



národní
úložiště
šedé
literatury

BIORAF – Biorefinery Research Centre of Competence

Topka, Pavel
2012

Dostupný z <http://www.nusl.cz/ntk/nusl-126634>

Dílo je chráněno podle autorského zákona č. 121/2000 Sb.

Tento dokument byl stažen z Národního úložiště šedé literatury (NUŠL).

Datum stažení: 10.04.2024

Další dokumenty můžete najít prostřednictvím vyhledávacího rozhraní nusl.cz.

BIORAF – Biorefinery Research Centre of Competence

P. Topka, ¹J. Hajšlová, ¹K. Demnerová, ²V. Cepák, ²M. Vosátka, V. Jiříčný, ³Z. Jandejsek, ⁴J. Kopenec, ⁵M. Šmejkal, ⁶P. Kaštánek, O. Šolcová
Institute of Chemical Process Fundamentals of the ASCR, v.v.i., Rozvojová 135, 165 02
Praha 6, Czech Republic, tel. +420 220390282, e-mail: topka@icpf.cas.cz; ¹Institute of
Chemical Technology Prague, Technická 5, 166 28 Praha 6, Czech Republic; ²Institute of
Botany of the ASCR, v.v.i., Zámek 1, 252 43 Průhonice, Czech Republic; ³Rabbit Trhový
Štěpánov, a.s., Sokolská 302, 257 63 Trhový Štěpánov, Czech Republic; ⁴Agra group, a.s.,
Tovární 9, 387 15 Střelské Hoštice, Czech Republic; ⁵Brikli, s.r.o., 391 75 Malšice 335,
Czech Republic; ⁶EcoFuel Laboratories, s.r.o., Šmilovského 1437/8, Praha 2, Czech Republic

The project employs the techniques of green chemistry for biomass utilization to the high added-value products and energy sources. By refining, it is possible to obtain food supplements, fodders and fertilizers, new-generation biofuels and energy from the biomass of microbial, plant or animal origin. Biorefining is a unique way of new sustainable substitution of fossil fuels minimizing the adverse effect on environment while exploiting the whole volume of biomass.



BIORAF

The project, which started in 2012, creates an interdisciplinary center with high innovation potential for sustainable utilization of renewable sources, and will bring the Czech Republic to the leading position in next-generation biorefinery within next eight years. The project links the private sector with experts from different fields of science (e.g., biosciences, phycology, analytical chemistry, enzymology, microbiology, chemical and biochemical engineering, material engineering, etc.).

Sustainable biomass resources, which will not compete with food crops in the use of agricultural land, will be employed in the project. New environmentally friendly processes for biomass biorefining will be developed in the order to obtain products with high market value and increase the market opportunities of participating companies, which will promote job creation. New technologies will be validated in the demonstration and pilot plant units; the developed products and technological processes will be commercialized.

Within four years, new intellectual property in the field of biorefinery will be created. The transfer of know-how from research to commercial sector will help to increase innovation potential and export opportunities of the participating companies. The project will bring the lend support to the Czech agriculture and industry and attract significant long-term investment opportunities in new technologies with high socio-economic impact.

Educational programs for graduates and young scientists will be developed to create experts in emerging technologies and opportunities for their employment. Finally, the project will contribute to the independence of the Czech Republic on fossil fuels and help to reduce the emissions of greenhouse gases.

Acknowledgement

The financial support from the Technology Agency of the Czech Republic (project TE01020080) is greatly appreciated.