

## **Press release**

# IK4-TEKNIKER presents its capabilities for electric motors at the Go Mobility trade fair

- During the event, the technology centre will showcase its most recent technological developments in the field of sustainable mobility and energy storage
- The trade fair on sustainable and smart mobility, a reference meeting point for professionals of Southern Europe, will take place on November 27 and 28 at the Ficoba Exhibition Centre in Irún

(Eibar, Basque Country. 26 November, 2018).- On November 27 and 28, the IK4-TEKNIKER technology centre will participate in the Go Mobility industrial trade fair, the professional meeting point of Southern Europe focused on sectors dealing with sustainable mobility and energy storage. This first edition will take place at the Ficoba exhibition centre in Irún.

IK4-TEKNIKER, be present at the event on a stand located in space 3-12 of hall 3, will showcase its capabilities in terms of design, manufacture and testing of electric motors and generators as well as its ability to develop customised power electronics equipment to achieve sustainable and smart mobility.

In its attempt to boost environmental sustainability in industrial sectors, the technology centre has focused its specialisation and technological actions on transforming the automotive sector by promoting hybrid or electric motors. In this regard, IK4-TEKNIKER will exhibit three demonstrators at the first edition of this trade fair.

### **Electric motors**

The first demonstrator consists in an electric motor without switched reluctance and axial flow to be fitted aboard electric vehicles. This equipment has been developed within the framework





of the VENUS project, an initiative that came into being for the purpose of producing a new range of magnet-free motors to replace those generally used on commercial electric vehicles.

The second demonstrator, to be presented via a poster, corresponds to a later version of the motor developed within the framework of the VENUS initiative. It has no switched reluctance magnets, but incorporates cross flow and a gearbox integrated in the rotor. This motor has been designed to reduce costs and minimise the amount of space it takes up in a vehicle. This demonstrator forms part of the WEEVIL project, an initiative that aims to develop a new concept of electric urban cars that are safer, sturdier and more efficient.

By exhibiting these two innovative motors, IK4-TEKNIKER intends to showcase its capabilities with regard to designing, manufacturing and testing electric motors and generators to meet needs ranging from improving already existing products to developing complete customised solutions.

### **Power electronics for different sectors**

Lastly, IK4-TEKNIKER will display a three-phase inverter fitted with SiC (silicon carbide) semiconductors that has been developed within the framework of the GANICS project and incorporated to an energy storage system based on inertia flywheels.

Compared to conventional technologies, these semiconductors are characterised by minor switching losses. This makes it possible to increase switching frequency and reduce current harmonics. Consequently, efficiency is improved and both the weight and volume of the system are reduced. This inverter is considered to be a promising alternative in terms of achieving high power ratings and very high switching frequencies.

Based on this technological development, the technology centre intends to demonstrate its capabilities as regards developing customised power electronics equipment. With regard to this particular line, IK4-TEKNIKER is working on designing, developing and validating power electronics equipment for different fields of applications such as industry, transport or energy.

## >> www.tekniker.es



#### **Go Mobility**

Go Mobility is an international activity supported and promoted by the Provincial Council of Gipuzkoa with the backing of the Basque Government and Ficoba's organisation and is geared towards manufacturers, ancillary industries, suppliers and research centres.

In addition to the exhibition area where the sector's most recent developments will be on display, the programme also features several lectures and panel discussions, a zone for vehicle testing, matchmaking, technical visits to companies and the Go Mobility prize-giving ceremony.

The aim of this first edition, therefore, is to provide a meeting point to foster exchanges between different stakeholders, support innovative projects and carry out an industrial transformation of the territory.

#### **Concerning IK4-TEKNIKER**

With more than 35 years of experience in applied technology research that has been be transferred to companies, IK4-TEKNIKER has achieved a high degree of specialisation in four major areas (Advanced Manufacturing, Surface Engineering, Product Engineering and ICTs). This means that its cutting edge know-how has been made available to customers to meet their requirements.

### Further information

