FIT-4-NMP

Strategic and targeted support
to incentivise talented newcomers
to NMP projects under Horizon Europe

HIGH-PERFORMANCE and SUSTAINABLE COMPOSITES INNOVATION WORKSHOP
TU DRESDEN 13-14.10.2022

Łukasiewicz Research Network –
Institute of Heavy Organic Synthesis ”Blachownia”
Weronika Janik
Poland

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 958255

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Łukasiewicz ICSO BLACHOWNIA

Catalytic Processes

Advanced Materials

High Pressure Processes

6 RESEARCH GROUPS

Bioeconomy

Analytics

Specialty Chemistry

- circular economy
- pressure and catalytic processes
- new, advanced materials and specialized products for various applications
- analytics and measurements
- engineering and technical area

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HORIZON-CL4-2023-TWIN-TRANSITION-01-31:

ENERGY EFFICIENCY BREAKTHROUGHS IN THE PROCESS INDUSTRIES (PROCESSES4PLANET PARTNERSHIP) (RIA)

Ideas for contribution and competences

- **Alternative routes to fossil-based raw materials**
- **Process simulation**
- **Bisphenol A production technologies**
- **Chemical recycling and reprocessing of materials**
- **Development and construction of lab and pilot-scale chemical processing units**
- **PPS – a polymer with superior mechanical properties and high thermal stability**

Motivation to apply:

- **Facing global challenges**
- **Developing within the European Research Area**

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HORIZON-CL4-2024-RESILIENCE-01-24:
DEVELOPMENT OF SAFE AND SUSTAINABLE BY DESIGN ALTERNATIVES (IA)

Ideas for contribution and competences

- Polysaccharide and bio-wax barrier coatings for packaging and fertilizers
- Plant oil-based modifiers for polymers and biopolymers
- Innovative granulate based on chitosan with the addition of biomodifiers
- Bio-based non-isocyanate polyurethanes
- Chemical recycling and reprocessing of plastics (PET, PUR,..)
- Bio-based coatings for fertilizers

Motivation to apply:

- Facing global challenges
- Developing within the European Research Area

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HIGH-PERFORMANCE AND SUSTAINABLE COMPOSITES INNOVATION WORKSHOP TU DRESDEN 13-14.10.2022

International Experience and industrial partners that Łukasiewicz-ICSO could bring to the project

DESign of bio-based Thermoset polymer with rEcycLing capabiLity by dynAmic bonds for bio-composite manufacturing

Advanced BIObased polyurethanes and fibres for the autoMOTIVE industry with increased environmental sustainability

ESTELLA

Łukasiewicz ICSO BLACHOWNIA

Horizon 2020 European Union Funding for Research & Innovation

BioMotive

Łukasiewicz ICSO BLACHOWNIA

Bio-based Industries Consortium

eit RawMaterials Connecting matters

Co-funded by the European Union

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Łukasiewicz
ICSO
BLACHOWNIA

HORIZON-CL4-2023-TWIN-TRANSITION-01-31
HORIZON-CL4-2024-RESILIENCE-01-24
RELEVANT EQUIPMENT AND FACILITIES

Polymer processing and testing machines

A pressure reactor with a capacity of 15 liters

Quarter-technical installation of hydrogen processes

BPA process model plant

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HIGH-PERFORMANCE AND SUSTAINABLE COMPOSITES INNOVATION WORKSHOP TU DRESDEN 13-14.10.2022

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