## **Biography**

Dr. Andrea Niklas graduated in chemical engineering at the University of Dortmund, Germany. and obtained her PhD in Materials Science and Engineering at the Catholic University of Leuven, Belgium. She has been working in Fundación AZTERLAN, Spain, for around 20 years with 33 peer-reviewed publications and presentations at international conferences, as well as 6 patents in the materials development area. Andrea is an expert in cast high performance alloys such as aluminium, stainless steels, superalloys and wear resistant alloys with focus on the alloy development and heat treatment optimization for specific applications. She also has a broad experience in microstructural characterization of different materials, as well analysis of casting defects and failures using among others light optical microscopy (OM) and scanning electron microscopy (SEM-EDX/WDS) techniques and X-ray diffraction (DRX). Furthermore, she has been involved in plenty of European and national joint projects, with industry and research institutions.