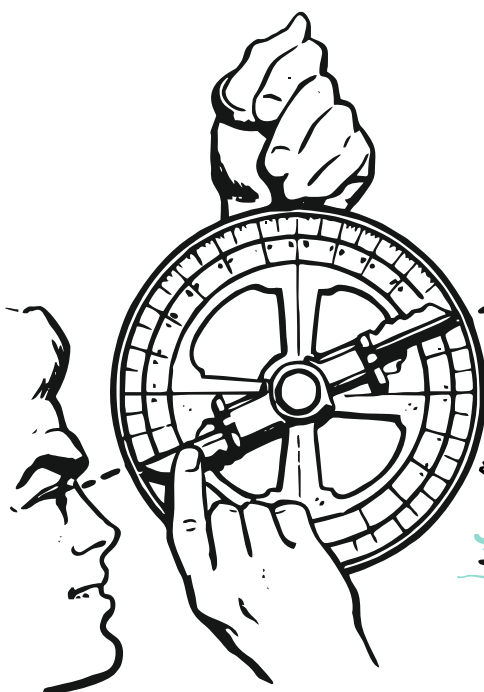




Łukasiewicz
Institute of Heavy
Organic Synthesis
BLACHOWNIA



HORIZON
europe

TOPIC ID:
HORIZON-JU-CBE-2025-IA-02

SSbD bio-based solutions to replace hazardous conventional
chemicals for textiles production

Flame retardants for textiles

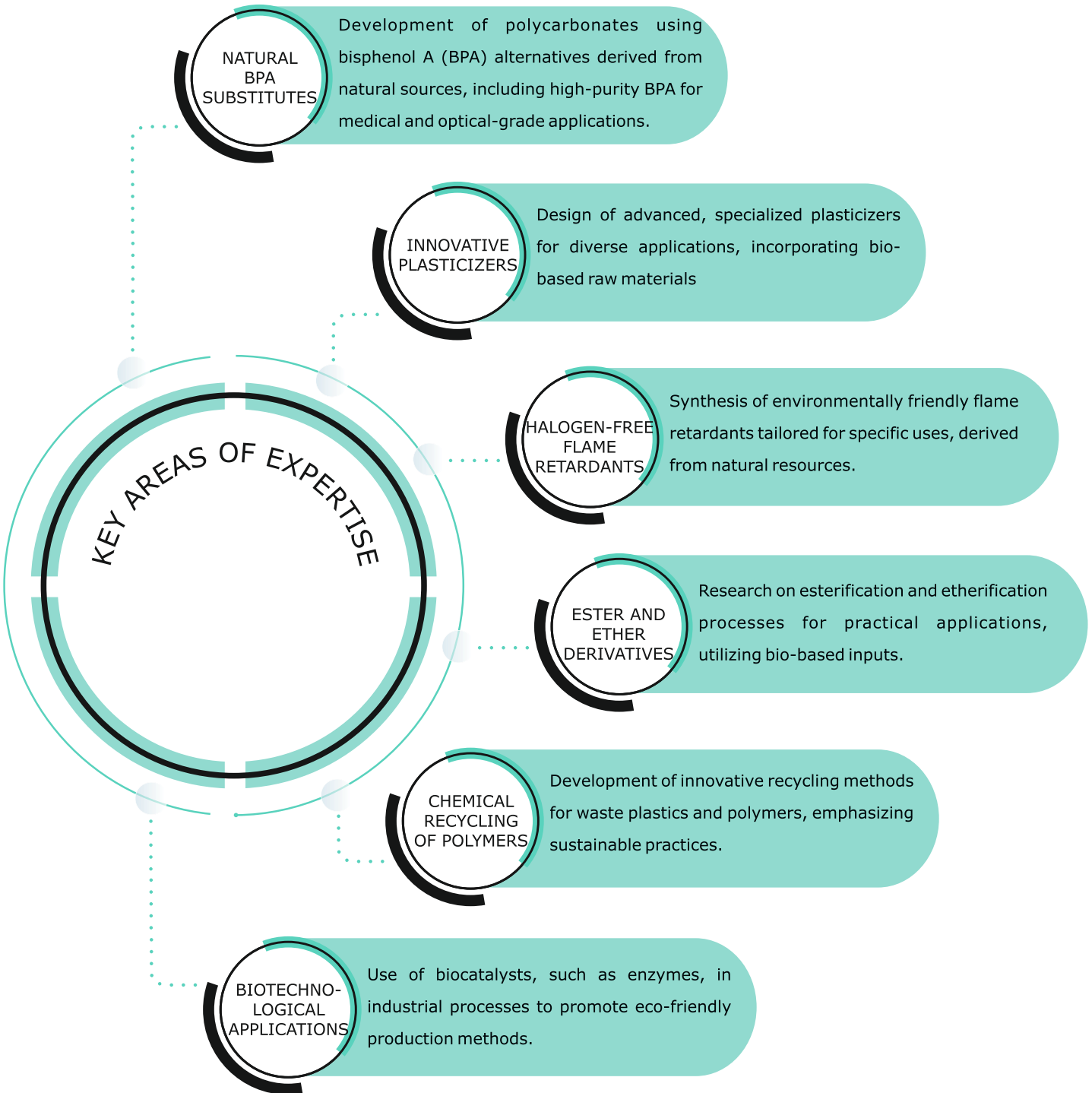
Type of project: IA

Call opening date: 4 April 2025

Call deadline: 17 September 2025

ABOUT US

The Catalytic Processes Research Group from Łukasiewicz - ICSO "Blachownia" specializes particularly in technologies utilizing natural raw materials.



OUR IDEA

In alignment with the scope of the call, we propose an innovative solution for the development of non-toxic, high-performance, halogen-free flame retardants tailored for various applications in the textile industry. These include protective clothing, curtains, functional textiles, upholstered furniture fabrics, and automotive interiors.

What We Offer:

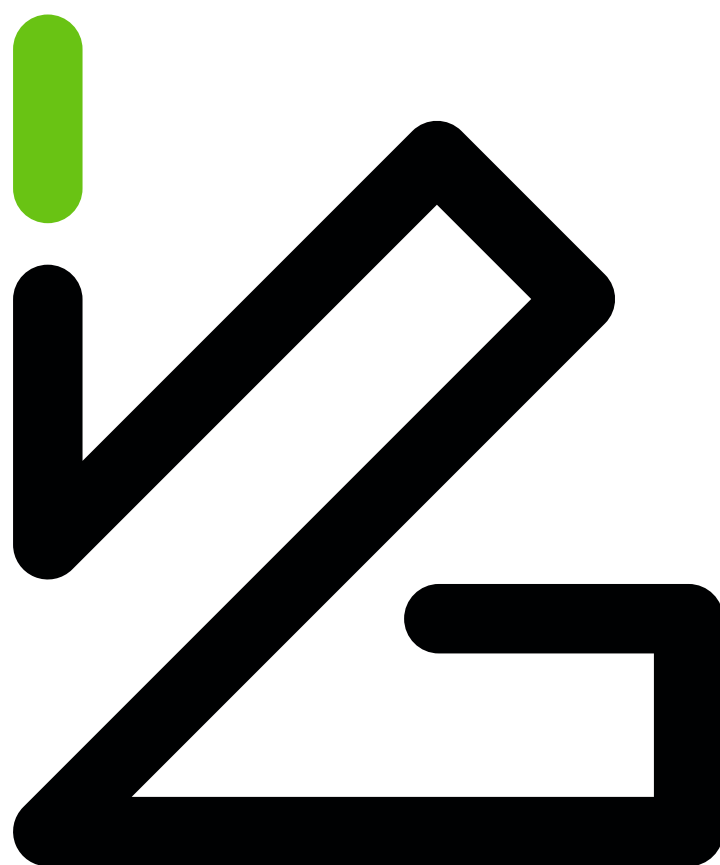
- Custom Flame Retardant Synthesis Development of flame retardants specifically adapted to different textile types, ensuring optimal performance.
- Laboratory and Scale-Up Expertise: Expertise in both laboratory-scale synthesis and scaling up production to meet industrial requirements.
- Application Testing: Comprehensive testing of flame retardant application on textiles, ensuring compatibility with manufacturing processes.
- Efficacy Validation: Advanced analytical testing to confirm the flame-retardant properties and compliance with safety and performance standards.

Our team is eager to collaborate with a consortium to drive innovation, sustainability, and safety in the textile sector. By combining our expertise with the collective strength of the consortium, we aim to deliver transformative solutions that meet the technical and environmental challenges of today's textile industry.

We propose cooperation in the synthesis and use of new P functionalized lignin derivatives as biodegradable functional flame retardant biocomponents. The advantage of the new biocomponents will be excellent biodegradation and improved compatibility with other components (e.g. polymer matrices).

Let's work together for innovation, sustainability, and safety in the textile industry!





Łukasiewicz

Institute of Heavy
Organic Synthesis
BLACHOWNIA



Katarzyna Zielińska, PhD - Catalytic Processes Research Group



Energetyków 9, 47-225 Kędzierzyn-Koźle, Poland



+ 48 665 661 145



katarzyna.zielinska@icso.lukasiewicz.gov.pl