# Registration

#### Workshop participation fee

KMM-VIN members150 EURFEMS members150 EURNon-members250 EUR

To register for the Workshop please fill out this form and press Send button.

Alternatively you can fax the registration form using the fax number given below.

The KMM-VIN office will confirm your registration within 24 hrs.

After that you will be asked to proceed with the payment of the Workshop fee by bank transfer to account no.: **BE42 3630 2151 6054** 

Please complete one form per participant.

Last Name		
First Name(s)		
Position		
Company/Institution		
Address		
Zip code, City		
Country		
Phone		
E-mail		
KMM-VIN member FEMS member I'd like to present a paper Billing address:	yes yes oral other, see below	no no poster as above
		SEND
Fax reply: (+32) 2 791 5536 E-mail registration: meetings@kmm-vin.eu		

#### Contact

Registration fee includes: participation in all sessions, coffee and beverages during breaks, lunch and guided visit to Prado Museum.

For any inquiry on the workshop please contact:

Andrés Díaz Lantada, UPM e-mail: adiaz@etsii.upm.es

### Workshop venue

The workshop will take place at:

ETSI Industriales, Universidad Politécnica de Madrid c/ José Gutiérrez Abascal 2, 28006 Madrid, Spain





#### Accommodation

ETSI Industriales is located in the city centre, just by the "Paseo de la Castellana", the central avenue of Madrid. Recommended hotels at walking distance include:

Hotel NH Madrid Zurbano, c/Zurbano, n. 79-81 http://www.nh-hoteles.es/hotel/nh-madrid-zurbano

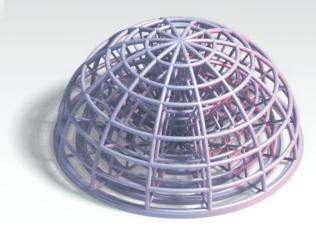
Hotel NH Collection Madrid Abascal, c/ José Abascal, n. 47 http://www.nh-collection.com/es/hotel/nh-collectionmadrid-abascal



# **Industrial Workshop**

# Multi-scale and multi-physics materials modeling for advanced industries

26-27<sup>th</sup> January 2016 Madrid, Spain



#### organized by

Universidad Politécnica de Madrid

European Virtual Institute on Knowledge-based Multifunctional Materials AISBL

Federation of European Materials Societies







## **Objectives**

The workshop is the fifth in the series of industrially oriented workshops organized by KMM-VIN in collaboration with leading research centres and industry. The most recent advances in material science and technology with high industrial potential are presented. The workshops provide a unique opportunity to start or intensify the communication and cooperation between scientists and engineers.

This workshop is aimed at presenting the latest developments in multi-scale and multi-physics materials modeling, especially those linked to final application in industries including: transport, energy, health, manufacturing, and information and communication technologies, among other relevant industrial practices.

The scope of the workshop will cover:

- Multi-scale/physics modeling of the synthesis, processing and application of materials
- Modeling of conventional materials: metals, alloys, ceramics, polymers and composites
- Modeling of modern materials: multifunctional (smart) materials, nanocomposites, metamaterials, biomaterials and biomimetic materials
- Promotion of knowledge-based materials for enhanced industrial performance
- Cases of success in health, transport, energy, manufacture and ICT industries

#### **Abstracts**

All participants are invited to submit abstracts for oral or poster presentation. The abstracts should be no longer than 300 words. An image, diagram and alike may be included, provided the full abstract (title, author information, text, figures, references, etc.) fits into a one page.

Please send your abstracts by email to Andrés Díaz Lantada (<u>adiaz@etsii.upm.es</u>) by **23<sup>rd</sup> Dec. 2015**.



## Workshop programme

#### 26<sup>th</sup> January 2016

Invited lectures (14:30-17:00)

Andrés Díaz Lantada (TU Madrid, Spain)

"Multi-scale design and manufacturing of biodevices for interacting at cellular level"

Josefa Predestinación García Ruíz & Miguel Manso Silván (Molecular Biology-UAM, Madrid, Spain)

"Tailoring micropatterned biointerfaces to improve mesenchymal stem cell differentiation"

Michele Chiumenti (CIMNE – UPC, Barcelona, Spain) "Modeling of 3D printing processes"

Francisco Moreno Chacón (ABENGOA, Seville, Spain) "Advanced simulation of multi-layered materials for energy"

François Hild (LMT Cachan, France)

"Identification and validation of crystal plasticity models for the nuclear energy industry"

Coffee break (17:00 -17:30)

Poster session (17:30-18:30)

\*\* Guided visit to Prado Museum (19:00-20:00) and Madrilenian Tapas Night (20:00-23:59) \*\*

# Workshop programme

#### 27th January 2016

Invited lectures (8:30-12:00)

Juan Manuel Muñoz Guijosa (TU Madrid, Spain)

"Development strategies for mechanical elements based on carbon nano-composites"

Jörg Hohe (Fraunhofer IWM, Freiburg, Germany)
"Long fiber reinforced thermoplastics: Challenges in

"Long fiber reinforced thermoplastics: Challenges ir numerical modeling from micro to macro scale"

Łukasz Madej & Maciej Pietrzyk (AGH Krakow, Poland)

"Multi scale modeling techniques in application to automotive sector"

Alberto Escrig, Vicente Cantavella, Francisco Gilabert & Arnaldo Moreno (ITC Castellón, Spain)

"Modeling in traditional ceramics"

Evangelos Hristoforou (NTUA, Athens, Greece)

"New problems in magnetic materials modeling"

Leonidas Tsetseris (NTUA, Athens, Greece)

"Quantum-mechanical modeling of emerging technological materials"

Karin Zoier (TU Graz, Austria)

"Charge transport in disordered semiconductors and organic semiconductor devices"

Coffee break (12:00-12:30)

Parallel oral sessions (12:30-14:00)

Contributed presentations by Workshop participants

Sandwich Lunch (14:00-14:30)

KMM-VIN Forum and

Informal brokerage event for Horizon 2020 (14:30-15:00)