

## Sustainable and High-Performance Electric Motors

### Maxima Project Mid-Term Conference

15:00 **Part 1**

#### Mid-Term Achievements of the Maxima Project

15:00 **Welcome and Opening Remarks**

15:05 **Project Overview**

##### Modular Axial Flux Motor for Automotive Applications

→ Stéphane Clénet, ENSAM

15:15 **Key Milestones Achieved**

##### Comprehensive EM Design and Analysis Framework: Multiphysics Challenges in Axial Flux Machines for Automotive Applications

→ UTCN/Emotors/4Multiphysics

##### Manufacturing Process Flow for Axial Flux Machines: Overcoming Challenges for Cost-Effective Mass Production

→ Emotors

##### Ferromagnetic Materials and Manufacturing Processes: Optimizing Axial Flux Machines for Automotive Applications

→ Höganäs/OCAS

##### Digital Twin Methodology: Specifications and Applications for Axial Flux Machine Development

→ Universitat Politècnica de Catalunya

16:05 **Q&A Session**



16:10 **Coffee Break**

16:25 **Part 2**

## Sustainability in Focus: Permanent Magnets Recycling Challenges and Life Cycle Assessment for Electric Motors

16:25 **Recycling Challenges: Managing End-of-Life Magnets**

### Heavy Rare Earth Permanent Magnets: Addressing Recycling Challenges

→ Johannes Maurath, MIMplus Technologies

### Policy Considerations for Rare Earth Magnet Recycling: Challenges and Opportunities

→ TBC

16:50 **Life Cycle Assessment: A Path to Sustainable Mobility**

### LCA in the Automotive Sector: Key Insights and Future Directions

→ Léa d'Amore, Vrije Universiteit Brussel

### Transport-Specific Life Cycle Assessment Approach Across Europe

→ TBC

17:20 **Q&A Session**



17:25 **Part 3**

## Electrical Motors: Specifications and Requirements Across Automotive, Aerospace, and Marine Sectors

17:25

**Electrical Motor Performance: Current Metrics, Challenges, and Innovations Across Industries**

### Automotive Sector

→ Emotors (TBC)

### Maritime Sector

→ **Jean Frédérique Charpentier**, Senior Researcher, Naval Academy France

### Aeronautic Sector

→ **Christophe Viguiet**, Electrical Machines Team Leader, Safran

### Industrial Sector

→ TBC

18:25

**Closing Remarks**

18:30

**Networking & snacks**

