PLENARY SPEAKERS

Ignaas Verpoest

Department of Materials Engineering, Katholieke Universiteit Leuven, Belgium

Prof. Ignaas Verpoest got a Masters Degree (1972) and a PhD-degree (1982) in Materials Engineering at the Katholieke Universiteit Leuven (Belgium). As a full professor (from 1990 till 2013) he was guiding a group which consisted (average of last 5 years) of 8 postdoc researchers and 25 PhD-students, carrying out research in the areas of mesomechanics of (textile based) composites, nano-engineered composites, natural fibre reinforced (bio)polymers and advanced production methods for composites. He is the author of more then 310 journal papers, about 500 conference papers and 3 books, and holds 15 patents. Since September 2013, Prof. Verpoest is emeritus professor at KU Leuven. Prof. Verpoest is holder of the Toray Chair in Composite Materials at KU Leuven, and chairman of the European Scientific Committee of CELC, the European Confederation on Flax and Hemp. He was President of the European Society for Composite Materials (ESCM), and of the International Committee on Composite Materials (ICCM). He was chairman of the materials research Centre at KU Leuven, and is member of the Royal Flemish Academy of Belgium for Science and Art. Prof. Verpoest won several awards, amongst others the Descartes Prize for Science Communication of the European Commission (2004), the International Fellowship of the Society for the Advancement of Materials Processing and Engineering (SAMPE, 2009) and of the International Committee on Composite Materials (ICCM,2009). In 2014, he was awarded the 'Medal of Excellence in Composite Materials' of the University of Delaware (USA). He is also co-founder and board member of the company Econcore, worldwide producer of innovative honeycomb cores.

Monday 27 June at 9:00 – Plenary Lecture 1:

Tony Kelly Lecture: COMPOSITES RESEARCH: INSPIRED BY PEOPLE, CHALLENGED BY NATURE

The Tony Kelly lecture will be held the first time in the history of the ECCM in honor of Tony Kelly and recognizes the extraordinary contributions of the assigned plenary speaker to the field of composites.

Thomas Wolff

Technology Development CFRP, BMW AG, Germany

Dr.-Ing. Thomas Wolff studied Mechanical Engineering at RWTH Aachen University with plastics processing as major subject. From 1995 to 2000 he was on the scientific staff at the Institute of Plastics Processing (IKV) at RWTH Aachen University. Dr. Wolff joined the BMW Group in 2000 as CAE engineer in the Exterior Development Department. After managing different predevelopment projects and series projects Dr. Wolff was member in the project i team since 2008. During the following 4 years he was responsible for the i3 exterior technology development and the setup of the production system. 2012 Dr. Wolff became head of exterior projects at the exterior inhouse production. Since 2014 he is head of the CFRP technology development department.

Tuesday 28 June at 9:00 – Plenary Lecture 2:

PROCESS CHAINS OF COMPOSITE TECHNOLOGIES FOR AUTOMOTIVE LIGHTWEIGHT DESIGN

Gerd Wingefeld

SGL CARBON SE, Germany

Dr. Gerd Wingefeld has been a member of the SGL Carbon SE Board of Management since October 1, 2008. As Chief Technology Officer he is responsible for Technology & Innovation, Environment, Health & Safety Affairs (EHSA), Purchasing, SGL Excellence and Engineering. Dr. Wingefeld was born on January 21, 1958 in Giessen. After finishing his Masters degree in Chemistry at the Giessen University, he also obtained his PhD there in 1984. His career began with research projects focused on materials at the Hoechst AG Research Center at the end of 1984. After assuming different responsibilities within Celanese, which split off from Hoechst AG, he moved to SGL Group in 2002 where he first worked in various international management functions in the fields of production as well as technology development. Before he joined the Board of Management of SGL Carbon SE in 2008 he was responsible for the Business Unit Graphite Specialties and the Business Area Graphite Materials & Systems. Dr. Wingefeld is married and has two children.

Wednesday 29 June at 9:00 – Plenary Lecture 3:

COMPOSITE MATERIAL SOLUTIONS: PROGRESS OF THE PAST, SOLUTIONS OF TODAY, CONCEPTS FOR TOMORROW

Christian Weimer

AIRBUS Group, Germany

Since more than two decades Dr. Christian Weimer has done research in the field of carbon fibre reinforced composites. He started at the University of Sydney and the Institute for Composite Materials (IVW) covering topics such as preforming and stitching technologies. In 2003 he joined Airbus Helicopters to become team leader and senior expert in new composite production technologies. At Airbus Group Innovations Dr. Weimer is currently Head of Domain Composites Materials & Process leading research for the different Airbus Divisions, including commercial aircraft, helicopters as well as defence and space. Being application driven Dr. Weimer is actively promoting entrepreneurship. In scientific terms Dr. Weimer is looking back to 20 years of research in the field of composite technologies, leading to more than 50 international presentations and publications. Several of his more than 25 patent applications have found its way into application.

Thursday 30 June at 9:00 – Plenary Lecture 4:

THE FUTURE COMPOSITE MATERIALS CHALLENGE IN AERONAUTICS

The Albert Cardon Lecture is the prestigious plenary lecture for the recipient of this year's ESCM Award that recognizes the accomplishments of this young researcher.

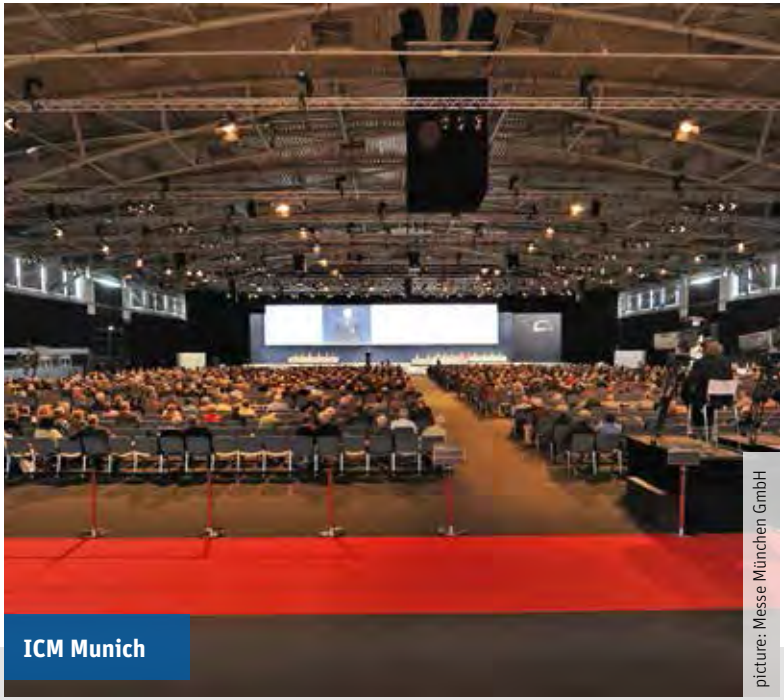
Juan J. Vilatela

IMDEA Materials Institute, Madrid, Spain

Dr. Juan J. Vilatela has a BSc in Physics Engineering from UIA, Mexico (2005) and a PhD from the Department of Materials Science and Metallurgy of the University of Cambridge (2009). In 2011 he founded the Multifunctional Nanocomposites Group (http://www.materials.imdea.org/groups/mng/) at IMDEA Materials Institute. His group's work is largely focused on the development of macroscopic materials made up of nanobuilding blocks in a way that the unique properties at the nanoscale are preserved through the assembly process and a new generation of high-performance engineering materials is produced. Dr. Vilatela was involved in early developments of a process to make continuous macroscopic fibres made up of CNTs, at Cambridge. Later he took part in the transfer of this technology to industry. His more recent work includes studying hierarchical structures by advanced X-ray techniques, reinforcement at multiple length-scales and the electrochemical interactions of CNT fibres with liquids and polymers. Dr. Vilatela's research has helped establish the unique combination of properties of CNT fibres, particularly for multifunctional composites that can store energy or have sensing functions. He is the author of around 36 papers (> 850citations), 6 patents (2 industrially exploited) and has been awarded the "Juan de la Cierva" and "Ramón y Cajal" fellowships by the Spanish Ministry of Economics. He has coordinated several European projects, industrial contracts (e.g. Airbus) and is currently the recipient of an ERC Starting Grant to develop structural energy harvesting composite materials. Since 2014 he is an associate lecturer at the Carlos III University.

Thursday 30 June at 15:00 – Plenary Lecture 5:

Albert Cardon Lecture: MULTIFUNCTIONAL COMPOSITES WITH MACROSCOPIC CNT FIBRES



ICM Munich

picture: Messe München GmbH

KEYNOTE SPEAKERS

Presenter	Institution	Title	Room
Monday 27 June, 14:10-14:50			
Francisco Chinesta	École Centrale de Nantes	ADVANCED MODELING AND REAL TIME SIMULATION OF COMPOSITES MANUFACTURING PROCESSES: REALIZING TECHNOLOGICAL DREAMS	Munich (MUC)
Stepan Lomov	Katholieke Universiteit Leuven	MULTI-SCALE MODELLING OF SPATIAL VARIABILITY IN TEXTILE COMPOSITES: UNCERTAINTY QUANTIFICATION BASED ON EXPERIMENTAL DATA OF INTERNAL GEOMETRY	Biarritz (BIA)
Jinson Leng	Harbin Institute of Technology	ACTIVE DEFORMABLE COMPOSITE STRUCTURES: OPPORTUNITIES AND CHALLENGES	Naples (NAP)
Gerald Pinter	Montanuniversität Leoben and Polymer Competence Center Leoben	ADVANCED TECHNIQUES FOR THE CHARACTERIZATION OF FATIGUE IN SHORT AND CONTINUOUS FIBRE REINFORCED POLYMER MATRIX COMPOSITES	Stuttgart (STG)
Tuesday 28 June, 14:10-14:50			
Pedro Camanho	University of Porto	ANALYSIS MODELS FOR POLYMER COMPOSITES ACROSS DIFFERENT LENGTH SCALES	Munich (MUC)
Markus G. R. Sause	University of Augsburg	ADVANCES IN IN-SITU MONITORING OF FIBER REINFORCED COMPOSITES	Biarritz (BIA)
Leif Asp	Chalmers University of Technology	NEXT GENERATION MULTIFUNCTIONAL COMPOSITES	Naples (NAP)
Peter Mitschang	Universität Kaiserslautern and Institut für Verbundwerkstoffe GmbH	INDUCTION WELDING - A FLEXIBLE TECHNOLOGY FOR VARIOUS APPLICATIONS	Stuttgart (STG)
Wednesday 29 June, 14:10-14:50			
Silvestre Pinho	Imperial College London	MECHANICS OF COMPOSITES: FROM NANO TO MACRO AND FROM SIMULATION TO ACTUALLY ENGINEERING NEW MICROSTRUCTURES	Munich (MUC)
Alexander Bismarck and Paul Robinson	Imperial College London and University of Vienna	EXPLOITING COMPOSITE INTERPHASES: CONTROLLABLE STIFFNESS, SHAPE-MEMORY AND REPAIR	Biarritz (BIA)
Paolo Ermanni	ETH Zürich	MULTIFUNCTIONAL COMPOSITE STRUCTURES FOR MORPHING APPLICATIONS	Naples (NAP)
Pascal Hubert	McGill University Montreal	TOWARDS SUSTAINABLE MANUFACTURING OF COMPOSITE MATERIALS	Stuttgart (STG)
Thursday 30 June, 14:10-14:50			
Philippe Boisse	Institut National des Sciences Appliquées Lyon	COMPOSITE FORMING SIMULATIONS AT MACRO AND MESO SCALES	Munich (MUC)
Bent F. Sørensen	Technical University of Denmark	CHARACTERIZING DELAMINATION RESISTANCE IN TERMS OF MIXED MODE COHESIVE LAWS	Biarritz (BIA)
Hubert Jäger	Technische Universität Dresden	CARBON FIBRES - FROM HYPE TOWARDS REALITY FOR FUTURE LIGHTWEIGHT CONCEPTS	Naples (NAP)
Volker Altstädt	University of Bayreuth	THERMOPLASTIC LIGHTWEIGHT STRUCTURES - TRENDS AND DEVELOPMENTS TOWARDS SERIAL PRODUCTION	Stuttgart (STG)