

# KET\*

Focus on (\*) Key Enabling Technologies - nanotechnologies, advanced materials, advanced manufacturing and processing

# 360

# INNOVATE TOGETHER

27th June 2019 - Strasbourg - FRANCE

**Project idea/ Field of expertise:**

Nano-enabled bio-based materials  
Nano-pharmaceutical productions

**Organisation Name:**

Selcuk University

**Adressed challenge(s)/ PPP(s):**

**Adressed topic(s) in Work Programme:**

**DT-NMBP-04-2020;**  
**DT-NMBP-06-2020;**  
**NMBP-38-2020**  
**CE-BIOTEC-09-2020:**

# Selcuk University

## Materials technologies, and Biotechnology units

- ❑ R&D
- ❑ Analysis&Testing
- ❑ Collaboration with Industry

- Nanomaterials & Semiconductor Tech.
- Magnetic NPs (synthesis, patterning, functionalization, surface treat),
- CVD systems / Processing techniques (in the films, fibers, fillers, coatings, etc).
- Smart surfaces, interfaces chemistry
- Biopolymers, bio-based materials
- Sensors development (NPs, QDs including biosensors etc)
- Graphene chemistry & applications (materials, optoelectronics, sensors, flexible electronics,)
- Directed self assembly of nanostructures for CMOS technologies



### ✓ Track Recors

- ✓ **H2020-MSCA-RISE-NanoFEED** Nanostructured Carriers for Improved Cattle Feed
- ✓ **FP7-NMP**, Large Area Molecularly Assembled Nanopattern for Devices (LAMAND)
- ✓ **FP7-INFRA-2012**, The European Solar Infrastructure for Concentrated Solar Power (EU-SOLARIS)
- ✓ **FP7-SME-2012**- "Enhanced chitin-based biosorbents for drinking water purification "ChitoClean"
- ✓ **FP7-SME-2013** ""Ingredients for Food and Beverage industry from a lignocellulosic source (LIGNOFOO

# project idea / expertise

**DT-NMBP-04-2020:** Open Innovation Test Beds for nano-enabled bio-based materials (IA)

Nano-enabled bio-based materials' properties, Processing techniques and optimisation of process parameters, Transformation of bio-based building blocks  
New, ecofriendly, nano-enabled bio-based materials relevant to various applications,  
Covering the full scale of new or existing industrial and consumer products

demonstrated in relevant industrial environments

SMEs

**DT-NMBP-06-2020:** Open Innovation Test Beds for nano-pharmaceuticals production (IA)

Nano-pharmaceutical materials production facilities  
Characterisation and quality control of nano-pharmaceuticals  
Developing novel nano-pharmaceuticals

Demonstration of the scalability of the production process

DUAMER

**NMBP-38-2020:** Citizens and industrial technologies (CSA)

Enhance public understanding of cutting-edge technologies and their diverse applications;  
Engage citizens in dialogue and co-creation on priorities, expectations and concerns

Citizen engagement in technologies, usable by industry, procurers (such as cities) and other stakeholders;

KSC

**CE-BIOTEC-09-2020:** Upcycling Bio Plastics of food and drinks packaging (RIA)

Expand the potential of current technologies and materials  
Manufacturing and design of bio-plastics that are recyclable and/or bio-degradable

Upcycling of plastics for food and drinks packaging

SMEs

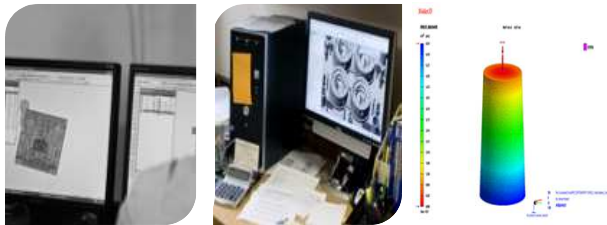
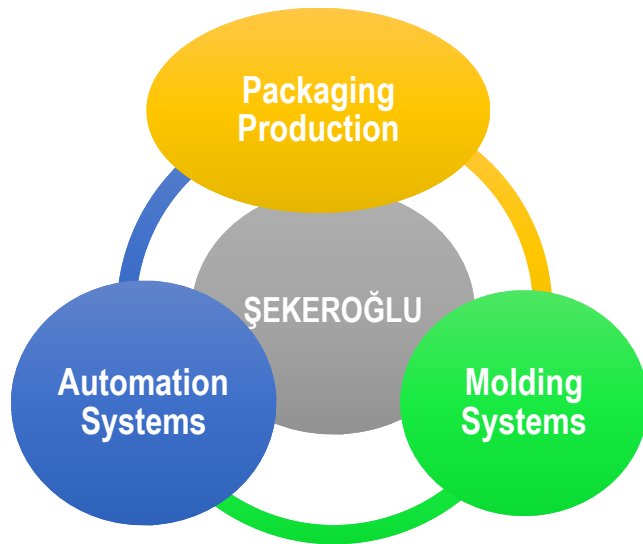
**NMBP-37-2020:** Incentivising newcomers (CSA)

have not been involved in NMBP Horizon 2020 projects so far; the identification should target in particular the best talents from regions so far underrepresented in Horizon 2020 projects

SMEs,

# COLLABORATION INDUSTRY

## ❑ Chemical and Plastic (Bio-Plastic) industry



**DT-NMBP-04-2020**

**CE-BIOTEC-09-2020**

**NMBP-37-2020:**

27/06/2019 - BE KETs-360

## ❑ Konya Science Center (KBM)



**NMBP-38-2020:**

## ❑ BioTechnology/Health

### Natural Products R&D:

Natural Supplements  
Turkey's first **healthy living** brand

Nutritional Supplements  
Vitamin/Minerals  
FDA, EP, GMP Standards



**DT-NMBP-06-2020**

# Consortium (if any)

<u>Known partners / Competence offer</u>			
Name	Type	Country	Role in the project
<u>Partner search</u>			
Profile	Type	Country	Role in the project
R&D Institute/Universities			Technology providers in the fields of:
Large industry			For scale-up/demonstration/joint development in the various sectors
SMEs			Scale up to TRL 7

**Join to consortiums** (or Establish) to **develop proposals** together with **SMEs**.

# Contact details



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