

## Press release

### IK4-TEKNIKER contributes with three technical presentations at Basque Industry 4.0

- ▶▶ *IK4-TEKNIKER will participate in different presentations on the applications of sensorics, artificial intelligence and robotics*
- ▶▶ *At the event, the technology centre will present its capabilities in additive manufacturing in the exhibition area*

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(Eibar, Basque Country. 23 November, 2018).- The technology centre [IK4-TEKNIKER](http://www.tekniker.es) will have a notable presence at the fifth edition of the Basque Industry 4.0 event, The Meeting Point 2018, which will be held at the Palacio Euskalduna in Bilbao on the 26th of November.

The technology centre will impart its expertise through different talks on sensorics, artificial intelligence and robotics as well as participating in an exhibition space where it will present its capacities in additive manufacturing linked to Industry 4.0.

Jon Mabe, manager of electronics and communications at IK4-TEKNIKER, will present the technological challenges implied by the development of new sensors and their integration in industrial processes. To this end, Mabe will explain, from 11.30 am in Technological Room 1, using a wide variety of applications, the integration process of different technologies (chemistry, NIR spectroscopy, colorimetry, embedded computer vision, electronics, micro-mechanics, etc.) for the development of advanced sensors with the objective of measuring parameters linked to quality, safety or the status of products.

In the field of artificial intelligence, the researcher Izaskun Fernández will explain the way in which different artificial intelligence technologies can contribute to the improvement and progress of natural communication between person and machine in different stages of the productive process: from the implementation of machines and processes, to the customised adaptation of machine behaviours, interfaces and content. This presentation will take place from 11.30 am in Technological Room 2.

Finally, Loreto Susperregi, manager of robotics at IK4-TEKNIKER, will tackle the planning techniques for manipulation and autonomous navigation and will provide a description of the strategies that make up the sensor information and planning, which allow the flexible control of the robots' movements. Susperregi will intervene within the framework of a presentation on the development of the concept of flexible and autonomous robotics for the automation of manufacturing processes, which will take place in Technological Room 4 from 4.00 pm.

The talks by the three IK4-TEKNIKER researchers will be complemented by the presentation of the capacities of the Basque centre in additive manufacturing applied to the 4.0 strategy, a technology which is becoming more and more relevant in sectors such as aeronautics, the automotive sector or the production of large components and parts.

Specifically, the technology centre will show a series of parts manufactured using the Laser Metal Deposition (LMD) technique, based on the fusion, by laser, of metal powder or wire injected onto the surface of a substrate in order to generate coatings and structures.

#### **Laser as a vector in advanced manufacturing**

Furthermore, the centre will also feature in the Laser for Manufacturing Lab event, a laboratory which provides integral solutions aimed at resolving the specific requirements of advanced manufacturing in high-requirement sectors in terms of precision, quality, etc.

The proposal deals with different manufacturing processes; design and manufacturing of equipment and components, additive manufacturing; inspection and metrology and consultancy and training in laser technology.

With this laboratory, IK4-TEKNIKER seeks to find a response to specific production demands using laser in strategic and high-demand sectors, thanks to its specialised knowledge and its 360° vision regarding this technology and its application.

#### **Basque Industry 4.0 The Meeting Point**

Organised by the Basque Government through the SPRI Group, Basque Industry 4.0 The Meeting Point has consolidated itself as a multidisciplinary event which brings together strategy, the exchange of knowledge, new technologies, real experiences, practical cases and workshops and is aimed at all agents linked with the so-called Fourth Industrial Revolution.

This event is held in a context in which areas such as biomedicine, renewable energy or the automotive industry are demanding more and more high-added-value components which are able to offer high performance and elevated precision rates, all under strict safety standards, meaning that advanced technologies applied to industrial manufacturing are of capital importance.

**Concerning IK4-TEKNIKER**

With more than 35 years of experience in applied technology research that has been 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**

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