The LabEx DAMAS: A Success Story About Nucleation and Growth

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Labex DAMAS *Genesis* *Nucleation* *Growth*

Abstract

The LabEx DAMAS (Laboratory of Excellence for **D**esign of **A**lloy **M**etals for low-m**A**ss **S**tructures) was born in February 14, 2012, in the framework of a major action of the French Government: “Investment in the future". It united the research forces of metallurgy of the Lorraine University from the LEM3 laboratory and the Jean Lamour Institute. Arriving to its 12 years of activity, the Labex DAMAS proved its excellence by boosting the research in metallurgical engineering. Some numbers to illustrate the progress: more than 830 research papers in web of science, 80 PhD funded, worldwide collaborations with 120 laboratories, 350 times represented at international conferences, creation of two start-ups, reaching 43rd in the Shanghai ranking in metallurgical engineering of the Lorraine University, etc. It was clearly the oxygen for the two laboratories, the LEM3 and the IJL, for innovative basic research in excellent collaboration. All major topics of metallurgy were covered: chemical, physical, mechanical, and numerical metallurgy. The success story of the Labex DAMAS, starting from its nucleation, followed by its growth, will be presented by its founding personalities: Laszlo S. Toth and Sabine Denis, emeritus professors in the Lorraine University.