

# 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:**

Automated Production and Testing of Nanoparticle Systems for Diagnostic and Therapeutic Applications

**Organisation Name:**

Translational Center Regenerative Therapies  
TLC-RT  
Fraunhofer Institute for Silicate Research ISC

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

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

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

# Translational Center Regenerative Therapies TLC-RT Fraunhofer ISC

## Fields of activity



**Biomaterials**



**In-vitro test systems**



**Clinical  
development**

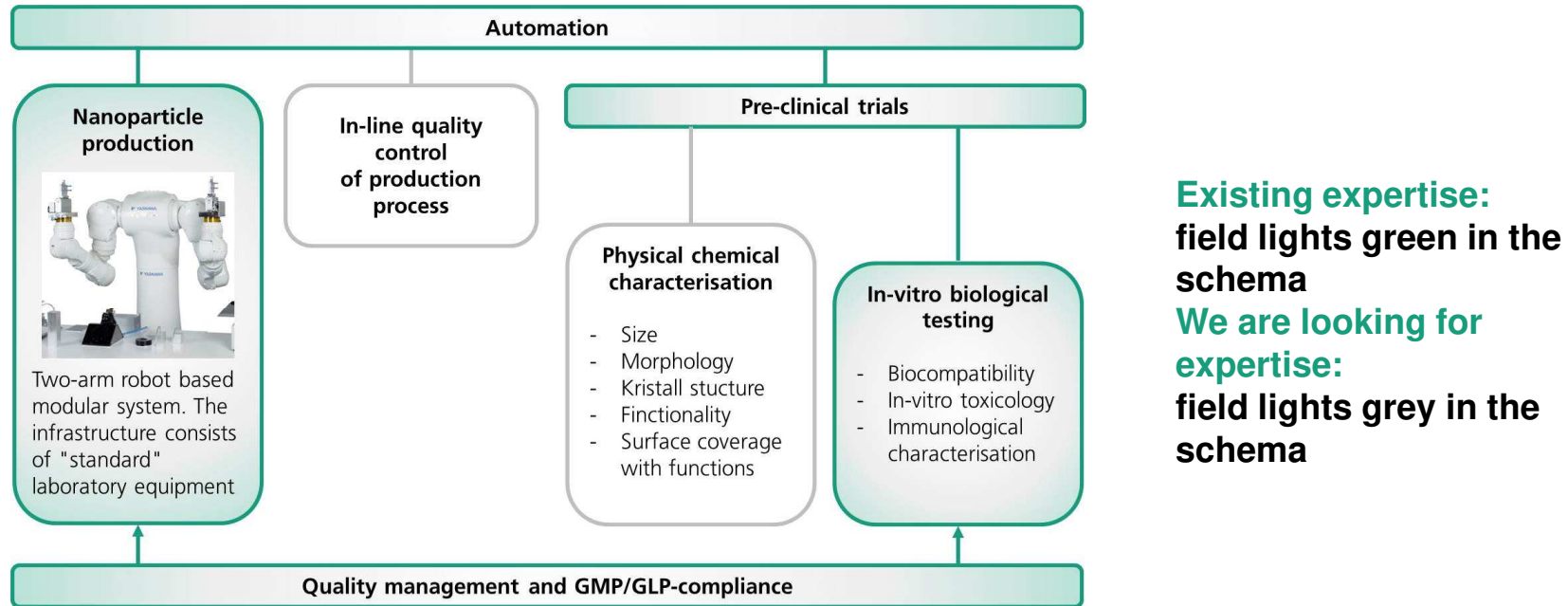


**Lab automation  
and bioreactors**

- Synthesis and characterization of biomaterials e.g. (nano)particles, fibers, biological 3D matrices
- Manufacturing or optimizing bioreactors
- Process automation and upscaling
- 3D in-vitro testing systems (alternative to animal testing)
- Preclinical testing of medical devices and novel advanced therapy medicinal products (ATMPs)

EU projects coordinated by TLC-RT: EU Bioinspire 01/2015 – 09/2017, EU BioChip 11/2015 – 10/2019, EU Vascubone 09/2013 – 03/2015). Participation in several EU-Projects: e.g. IDEA

# Automated Production and Testing of Nanoparticle (NP) Systems for Diagnostic and Therapeutic Applications



**Existing expertise:**  
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**We are looking for expertise:**  
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- Modular plant design
- Precise synthesis steps under GMP-compliant conditions
- Automated production of in-vitro testing models and material testing
- Reproducible manufacturing of NPs with narrow defined specifications
  - Tailor-made products
  - Production of unique and small scale series

# Consortium

## Known partners / Competence offer

Name	Type	Country	Role in the project
Chair of Tissue Engineering and Regenerative Medicine (TERM),	University Hospital	Germany	Implementation of regulatory requirements for QMS and DMS

## Partner search

Profile	Type	Country	Role in the project
Manufacturers and developers NPs for medical/pharm. applications and/or analytic devices			<ul style="list-style-type: none"> <li>- Further development of automated system</li> <li>- Establishment of automated production of specific nanoparticle based medical products</li> <li>- Future support in distribution and networking</li> </ul>
Pharmaceutical companies			Establishment of automated production of specific NP based pharmaceutical products

# Contact details

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