

COMET: K-Project

SafeBattery	
Safe Lithium-Based Traction Batteries	
Main location	Graz , Styria
Other locations	-
Research programme	The goal of SafeBattery is to investigate the mechanical, electrochemical and chemicalthermodynamic behaviour including a hazard quantification of lithium-based single-cell and single modules under crash loads (acceleration and deformation) taking into account product life, i.e. the mechanical and chemical changes that take place over product life.
Planned realisation and outcomes	
The main outcome of SafeBattery is a comprehensive knowledge on the multi-physical processes in lithium-based battery cells and modules under crash loads taking into account product life. This knowledge can be used by the partners to optimally integrate batteries in vehicles even within deformation zones. The project will enable enhanced design freedoms, increased vehicle range and improved safety when operating vehicles with Li-Ion cells.	
History of establishment	The consortium of SafeBattery is well established. The scientific partners have worked in complementary research fields associated with the development of battery cells and modules now for several years. The multidisciplinary research questions of SafeBattery require a close cooperation of scientific and industrial partners. The COMET K-Project type is an ideal funding scheme for the research of SafeBattery in the area of lithiumbased traction batteries.
Selected company partners (max. 10)	Selected scientific partners (max. 5)
1. Audi AG 2. AVL LIST GmbH 3. Daimler AG 4. Dr. Ing. h.c. F. Porsche AG 5. Kreisel Electric GmbH & Co KG 6. Robert Bosch Battery Systems GmbH 7. SFL Engineering GmbH 8. STEYR MOTORS GmbH	1. Graz University of Technology / Vehicle Safety Institute 2. Graz University of Technology / Institute for Chemistry and Technology of Materials 3. Virtual Vehicle Research Center
	Selected international partners ¹ (max. 5)
	1. Audi AG 2. Daimler AG 4. Dr. Ing. h.c. F. Porsche AG 5. Robert Bosch Battery Systems GmbH
Start of the K-Project	01.04.2017 (4 years)
Number of personnel	16 (FTE) are involved (14.14 FTE are scientists)
Total costs	EUR 6.000.000
Leader of consortium:	Graz University of Technology - Vehicle Safety Institute (Ass.Prof. Dipl.-Ing. Dr.techn. Wolfgang Sinz)
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¹ Partners with headquarters outside Austria