MATERIALS SCIENCE ENGINEERING

YOUNG RESEARCHERS MEET PROFESSIONALS

SEPTEMBER 27TH - 29TH, 2016

DARMSTADT, GERMANY

CALL FOR ABSTRACTS

DEADLINE MARCH 31ST,2016

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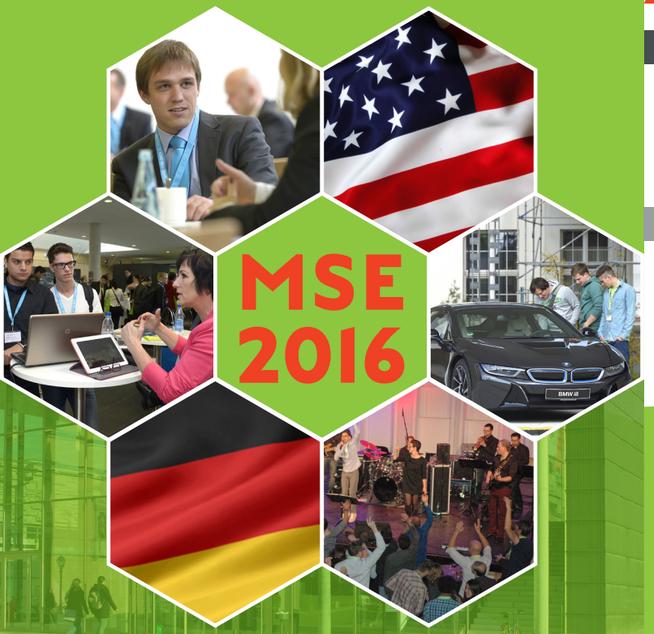

TMS MRS CO-SPONSORED MEETING DGM GERMAN MATERIALS SOCIETY

MSE 2016

Call for Abstracts

The organisers invite prospective authors to submit abstracts for lectures (12 min oral presentation / 3 min discussion) or posters relating to the congress topics. The abstracts will be evaluated and, if accepted, the authors will be informed about their assigned type of presentation (oral or poster). Especially young scientists and speakers from the elected guest country USA are welcome to actively contribute to the congress by submitting an abstract. The submission deadline for abstracts is **March 31st, 2016**.

Keydates:
March 31st, 2016 – Deadline Call for Abstracts
May 2016 – Authors Confirmation
August 2016 – Final Programme
September 26th, 2016 – DGM Tag 2016, the DGM General Assembly
September 27th- 29th, 2016 – MSE 2016 Congress

G Colloquium of Honour

Prof. Dr. Wolfgang Kaysser

H USA-GERMAN Networking Symposium

Topic Coordinator
Oliver Kraft
KIT, Karlsruhe, Germany

TMS MRS CO-SPONSORED MEETING

For more information on plenary discussion, side events, evening programs, student-sessions and congress registration, please visit our congress homepage: **www.mse-congress.de**

Congress Venue
TU Darmstadt, karo5
Karolinienplatz 5 | 64289 Darmstadt, Germany

Congress Office
INVENTUM GmbH
Postfach 20 07 14 | 53137 Bonn, Germany
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A Functional Materials and Devices

A01 - High-Temperature Functional Materials
Holger Fritze (Clausthal University of Technology, Germany);
Osman Adiguzel (Firat University, Turkey)

A02 - Advanced Materials for Lithium Ion Batteries
Hans J. Seifert (KIT, Karlsruhe, Germany)

A03 - Materials for Energy Engineering
Peter Schaaf (Ilmenau University of Technology, Germany);
Wolfram Jaegermann (Darmstadt University of Technology, Germany);
Olivier Guillon (Forschungszentrum Jülich GmbH, Germany)

A04 - Thermo-Chemical Materials for long term compact heat storage
Henk Huinink (Technical University of Eindhoven, The Netherlands);
Leo Pel (Technical University of Eindhoven, The Netherlands);
Olaf Adan (TNO, The Netherlands)

A05 - Semiconductor materials at the nano- and microscale for novel applications
Paloma Fernández (Ciudad Universitaria Madrid, Spain)

A06 - Catalytic Materials and Processes for Energy Storage and Conversion
Monica Kosa (Bar-Ilan University, Israel);
Clotilde S. Cucinotta (CRANN, Trinity College, Ireland)

A07 - Advanced materials for Na-ion based energy storage devices
Maria Helena Braga (University of Porto, Portugal);
John B. Goodenough (The University of Texas at Austin, USA)

A08 - Material-integrated intelligent systems for real time condition awareness
Axel von Hehl (IWT Bremen, Germany); Lothar Kroll (Chemnitz University of Technology, Germany); Stefan Bosse; Armin Lechleiter; Dirk Lehmhus (University of Bremen, Germany); Richard Fu (Northumbria University, UK)

A09 - Shape Memory Alloys - Basics and Applications
Alexander Czechowicz (Zentrum für angewandte Formgedächtnistechnik, Germany)

A10 - Ferroelectric and Multiferroic Materials
Michael J. Hoffmann (KIT, Karlsruhe, Germany)

A11 - Hierarchical Materials
Gerold Schneider (Hamburg University of Technology, Germany);
Wolfgang Peukert (University of Erlangen-Nuremberg, Germany)

A12 - Recent trends in shape memory alloys
Thomas Niendorf (University of Kassel, Germany);
Hans Jürgen Maier (Leibniz University Hannover, Germany)

A13 - Advances in Thermoelectricity : From Materials to Devices
Marie-Christine Record (Aix-Marseille University, France);
Pascal Boulet (Aix-Marseille University, France)

Topic Coordinator
Michael J. Hoffmann
KIT, Karlsruhe, Germany

B Structural Materials

B01 - Very High Cycle Fatigue
Hans-Jürgen Christ (University Siegen, Germany);
Martina Zimmermann (Dresden University of Technology, Germany)

B02 - Hydrogen embrittlement and delayed cracking of steels
Thorsten Michler (Adam Opel AG, Ruesselsheim, Germany)

B03 - Low cycle fatigue of fiber reinforced plastics
Thorsten Michler (Adam Opel AG, Ruesselsheim, Germany)

B04 - Intermetallics: Physical Metallurgy, Processing and Characterisation
Fritz Appel (Helmholtz-Zentrum Geesthacht, Germany);
Michael Oehring (Helmholtz-Zentrum Geesthacht, Germany);
Jonathan Paul (Helmholtz-Zentrum Geesthacht, Germany)

B05 - Advances in Light-Metal Alloys and their Processing
Wim Sillekens (ESA - European Space Agency, The Netherlands);
Jürgen Hirsch (Hydro Aluminium Rolled Products GmbH, Germany)

B06 - Advanced Steels for Structural Applications
Wolfgang Bleck (RWTH Aachen, Germany);
Horst Biermann (Bergakademie Freiberg University of Technology, Germany)

B07 - Bulk Ultrafine- and Nano-structured Materials
Martin Wagner (Chemnitz University of Technology, Germany);
Philipp Frint (Chemnitz University of Technology, Germany)

B08 - Hybrid Structures and Materials
Joachim Hausmann (Kaiserslautern University of Technology, Germany)

B09 - Mechanical Properties and Microstructure
Eberhard Kerscher (Kaiserslautern University of Technology, Germany);
Frank Walther (Dortmund University of Technology, Germany)

B10 - Surface Engineering and Functionalisation
Volker Schulze (KIT, Karlsruhe, Germany);
Carsten Gachot (Saarland University, Germany);
Andres Fabian Lasagni (Fraunhofer Dresden, Germany)

B11 - Third Generation Advanced High Strength Steels by Quenching and Partitioning
Roumen Petrov (Ghent University, Belgium);
Maria J.Santofimia (Delft University of Technology, The Netherlands);
Ilchat Sabirov (IMDEA Materials Institute, Madrid, Spain)

B12 - Influence of the microstructure on corrosion properties of steel alloys
Maria J. Santofimia (Delft University of Technology, The Netherlands);
Yaiza Gonzalez-Garcia (Delft University of Technology, The Netherlands)

B13 - Tribology across length-scales: experiments and simulations
Christian Greiner, (KIT, Karlsruhe, Germany); Steffen Brinckmann (Max-Planck-Institut für Eisenforschung, Dusseldorf, Germany)

Topic Coordinator and Co-Coordinator:
Christoph Leyens
Dresden University of Technology, Germany
Martin Heilmaier
KIT, Karlsruhe, Germany

C Synthesis and Processing

C01 - Protective Coatings and Functional Thin Films
Monika Willert-Porada (University of Bayreuth, Germany);
Michael Stüber (Karlsruhe Institute of Technology, Germany);
Jörg Vetter (Oerlikon Balzers Coating Germany GmbH, Bergisch-Gladbach, Germany)

C02 - Nanomaterials and Composites
Karl-Heinz Haas (Fraunhofer Institute for Silicate Research, Würzburg, Germany);
Rainer Gadow (University of Stuttgart, Germany);
Paul Olaru (IMNR-Academy of Romania, Romania)

C03 - Materials for Additive Manufacturing Technologies
Jürgen Stampfl (Vienna University of Technology, Austria);
Fernando A. Lasagni (Andalusian Foundation for Aerospace Development, La Rinconada, Sevilla, Spain)

C04 - Wet Processed Functional Materials and Printed Electronics
Thomas Mayer (Darmstadt University of Technology, Germany)

C05 - Joining and Integration Issues of Composites
Monica Ferraris (Politecnico di Torino, Italy)

C06 - Tailored-Precursor Approaches to Nanocellular and Functional Ceramics
Samuel Bernard (CNRS-University Montpellier, France);
Emanuel Ionescu (Darmstadt University of Technology, Germany);
Gabriela Mera (Darmstadt University of Technology, Germany);
Sanjay Mathur (University of Cologne, Germany)

C07 - Laser, Plasmas and Hybrid Nano-technologies for Surface Processing
Xerman de la Fuente Leis (University of Zaragossa, Spain);
Agustín Rodríguez González-Elipe (University of Sevilla, Spain)

C08 - Advanced Paper-Based Materials
Markus Biesalski (Darmstadt University of Technology, Germany);
Ralf Riedel (Darmstadt University of Technology, Germany)

C09 - Functionalized few-layer graphene: production, study and applications
Arkady M. Ilyin (Kazakh National University, Kazakhstan);
Uwe Bratzler (CERN, USA);
Stanislav Pospisil (Czech Technical University, Czech Republic);
Altynay Togambayeva (Stanford Linear Accelerator Center, USA)

Topic Coordinator and Co-Coordinator:

Ralf Riedel
Darmstadt University of Technology, Germany

Sanjay Mathur
University of Cologne, Germany


D Characterisation

D01 - Advanced and In-Situ Microscopies in Materials Science and Engineering
Guillermo Solórzano (Pontifical Catholic University of Rio de Janeiro, Brazil);
Joachim Mayer (GFE-RWTH Aachen University, Germany);
Rafal E. Dunin-Borkowski (Ernst Ruska-Centre, Juelich, Germany);
Wolfgang Jäger (Materials Science, Christian-Albrechts-University Kiel, Germany)

D02 - Application of orientation contrast microscopy for the investigations of phase transformations and plastic deformation
Stefan Zaefferer (Max-Planck-Institut für Eisenforschung, Dusseldorf, Germany);
Roumen Petrov (Ghent University, Belgium);
Leo Kestens (Ghent University, Belgium)

D03 - Scanning Probe Techniques
Doru C. Lupascu (University of Duisburg – Essen, Germany);
Vladimir Shvartsman (University of Duisburg – Essen, Germany)

D04 - Small scale and in situ mechanical testing
Karsten Durst (Darmstadt University of Technology, Germany);
Verena Maier-Kiener (Austrian Academy of Sciences, Austria);
Thomas Niendorf (University of Kassel, Germany);
Anja Weidner (Bergakademie Freiberg University of Technology, Germany)

D05 - Process-microstructure-property relationships in additive manufacturing
Thomas Niendorf (University of Kassel, Germany);
Frank Walther (Dortmund University of Technology, Germany)

D06 - Analytical Methods for Thin Film Investigations
Susan Schorr (Helmholtz-Zentrum Berlin, Germany);
Francesco Di Benedetto (University of Florence, Italy)

D07 - High-resolution multiscale characterization
Steven van Petegem (Paul Scherrer Institut, Villigen, Switzerland);
Julia Wagner (KIT, Karlsruhe, Germany);
Daniel Kiener (Montanuniversitaet Leoben, Austria)

D08 - Multiscale Structure-Functional Characterization & Modeling of Musculoskeletal Mineralized Tissues
Quentin Grimal (Laboratoire d'Imagerie Biomédicale, France)

Topic Coordinator and Co-Coordinator:

Anke R. Kaysser-Pyzalla
Helmholtz-Zentrum Berlin, Germany

Cécile Hébert
EPFL Lausanne, Switzerland


E Modelling and Simulation

E01 - Microstructure and property evolution in applied materials: Aspects of chemo-mechanical coupling in metals and polymers
Ingo Steinbach (Ruhr-University Bochum, Germany);
Marina Grenzer (Leibniz Institute of Polymer Research Dresden, Germany)

E02 - Experimental and Computational Thermodynamics and Kinetics
Hans J. Seifert (KIT, Karlsruhe, Germany);
Damian M. Cupid (KIT, Karlsruhe, Germany)

E03 - Multiscale description of advanced materials properties
Marcela Trybula (Institute of Metallurgy and Materials Science, Poland);
Przemyslaw Fima (Institute of Metallurgy and Materials Science, Poland);
Rafal Kozubski (Jagiellonian University, Poland)

E04 - Atomistic to Mesoscale Modelling and Characterization of Materials for Energy Applications
Marie-Christine Record (Aix-Marseille University, France);
Pascal Boulet (Aix-Marseille University, France);
Maria Helena Braga (Engineering Faculty of the Porto University, Portugal);
Anter El-Azab (Purdue University, West Lafayette, USA)

E05 – Atomistic origin of ductility
Martin Friak (Institute of Physics of Materials of the Academy of Sciences of the Czech Republic, Brno, Czech Republic)

E06 - Modelling Material Behaviour, Degradation and Reliability of Advanced Ceramics
Andreas Kailer (Fraunhofer IWM, Freiburg, Germany);
Iyas Khader (German-Jordanian University, Jordan)

E07 - Integrated Computational Materials Engineering (ICME) for Materials Design using Numerical Synchronized Approaches Linking Different Scale Algorithms
Ali Ramazani (University of Michigan-Ann Arbor, USA);
Ulrich Prahl (Steel Institute (IEHK) at RWTH Aachen University, Germany);
Georg J. Schmitz (ACCESS e.V. at the RWTH Aachen, Germany);
Matthias Schmidtchen (Bergakademie Freiberg University of Technology, Germany)

E08 - Microstructural Evolution – recent advances in experiments and modelling
Heike Emmerich (University of Bayreuth, Germany);
Ernst Gamsjäger (Montanuniversitaet Leoben, Austria);
Markus Rettenmayr (Friedrich Schiller University Jena, Germany)

E09 - Experimental characterization and modelling of nano-reinforced soft matters
Daniel Juhre (Otto-von-Guericke-University Magdeburg, Germany);
Roozbeh Dargazany (Michigan State University, USA)

Topic Coordinator and Co-Coordinator:

Alexander Hartmaier
Ruhr-University, Bochum, Germany

Peter Gumbsch
Fraunhofer Institute for Mechanics of Materials IWM, Freiburg, Germany


F Biomaterials and Polymeric Materials

F01 - Bio-Interfaces and Coatings
Thomas Keller (DESY-Deutsches Elektronen-Synchroton, Hamburg, Germany);
Klaus D. Jandt (Friedrich Schiller University Jena, Germany)

F02 - Degradation Mechanisms and Characterization of Biodegradable Materials
Frank Feyerabend (Helmholtz-Zentrum Geesthacht, Germany);
Daniela Zander (RWTH Aachen University, Germany)

F03 - Biomaterials Applications
Aldo R. Boccaccini (University of Erlangen-Nuremberg, Germany);
Jonny Blaker (University of Manchester, England)

F04 - Bio-inspired Materials
Peter Fratzl (Max Planck Institute of Colloids and Interfaces, Potsdam, Germany);
Ingo Burgert (ETH Zurich, Switzerland);
Thomas Scheibel (University of Bayreuth, Germany)

F05 - SPP 1569 Generation of Multifunctional Inorganic Materials by Molecular Bionics
Joachim Bill (University of Stuttgart, Germany)

F06 - Biomaterials for Tissue Engineering
Bora Garipcan (Bogaziçi University, Istanbul, Turkey);
Nuno Neves (Universidade do Minho, Braga, Portugal)

F07 - Polymeric Materials
Hansgeorg Haupt (Darmstadt University of Technology, Germany)

F08 - New generation biopolymers and biopolymer composites: Synthesis, characterization and applications
Athanassia Athanassiou (Istituto Italiano di Tecnologia, Genova, Italy);
Ilker S. Bayer (Istituto Italiano di Tecnologia, Genova, Italy)

F09 - Materials for Bone Tissue Regeneration
Christian Heiß (University Hospital of Giessen and Marburg, Germany);
Volker Alt (University Hospital of Giessen and Marburg, Germany)

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Klaus D. Jandt
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