



RawMaterials

Connecting matters

# Pitch template for KAVA Call 9

Brokerage Event & Expert Forum<sup>3</sup> | 13-14 October 2021

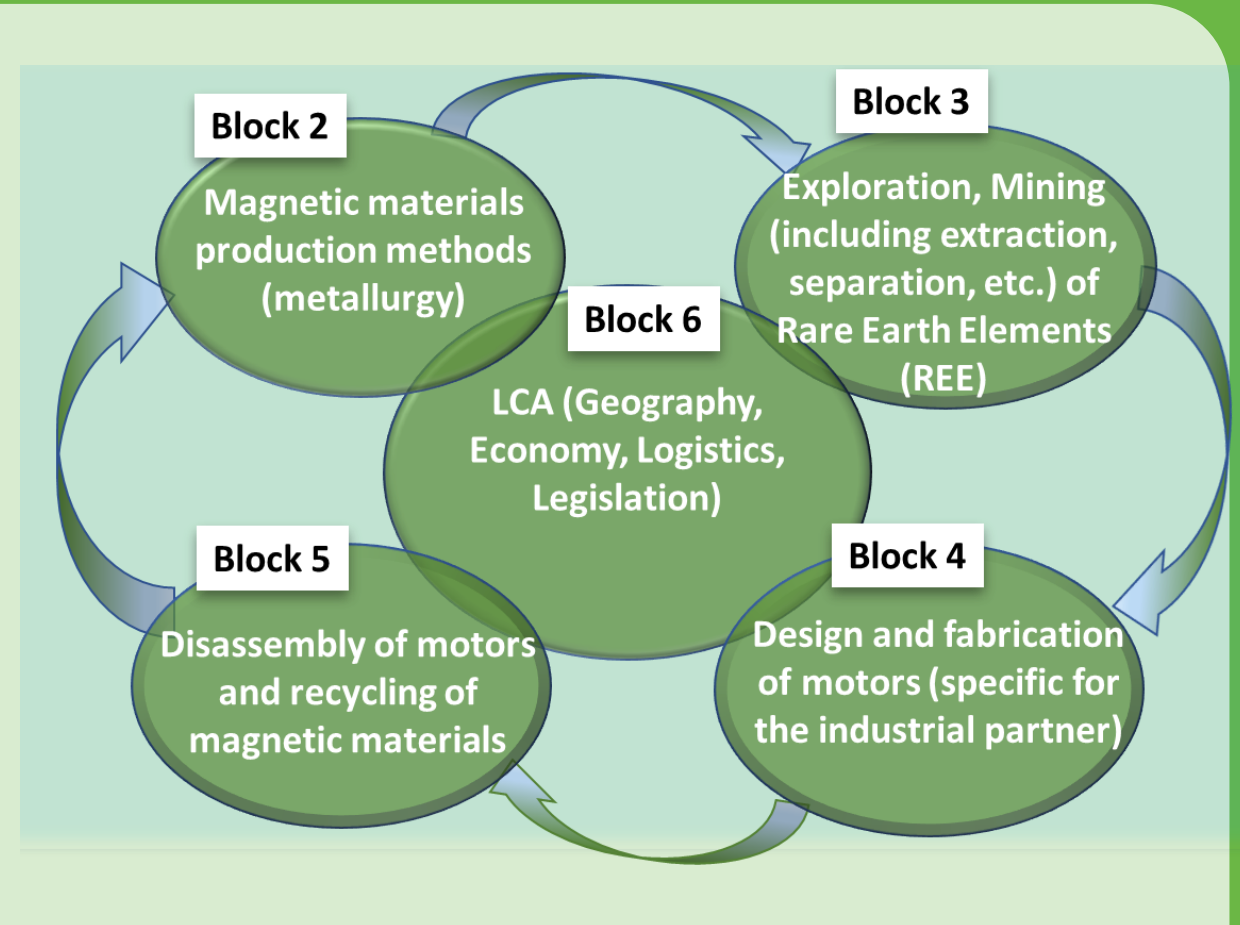


Co-funded by the  
European Union



# SHORT DESCRIPTION OF THE IDEA

- A life long learning project dealing with *Rare Earth Magnets and Motors*
- Course duration: 1-2 weeks
- Targeted learners are people who have Master Degrees in Natural Science- and Technology-related fields and intend to work in the rare earth value chain industry
- The course is divided into 6 blocks and includes both theoretical and practical training.
- **Block 1** is an introduction to magnetism: main definitions, types of magnets, properties characterization methods



# THEMATIC SCOPE OF THE PROJECT PROPOSAL

Category of activity:

- Education/Upscaling/RIS

Link with the topics addressed in KAVA Call 9:

- **Raw Materials and Circular Societies Lighthouse:**
  - Recycling of end-of-life products containing Strategic Materials and/or CRMs
  - Supply of Strategic Materials and/or CRMs
  - Resource and Energy efficient in metallurgical and Mineralogical processing
- **Sustainable Materials Future Mobility Lighthouse:**
  - Resource efficient design
  - Innovative technical and business solutions in process design, plant engineering and construction
  - Development of an improved Life Cycle Inventory database
- **Sustainable Discovery and Supply Lighthouse:**
  - Targeted exploration of Strategic Materials and/or CRMs
  - Supply of Strategic Materials and/or CRMs
  - Environmental-Social-Governance (ESG)

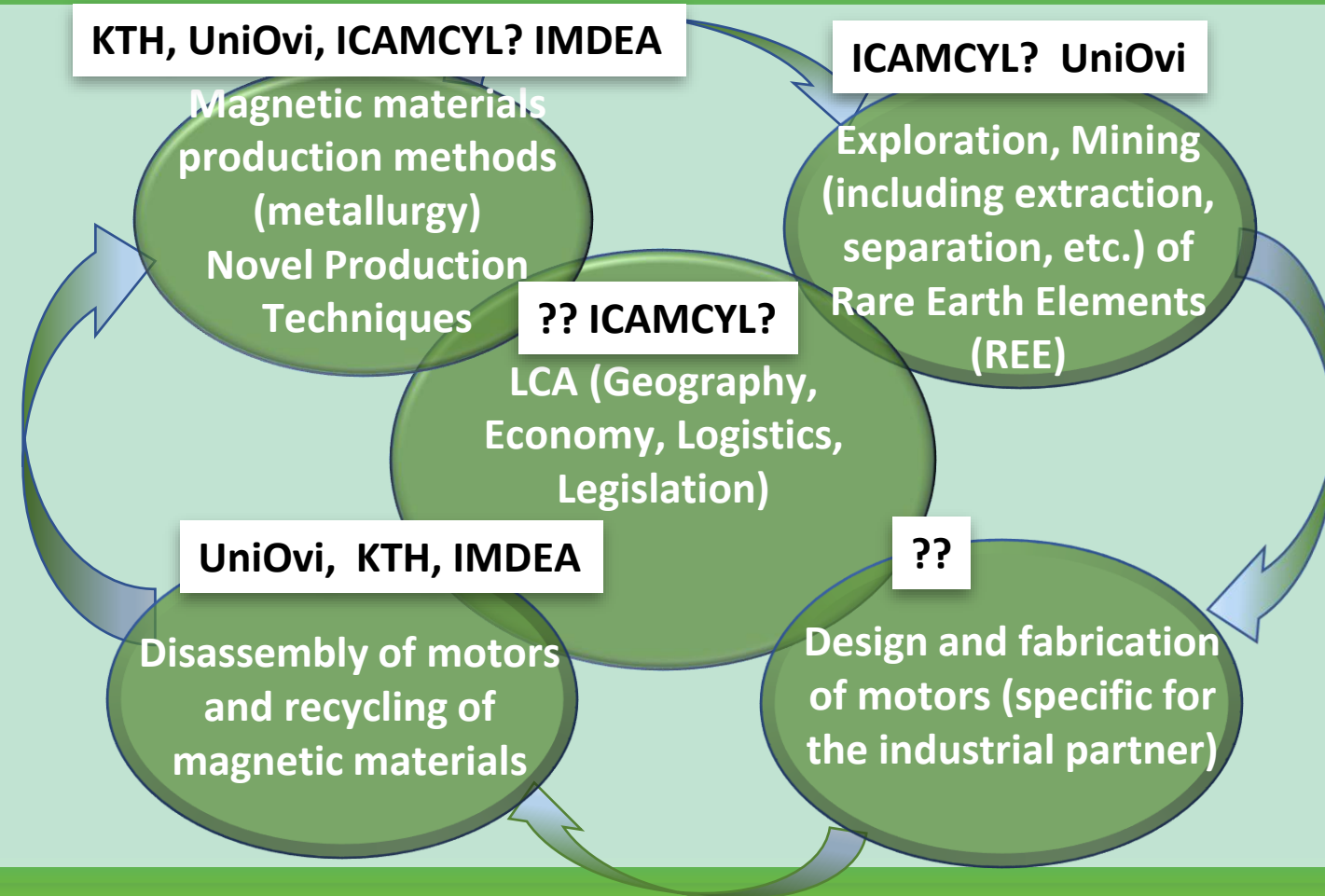
# CURRENT STATUS OF THE PROPOSAL

- **Current status of the proposal:** KTH, Sweden; University of Oviedo, Spain; ICAMCYL, Spain; IMDEA Nanoscience
- **Type of expertise requested:**
- LCA experts (Fraunhofer Research Institution for Materials Recycling and Resource Strategies IWKS ?);
- Design and fabrication of motors (industry representatives?);
- Disassembly of motors and recycling of magnetic materials (industry?)
- Letter of intent from industry
- Commercialization

# TYPE OF EXPERTISE REQUESTED

- **KTH, UniOvi, IMDEA**

Introduction:  
*Basics of Magnetism (main definitions, types of magnets, properties characterization methods)*



# CONTACT PERSON

Full name: Dr. Inna Soroka

Applied Physical Chemistry  
KTH Royal Institute of Technology

Dr. Pavel Korzhavyi

Materials Science and Engineering  
KTH Royal Institute of Technology

E-mail address: soroka@kth.se

pavelk@kth.se