Guilhem MARTIN

Guilhem MARTIN studied Materials Engineering at Grenoble Institute of Technology, obtaining my engineering degree in 2008 with a major in physical metallurgy. Following graduation, he continued on to Graduate school, obtaining my Ph.D. in Materials Science under the supervision of Prof. Y. Bréchet, Prof. M. Veron from Grenoble Institute of Technology and Prof. T. Pardoen from Université Catholique de Louvain. His Ph.D. work sought to understand the development of edge cracks during hot rolling of duplex stainless steels. This involves the generation of various microstructures using heat treatments, mechanical testing at high temperature to determine the high temperature fracture toughness and to evaluate the degree of microscale strain partitioning between both phases within the duplex steel.

Following his Ph.D., he changed research direction, becoming a Post-Doctoral Fellow at the University of British Columbia (UBC, Vancouver, Canada) under the supervision of Prof. Chad Sinclair. During this period, he worked on topics related to the formability of Mg-alloys and in particular to the development of local strain heterogeneities at the microstructural scale.

In 2013, he joined the Materials Engineering Department of the Université Grenoble Alpes (SIMaP Laboratory, France) as an Associate Professor. Since then, his research focuses on the metallurgy of additively manufactured parts. He aims at improving our understanding of the microstructures and defects inherited from AM-processes and at investigating the relationship between the processing conditions, microstructures and properties. He recently developed an activity related to the design of AI and Ni-based alloys for laser powder bed fusion.