**Scientific Program**

FINAL CONFERENCE OF GREEN-MAP PROJECT on:

# Bio-based and biodegradable polymers for medical packaging and disposables to improve hospitals sustainability

**October 21-22, 2024**
**West Pomeranian University of Technology in Szczecin**
**Al. Piastów 45, Nanotechnology Center, 71-311 Szczecin, Poland**

| | October 21, 2024 (Monday) | October 22, 2024 (Tuesday) |
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| 8:30 | Registration | |
| 9.00-9.15 | Welcome addresses: Miroslawa El Fray, Project Coordinator<br>V-ce Rector (Prof. Fijałkowski)<br>Dean (Prof. Rakoczy)<br>Nathalie Riguelle – Project Officer (on-line) | |
| 9.15 – 10.00 | **PLENARY INVITED**<br>**Environmental impact and reduction of plastics in the operating theatre – through a dental clinical waste audit perspective**<br>**Tamas Demeter** | **Beginning of a session: 9:45** |
| | **Session I (WP1) – "Green" monomers and sustainable polymerization and composites/ blends preparation** | **Session V (WP4) – "Green polymers" processing** |
| 10.00 – 10.30 | Monomers from renewable sources in the synthesis of sustainable polyesters for medical packages<br>**Martyna Sokołowska, ZUT** | Studies on processing and degradation of biopolymeric packaging materials<br>**Kolos Molnar, BME** |
| 10.30 – 11.00 | Biobased additives for polymers with antimicrobial activity<br>**Magdalena Zdanowicz, ZUT** | Thick-walled poly(lactic) acid products: study of the effects of sterilizing UV-C radiation and modelling the long-term creep behaviour<br>**Ábris Dávid Virág, BME** |
| 11:00-11:15 | Coffee break (poster display) | Coffee break (poster display) |
| | **Session II (WP2) – Characterization of polymers and composites/blends** | **Session VI (WP5) – Product characterization and Life Cycle Assessment** |
| 11.15 – 12.00 | Advanced Polymeric Materials: Forensic Analysis and Applications in Europe in Healthcare Industry<br>**Marek Kowalczuk, PAN** | Life Cycle Assessment of bio-based products developed within the GreenMap project<br>**Simone Maranghi, ECOI** |
| 12.00 – 12.30 | Oligopeptide-based molecular labelling of (bio)degradable polymers<br>**Khadar Duale, PAN** | Life Cycle Assessment of polypropylene and paper-based packaging formulations and focus on the PEF methodology (**Francesco Arfelli & Eleonora Rossi, UNIBO** *(on line)* |
| 12.30 – 13.00 | Synthesis and analysis of biodegradable composites based on electrospun polysuccinimide fibers<br>**Kristof Molnar, OSU** | Biodegradable and biomimetic fibrous composites of hierarchical structure<br>**Moein Zarei, CEZAMAT** |
| 13.00 – 14.00 | **Lunch break** (poster display) | **Lunch break** (poster display) |

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| | **Session III (WP3) – "Green products" design** | **Session VI – Future trends in biopolymers for medical industry** |
| 14.00 – 14.45 | Designing biodegradable nanofibrous polymeric meshes for biomedical applications<br>**Maria Letizia Focarete, UNIBO** | **PLENARY INVITED**<br>**Do biopolymer have a future in healthcare?**<br>**Judit Puskas, OSU, USA** *(on line)* |
| 14.45 – 15.15 | Biodegradation of green bioplastics for medical purpose through composting and anaerobic digestion<br>**Joanna Rydz, PAN** | **Panel discussion**<br>**Moderator: Prof. Artur Bartkowiak, ZUT**<br>Future and perspectives of biodegradable plastics in healthcare industry<br>**COMP, ECOI, CARGILL, KB FOLIE, ZUT, BME, PAN** |
| | **Session IV (WP6) – Training** | **Session VII (WP8) – Communication and dissemination** |
| 15.15 – 15.45 | Transfer of knowledge, training and getting experience within GREEN-MAP project (industry-academia)<br>**Maria Letizia Focarete, UNIBO** | Summary of communication and dissemination activities<br>**Agnieszka Piegat, ZUT** |
| 15:45 – 16:00 | **Coffee break** (poster display) | **Coffee break** (poster display) |
| 16:00 – 16:30 | **Poster session + Rapid fire presentations of PhD students (5 min each)**<br>**Szymon Macieja**<br>**Konrad Walkowiak**<br>**Balasz Tatar**<br>**Csenge Thot** | Project management (WP7) and summary<br>**Mirosława El Fray, Magdalena Siwoń, ZUT** |
| 16:30 – 17:00 | Lab tour & Group Photo | |
| 19:00 | **Dinner at Wyszak Browar Rodzinny Restaurant** | |