

TRANSFER SPECIAL

Strategic programs

Sustainable Campus Living Lab/BIOMAT

Page 3–13

Agro-Food-Business

Page 14–18

Health Research Hub

Page 19–23

Digital Transformation

Page 24–27

Integrated Bio-based Materials Value Chains (BIOMAT)



Team BIOMAT

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To the project “**BIOMAT**
(Integrated Bio-based
Materials Value Chains)”

The depletion of oil reserves, climate change, significant negative impacts on the environment, and dependency on politically unstable regions are all drivers for seeking alternatives to fossil-based resources. The bioeconomy encompasses the production of renewable biological resources and the conversion of these resources, residues, by-products and side streams into value-added products, such as food, feed, bio-based

products, services, and bioenergy. It aims to use ‘green’ materials instead of fossil-based materials to generate bio-based products.

Within the program, we aim to bring together all relevant expertise at the School of Life Sciences and Facility Management to support a sustainable technological development along the entire value chain of biomaterials. Our objective was to develop sustainable

biomass with two different approaches (Figure 1). On one hand, we developed technological processes to produce biomass using microalgae; on the other hand, we used agro-food industry side streams to develop bio-based materials. We also developed innovative processing technologies for the bio-based materials and demonstrated proof of concept for selected applications. ■

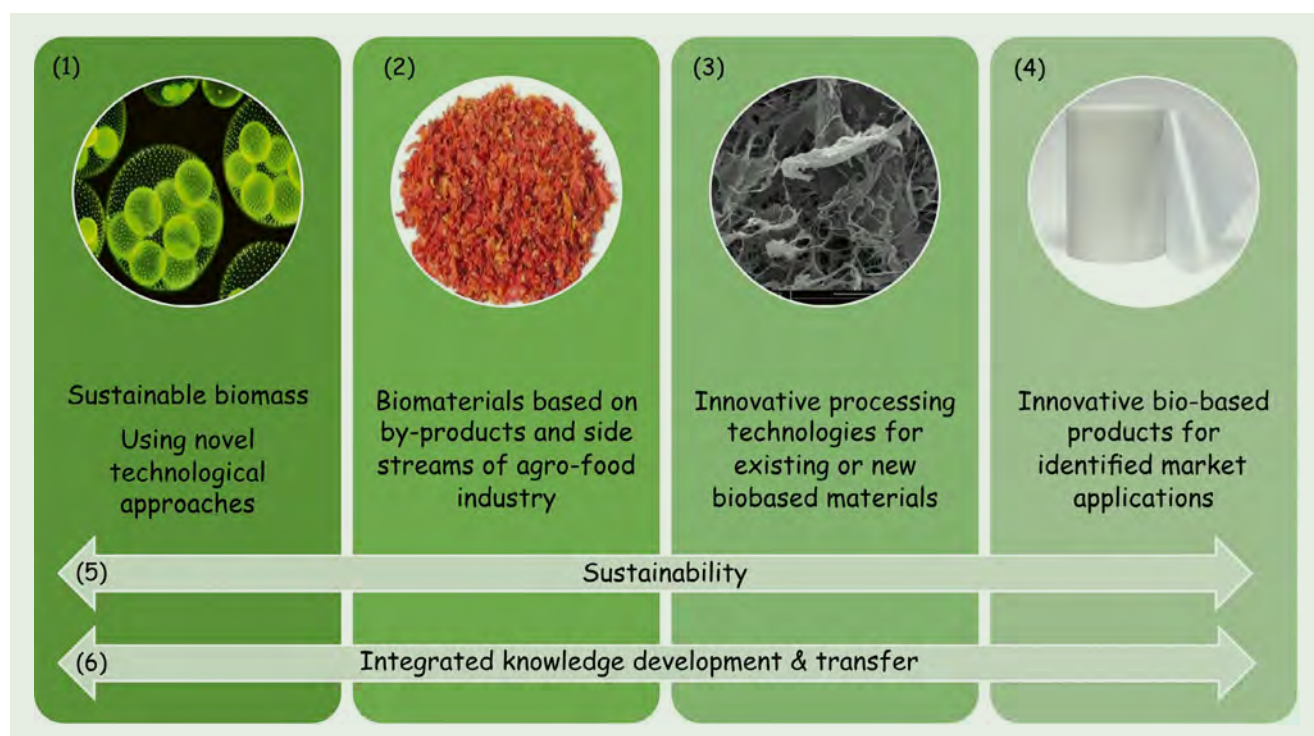


Fig.: Research focus areas of BIOMAT

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