



Open Experienced Researcher (ER) positions for 12 months at KU Leuven (Belgium) in the framework of

INTERACTIVE

A Marie Curie Industry-Academia Partnerships and Pathways (IAPP) project funded under the FP7 programme of the European Commission

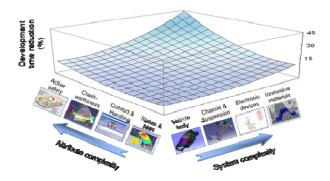
Project description:

INTERACTIVE (Innovative Concept Modelling Techniques for Multi-Attribute Optimization of Active Vehicles) is a EU FP7 Marie Curie Industry-Academia Partnerships and Pathways (IAPP) project - Grant Agreement 285808 - Duration: November 1st, 2011 -October 31, 2015. The main aim of the project is to establish a transfer of knowledge in the relevant domains of vehicle concept modeling between complementary academic and industrial expertise of the following partners:

N.	Partner name	Sector	Country
1	Università della Calabria (UNICAL)	Academia	Italy
2	Katholieke Universiteit of Leuven (KU Leuven)	Acad	Belgium
3	G&G Design and Engineering (G&G)	Industry	Italy
4	LMS International (LMS)		Belgium

Objectives:

The development of sustainable products is a basic requirement for European industries to grow in highly competitive environments. Innovation is the key challenge and must be supported with the highest priority. Such considerations fully apply to automotive industries, which are forced to develop products of increasing quality in shorter and shorter timeframes to come up with competitive pressure and conflicting demands from customers and regulatory bodies. The challenge is made even more complex by the increasing integration of mechatronic content in the vehicles and can be achieved only when engineers are able to manage this complexity in any phase of the vehicle development process from the concept stage onwards. The overall aim of INTERACTIVE project is the development of promising upfront engineering methods for active and intelligent vehicles, which are green, safe and competitive. A systematic approach will be followed for the research development of innovative concept modeling and simulation methods, starting from the level of critical subsystems (chassis and suspensions, tire, vehicle body) up to the system-level simulation and optimization of active vehicles. The targeted technology and methodology outcome is perfectly aligned with the quest of European industry and academia to again take the global lead in the field of Computer Aided Engineering (CAE), one of the fastest growing applied ICT fields with world-wide impact. As such, the IAPP directly contributes to achieving the objectives of the European Commission towards developing safer, greener and more efficient mobility, and will help strengthening the competitive position of the European vehicle industry in the global vehicle development market.









Innovative Concept Modelling Techniques for Multi-Attribute Optimization of Active Vehicles



Position description and candidate profile

The specific positions involve participation in INTERACTIVE research tasks with a main focus on multidomain concept modeling for vehicle dynamics and robust optimization of vehicle system-level performance, taking into account uncertainty and variability in the actual vehicle.

The ideal candidate has research experience in numerical modelling and their use for the enhancement of different vehicle attributes, such as safety and comfort. A basic knowledge of vehicle dynamics and control engineering are an added value. Proficiency in English is a requirement.

Most of the research activities will be carried out at the Department of Mechanical Engineering – KU Leuven, Belgium, while shorter visits at other academic or industrial partners will be implemented if beneficial to the training and research programme.

The selected researcher will receive an extremely competitive salary according to the rules set forward by the the Marie Curie Actions funding programme (see <u>http://cordis.europa.eu/mariecurie-actions/</u>). Women are particularly encouraged to apply.

Eligibility criteria:

An eligible candidate holds a MSc degree in Engineering, holds a PhD degree or has at least 4 years and no more than 10 years of research experience since gaining a university degree giving her/him access to doctoral studies.

Among others, the following criteria apply for eligibility:

• the researcher may be of any nationality;

• at the time of appointment, the researcher may not have resided or carried out her/his main activity in the country of the hosting partner for more than 12 months in the 3 years immediately prior to her/his appointment.

Application:

Applications should be sent by email to <u>bert.pluymers@mech.kuleuven.be</u> and include:

- "INTERACTIVE ER application" as subject of the email;
- A curriculum vitae including the following information:
 - Name, place and date of birth, sex and address;
 - Nationality (or nationalities) and record of residence (countries and periods of residence) for the past 3 years;
 - List of academic degrees obtained. For each degree, mention the title in the original language and in English, the awarding institution and date;
 - Periods of parental leave during the past 4 years, if applicable;
 - English language proficiency test results.
- Positions held and other relevant work experience;
- A list of publications;
- Copies of your MSc (and PhD) diploma and transcripts (including translation in English, if possible);
- A letter of interest (including motivation relevant to the research topic, names and emails of two references).

For further information about the project and the available position, please contact Dr. Bert Pluymers (<u>bert.pluymers@mech.kuleuven.be</u>) or visit the project website <u>http://www.fp7interactive.eu/</u>.

APPLY NOW! A start date in course of 2012-2013 will be agreed upon.

