

QuesTek supports the development of high-performance materials and components for European process industry

Stockholm, Sweden, August 2020 – QuesTek Europe, as part of a consortium led by Fundación Azterlan, was selected for a European Commission Horizon 2020 (H2020) LC-SPIRE-08-2020 Research and Innovation Action grant for the project Advanced design, monitoring, development and validation of novel high-performance materials and components (HIPERMAT).

The HIPERMAT project aims to develop new refractory stainless steels, high entropy alloys and ceramic coatings for applications in hot stamping furnaces. These new materials are expected to drastically increase the life-time of the furnace components and reduce the number of maintenance stops, leading to higher productivity, significantly reduced energy consumption for spare part manufacturing, and improved competitiveness of European process industry.

QuesTek Europe will contribute to the HIPERMAT project with expert knowledge in materials modelling, simulations and design. Materials microstructure and property models will be validated in collaboration with KTH Royal Institute of Technology, and lay the foundation for the development of new materials. QuesTek Europe will also work together with ESI Software to connect materials and process models as a step towards a computational materials and process design framework.

Ida Berglund, Managing Director of QuesTek Europe, commented: “We are looking forward to this opportunity to support European industry, and we believe that using a materials-based approach to improve efficiency is a crucial step towards a sustainable production- and manufacturing industry. Expected outcomes from this project should provide broad commercial and societal benefits.”

The HIPERMAT project consortium consists of 14 members, ranging from academia to furnace manufacturers: Fundación Azterlan, QuesTek Europe, ESI Software Germany, SVUM, AMPO S. Coop., GESTAMP Louny, Advanced Coatings & Construction Solutions, GHI Hornos Industriales, Fraunhofer Zentrum Hochtemperatur, KTH Royal Institute of Technology, Fundacio Eurecat, Asociacion Centro Tecnologico CEIT-IK4, Rina Consulting – Centro Sviluppo Materiali, and Calcom ESI. HIPERMAT is a 3-year project valued at €5.36 million.

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About QuesTek Europe AB

QuesTek is a global leader in Materials Design and Integrated Computational Materials Engineering (ICME). Founded in 2016 as a corporate joint venture between QuesTek International LLC and Thermo-Calc Software AB, QuesTek Europe brings together QuesTek USA's Materials by Design™ expertise with the computational software development expertise of Thermo-Calc Software. By doing this, QuesTek Europe are able to offer ICME technologies and modelling services, as well as designed novel materials, to the European market. For more information about QuesTek Europe, visit www.questekeurope.com or contact info@questekeurope.com.