

## Challenges & Solutions to increase motor Efficiency in existing applications

### EASA-BEMAS Motor Club at the University of Gent, Campus Kortrijk

Thursday the 25<sup>th</sup> of April of 2019 from 12pm to 4pm

EASA & BEMAS with the important support of Universiteit Gent organize on the 25<sup>th</sup> of April of 2019 their 3<sup>rd</sup> Motor Club in Belgium in a very interesting place: the Motion Products Laboratory of the University of Gent in Kortrijk. This an opportunity to **visit a unique laboratory in Belgium** dedicated to motor systems.

### Program

**12pm: Welcome Drink and Sandwiches**

**12.30pm: Introduction & Short Presentation of each participants**

**1pm: Challenges & solutions in motor efficiency – Professor Kurt Stockman, UGent and his team:**

- Current and upcoming standards and technical evolutions to increase motor efficiency + Q&A: 30'
- Insights from the ITHACA project: thermal characterisation of drive train components +Q&A: 30'
- Motor rewinding & remanufacturing in a circular economy perspective +Q&A: 30'

**2.30pm Guided tour through the laboratory 30'**

- Drive train test rigs up to 150kW with demo on how energy efficiency is measured with the ITHACA infrastructure
- Demo of High speed thermal imaging and how it can be applied to inspect drive trains
- Condition monitoring using sensor fusion of vibration analysis and thermal imaging in order to inspect lubrication conditions of bearings
- Demo on determination of IE energy classes of power electronics

**3pm: EASA & BEMAS – Quick Update**

**3.20pm: 2 presentations from the participants**

- Please submit your non commercial 20mn conference topic with a short Summary to [fbeghain@easa9.org](mailto:fbeghain@easa9.org) before the 12<sup>th</sup> of April. A committee with EASA & Bemas members will select the conferences on the 15<sup>th</sup> of April.

**4pm: Conclusions and Closing drink**

**4.30pm-4.50pm: Short Meeting between EASA&BEMAS members to discuss next actions**

**Location:** Graaf Karel de Goedelaan 5, 8500 Kortrijk, Belgium

**Details on the Laboratory:** The research group EEDT- Motion Products at Universiteit Gent is located in Kortrijk and Gent. In Kortrijk the focus is on the characterization testing and system design of motion products. The location is equipped with high end testing infrastructure for electric motors ranging from a few Watt up to 150 kW and dedicated test infrastructure for mechatronic applications. In Gent the focus is primarily on the design of electric machines and new types of electromagnetic energy conversion systems and deals with motor control, thermal design and material properties. Expertise from both labs is combined to assist industry in realizing energy efficient and robust electric drive trains and motion systems

### **Who should attend?**

- This event is open to all companies active in Motor Systems Performances, including non members (Manufacturers, Suppliers, Users, Service companies, Institutions, Training centers, ...).
- Members and Non Members are welcome.

### **What can you expect?**

- Top experts presentations
- Visit of one of the best laboratory dedicated to motor systems in Belgium
- Unique Networking experience
- Open discussions on industry challenges and opportunities
- Workshop, next projects,

### **Conditions:**

- Free for EASA &/or BEMAS Members
- Non Members: 55 Euros

### **Registrations (Limited Seats!) :**

- Please contact: [fbeghain@easa9.org](mailto:fbeghain@easa9.org)
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