MŰEGYETEM 1782

BMEFIEK

NEMZETI KUTATÁSI, FEJLESZTÉSI ÉS INNOVÁCIÓS HIVATAL

A BME FIEK Horizon Europe-részvételt támogató szolgáltatásai – nemzetközi láthatóság

NKFIH Horizont Európa Konzorciumépítő workshop 2022. november 15.
dr. Schenk Borbála, BME FIEK vezető európai pályázati tanácsadó,
BME Competence Map szerkesztő

Miben lehet szüksége támogatásra a kutatóknak a Horizon Europe programban?

1. **Speciális logikájú pályázatok – nem elég a kiváló tudományos koncepció**
2. **Komplex pályázati felhívások – új stratégia szükséges a nemzetközi láthatósághoz, partnerkereséshez**
3. **Rengeteg információ – kutatók számára a leginkább lényeges kiszűrése**
4. **Évente több száz pályázat – kutatók számára a leginkább alkalmas megtalálása**
5. **Új kutatási trendek magabiztos ismerete (pl. Open Science, adatmenedzsment, co-creation)**

BME FIEK Horizon Europe támogatási portfóliójának elemei

Az ötlettől a pályázat beadásáig

- Megfelelő pályázati forma és felhívás kiválasztása
- Felhívás értelmezése
- **Partnerkeresés, konzorciumépítés**
- Pályázati koncepció kialakítása
- Pályázat minőségbiztosítása, írása

Tájékoztatás

- Honlap + Teams
- **Kutatói konzultációk**
- Kari, tanszéki tájékoztatók, események
- Rendszeres vezetői tájékoztatók
- Meghívások (pl. Doktorandusz Szövetség, EELISA)

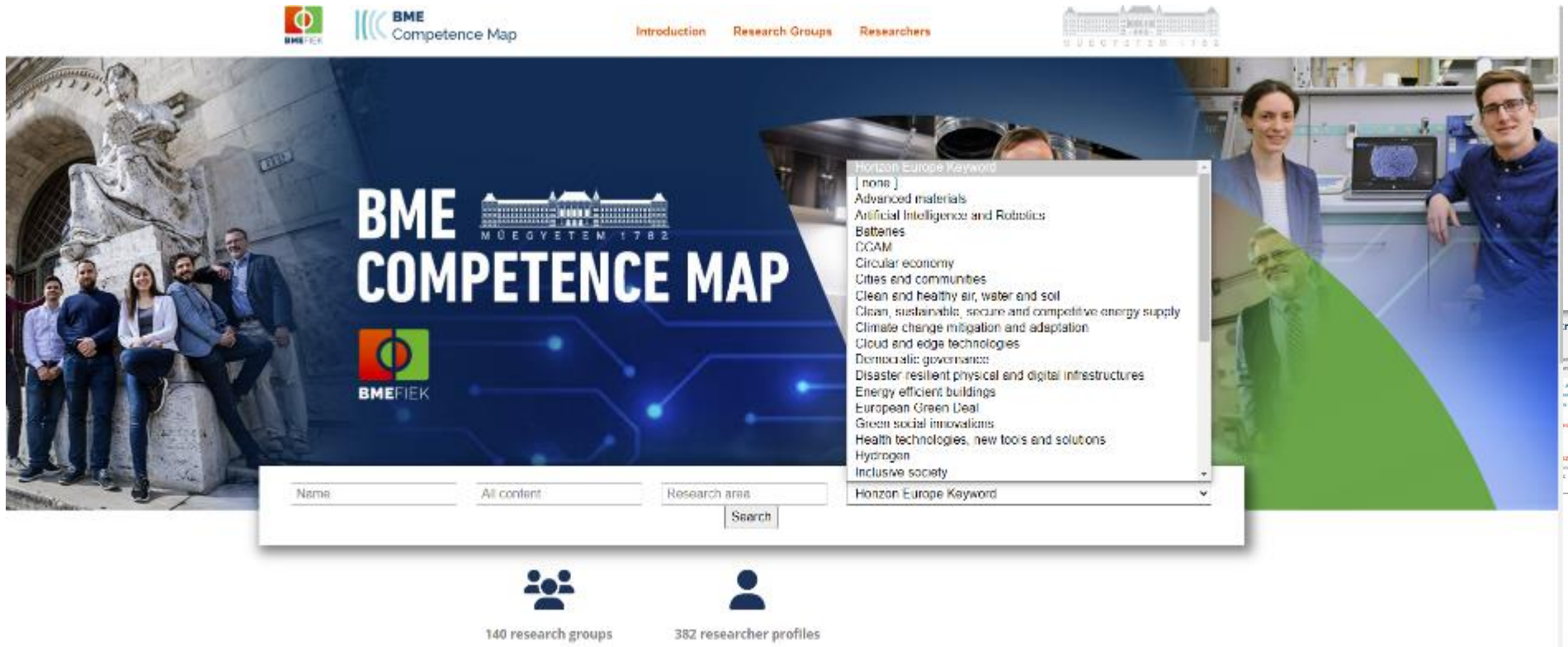
Képzés

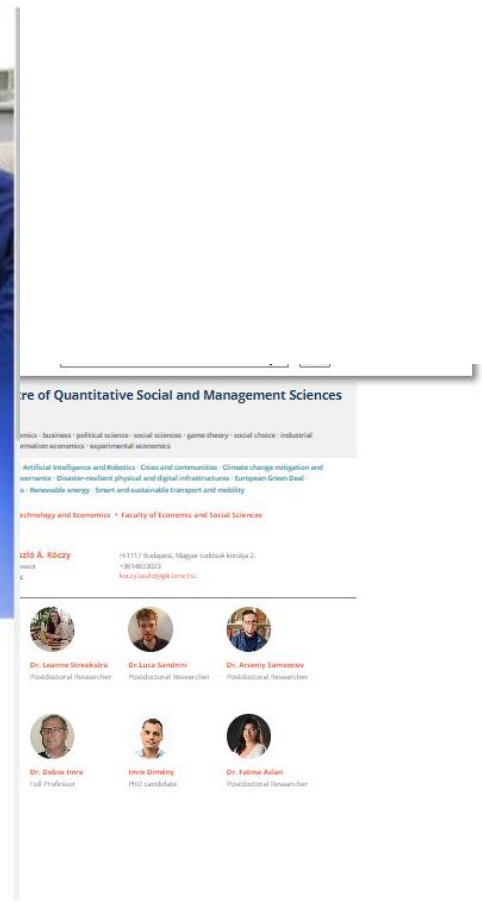
Nemzetközi láthatóság növelése

Szervezet felkészítése HE-követelményekre

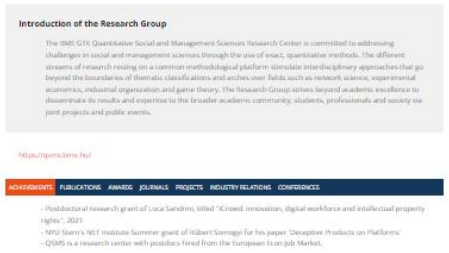
Munkaprogramok alakításában való részvétel támogatása

Kompetenciatérkép Horizon Europe keresőszavakkal





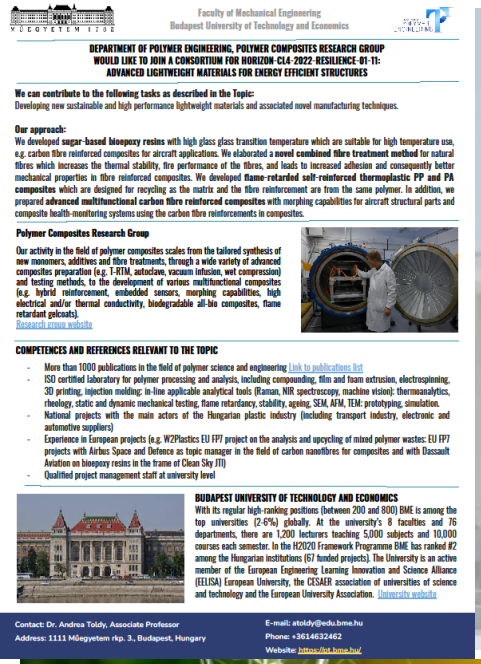
Feltöltjük, fejlesztjük, promotáljuk



http://competence.bme.hu

https://www.youtube.com/playlist?list=PLM2rgmv2VW11Hba_oTUi8cu6SbvcFJTLn

Findable, Accessible and Reusable



Faculty of Mechanical Engineering
Budapest University of Technology and Economics

DEPARTMENT OF POLYMER ENGINEERING, POLYMER COMPOSITES RESEARCH GROUP WOULD LIKE TO JOIN A CONSORTIUM FOR HORIZON-CL4-2022-RESILIENCE-01-11: ADVANCED LIGHTWEIGHT MATERIALS FOR ENERGY EFFICIENT STRUCTURES

We can contribute to the following tasks as described in the Topic:
Developing new sustainable and high performance lightweight materials and associated novel manufacturing techniques.

Our approach:
We developed **sugar-based bioepoxy resins** with high glass glass transition temperature which are suitable for high temperature use, e.g. carbon fibre reinforced composites for aircraft applications. We elaborated a **novel combined fibre treatment method** for natural fibres which increases the thermal stability, fire performance of the fibres, and leads to increased adhesion and consequently better mechanical properties in fibre reinforced composites. We developed **flame-retarded self-reinforced thermoplastic PP and PA composites** which are designed for recycling as the matrix and the fibre reinforcement are from the same polymer. In addition, we prepared **advanced multifunctional carbon fibre reinforced composites** with morphing capabilities for aircraft structural parts and composite health-monitoring systems using the carbon fibre reinforcements in composites.

Polymer Composites Research Group

Our activity in the field of polymer composites scales from the tailored synthesis of new monomers, additives and fibre treatments, through a wide variety of advanced composites preparation (e.g. T-RTM, autoclave, vacuum infusion, wet compression) and testing methods, to the development of various multifunctional composites (e.g. hybrid reinforcement, embedded sensors, morphing capabilities, high electrical and/or thermal conductivity, biodegradable all-bio composites, flame retardant gelcoats).
Research group website

COMPETENCES AND REFERENCES RELEVANT TO THE TOPIC

- More than 1000 publications in the field of polymer science and engineering Link to publications list
- ISO certified laboratory for polymer processing and analysis, including compounding, film and foam extrusion, electrospinning, 3D printing, injection molding: in-line applicable analytical tools (Raman, NIR spectroscopy, machine vision): thermoanalytics, rheology, static and dynamic mechanical testing, flame retardancy, stability, ageing, SEM, AFM, TEM: prototyping, simulation.
- National projects with the main actors of the Hungarian plastic industry (including transport industry, electronic and automotive suppliers)
- Experience in European projects (e.g. W2Plastics EU FP7 project on the analysis and upcycling of mixed polymer wastes: EU FP7 projects with Airbus Space and Defence as topic manager in the field of carbon nanofibres for composites and with Dassault Aviation on bioepoxy resins in the frame of Clean Sky JTI)
- Qualified project management staff at university level

BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS
With its regular high-ranking positions (between 200 and 800) BME is among the top universities (2-6%) globally. At the university's 8 faculties and 76 departments, there are 1,200 lecturers teaching 5,000 subjects and 10,000 courses each semester. In the H2020 Framework Programme BME has ranked #2 among the Hungarian institutions (67 funded projects). The University is an active member of the European Engineering Learning Innovation and Science Alliance (EELISA) European University, the CESAER association of universities of science and technology and the European University Association. University website

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Center For University-Industry Cooperation
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Meet Budapest University of Technology and Economics research groups!

The BME Combustion Research Group has a principal focus on #combustion, especially on #renewable liquid and gaseous #fuels. They also have expertise in solving industrial problems with #thermal modelling and simulations. Their results have a wide range of industry applications from #wind #turbines and #space technology to #medical research.

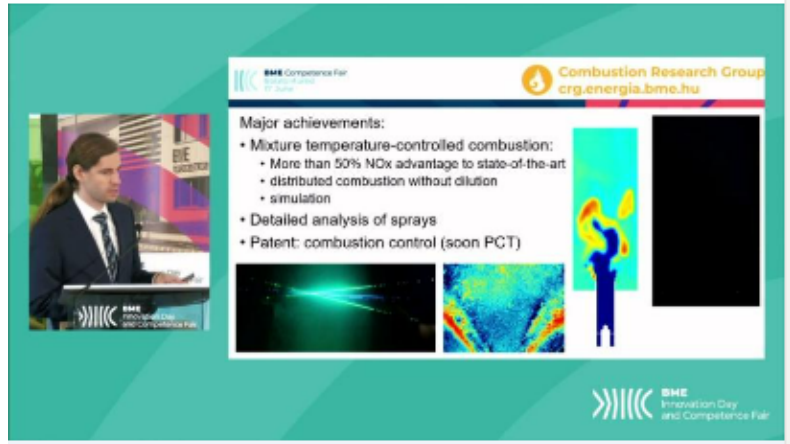
"Our most notable achievement is a mixture temperature controlled combustion with more than 50% NOx emission reduction compared to the state-of-the-art solutions without compromising the concentration of other pollutants." - says the leader of the research group Viktor Józsa

The BME Combustion Research Group is interested in Horizon Europe collaboration, especially in the fields of Clean, sustainable, secure and competitive #energy supply, #climatechange mitigation and adaptation, #hydrogen and #renewableenergy.

For their detailed professional profile:
watch their research pitch video at https://lnkd.in/dHtErQSx
visit their profile page on the BME Competence Map: https://lnkd.in/dsiiNrSA

#BMECompetenceMap #MeetBMEresearchers #horizoneurope #ExpertiseOffer #BMECombustionResearchGroup #matchmaking #engineering #FacultyofMechanicalEngineering

Imre Norbert Orbulov Csaba János Hős



BME Combustion Research Group
youtube.com

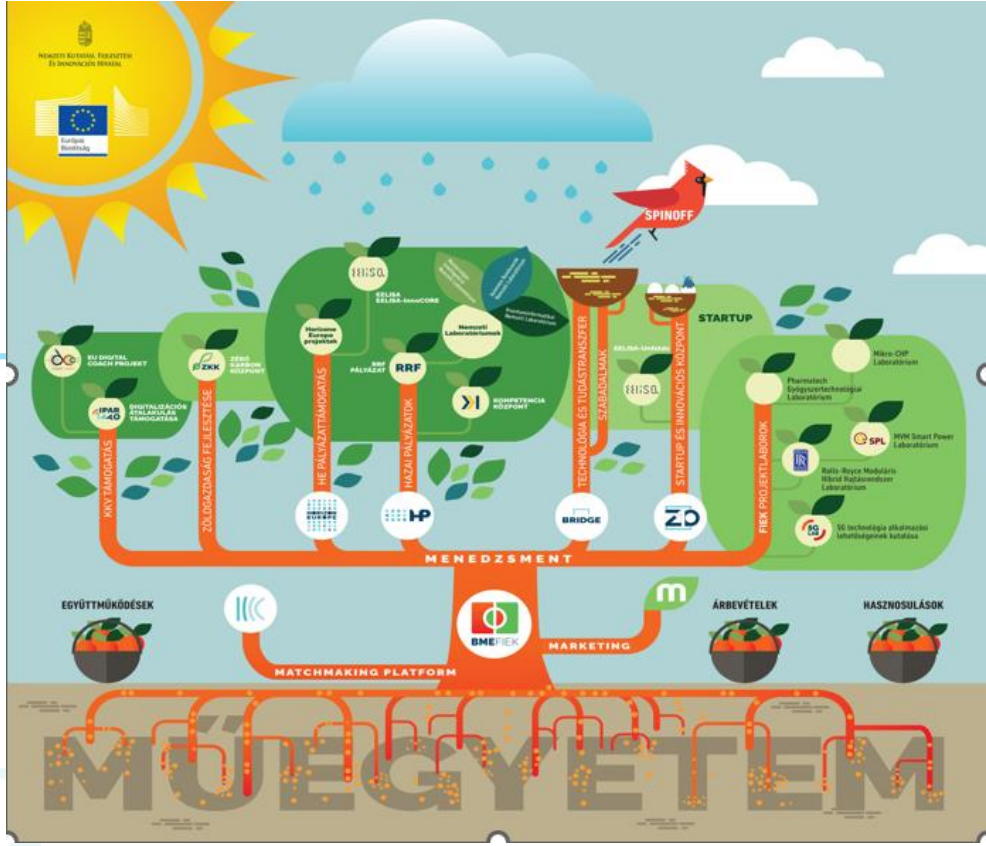
Dorottya Szemere and 13 others 3 shares

BME FIEK Horizon Europe legfontosabb elemek

Csapatmunka, vezetői támogatás,

NKFIH EIÖ pályázat,

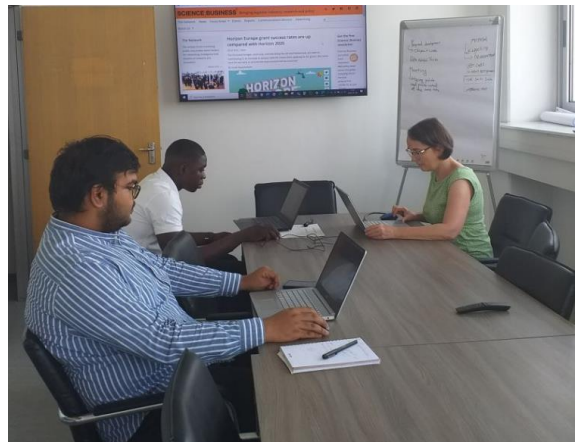
Horizon rásegítő pályázat



Dr. Borbála Schenk
Chief European research Funding Advisor

Anjan Kumar Das
European Research Funding Advisor Trainee

Emmanuel Godwin Bandawa
European Research Funding Advisor Trainee



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Köszönöm a figyelmet!

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AZ NKFI ALAPBÓL MEGVALÓSULÓ PROJEKT

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