

Obrazac odobrenog znanstvenog projekta:

Naziv projekta Title	HR: Proizvodnja izobutanola iz lignoceluloznih materijala ENGL: Isobutanol production from lignocellulosic materials
Sažetak projekta Summary	ENGL: To meet the social challenge of improving the environment and climate, biofuel and biochemical production is seen as a promising alternative to petrochemical production. Isobutanol is an important chemical that has many applications. It can be used directly as an oxygenated blendstock for gasoline or as an industrial solvent. Isobutanol has an energy density closer to gasoline, it is not hygroscopic, and is less volatile compared with ethanol. Thus it is considered as a gasoline substitute. The main objective of this project is to develop the process of isobutanol production using lignocellulosic biomass as feedstock. The food industry residues of plant origin are mostly lignocellulosic materials, recalcitrant towards degradation, because of the complex lignin structure and its large molecular mass and insolubility. In this project, two different type of materials originated from food industry will be used: grape pomace and barley husk. Therefore, in this project, the knowledge and experience of the Croatian team will be used to obtain the first specific objective: 1) to degrade lignocellulose by the application of technology of solid-state fermentation; while the knowledge and experience of the Chinese team will be used to obtain the second specific objective: 2) to develop the process of isobutanol production using previously biologically treated lignocellulose material.
Voditelj projekta ili koordinatorka s PTF-a Project Manager	HR: Marina Tišma ENGL: Marina Tišma
Suradnici na projektu Project Associates	HR: Ana Bucić-Kojić, Mirela Planinić, Gordana Šelo ENGL: Ana Bucić-Kojić, Mirela Planinić, Gordana Šelo
Izvor financiranja i vrijednost projekta Funding sources	HR: Kinesko-hrvatski bilateralni projekti, 60.000,00 kn ENGL: Chinese-Croatian bilateral projects, 60.000,00 kn
Institucije partneri na projektu Partner Institutions	HR: Shanghai Advanced Research Institute, Chinese Academy of Sciences ENGL: Shanghai Advanced Research Institute, Chinese Academy of Sciences
Razdoblje realizacije projekta Project period	2020. - 2022.
Popis opreme koja će se nabaviti iz sredstava projekta Equipment:	HR:- ENGL: -

Voditelj/koordinatorka projekta