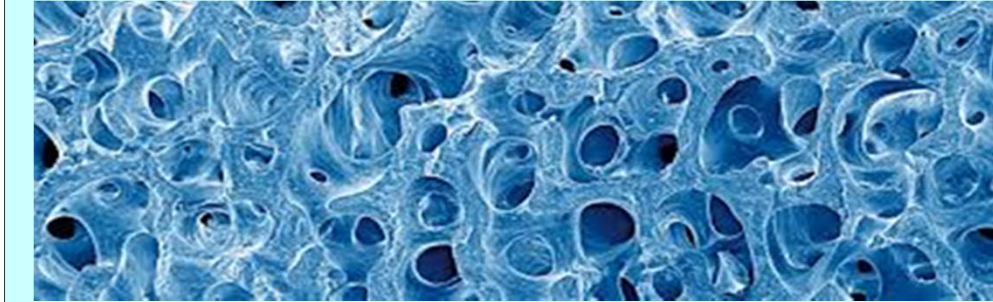


Program Schedule

Workshop on NANO MATERIALS (Harvard-MIT & Universities CEI Moncloa)

TIME	Session	SPAIN	USA
08:30-08:45	Welcome	Prof. Páez, Prof. del Cañizo (UPM)	Prof. del Álamo (MIT)
8:45-09:15	Keynote Speech		Prof. Emilio Méndez (Brookhaven National Lab)
9:15-10:15	S1. Nanoelectronic 2D Materials	Prof. Calle (UPM)	Prof. Kim (Harvard), Profs. Palacios & Jarillo (MIT)
10:15-10:30	Coffee Break		Break
10:30-11:15	S2. Optoelectronic Devices	Prof. Sánchez (UPM)	Prof. Loncar (Harvard), Prof. del Álamo (MIT)
11:15-12:00	S3. Biomaterials	Prof. Manzano (UCM)	Prof. Farokhzad (Harvard), Prof. Hamad-Schiffertli (MIT)
12:00-13:00	Lunch		Break
13:00-14:00	S4. Photovoltaic Devices	Prof. Martín (UCM), Prof. Martí (UPM)	Prof. Mazur (Harvard), Prof. Buonassisi (MIT)
14:00-15:00	S5. Storage Applications	Prof. Pérez (UCM), Dr. Datas (UPM)	Prof. Aziz (Harvard), Dr. Zhitomirsky (MIT)
15:00-15:15	Coffee Break		Break
15:15-16:15	S6. Materials for Advanced Applications	Prof. León (UCM), Profs. Güemes & Perlado (UPM)	Prof. Ramanathan (Harvard)
16:15-17:00	Materials in CEI Moncloa	Prof. Prieto (UPM) / Prof. Pérez-Trujillo (UCM)	
17:00-17:30	Funding and transfer opportunities	Prof. Prieto (UPM) / Prof. Pérez-Trujillo (UCM)	
17:30-17:45	Final Conclusions	Prof. Páez, Prof. del Cañizo (UPM)	
17:45-18:30	Spanish wine		
<i>Coffee & Tea will be available during the sessions</i>			
Format	45m/1h Each Session		
Venue:	RCC at Harvard, 26 Trowbridge St, 02138 Cambridge, MA		
Date:	May-1-2015		
		Harvard Univ & MIT UPM & UCM	



Workshop on Nanomaterials

Real Colegio Complutense

www.rcc.harvard.edu

May 1st, 2015

Organizers

Profs. José M. Páez & Carlos del Cañizo (UPM)
Prof. Jesús del Álamo (MIT)

Co-Sponsored by

Real Colegio Complutense at Harvard
Campus of International Excellence MONCLOA
Universidad Politécnica de Madrid
Universidad Complutense de Madrid

Collaboration of
Universidad de Alcalá



Description

“What I want to talk about is the problem of manipulating and controlling things on a small scale.” This sentence was part of the famous talk “There is plenty of room at the bottom” that Richard Feynman gave in 1959. Although it took several decades to be able to follow the paths he envisioned, we can say that in a short time we have gone quite far in bringing his dreams to reality. Materials research has made huge progress in understanding the very small, and in manipulating it to accomplish big things. It is a powerful tool that has enabled new applications that are changing the way we communicate, build energy systems or tackle health problems... in summary, the way we live.

In the process of taking a closer look to materials, it has become clear that the boundaries between disciplines are extremely fuzzy, so that physicists, chemists, biologists, engineers, social scientists, etc., need to complement their visions and work together. It is in this cross-fertilization that exciting ideas find their way through, and materials research can contribute to address the challenges that our societies confront.

RCC-Harvard will hold a 1-day workshop with faculty from UPM, UCM (CEI Moncloa), MIT and Harvard University. The goal is to create a unique opportunity for faculty and researchers from these institutions to debate their work and research interests in the wide area of Nanomaterials.

The workshop on Nanomaterials will consist of a keynote speech and six sessions:

KS. The Brookhaven national Lab

1. Nanoelectronic 2D Materials
2. Optoelectronic Devices
3. Biomaterials
4. Photovoltaic Devices
5. Storage Applications
6. Materials for Advanced Applications

A panel with final conclusions will end the day. In addition, it is expected that the interdisciplinary attendance to the workshop could help to retune the research lines and open new opportunities for collaboration among the four universities under the umbrella and promotion of RCC-Harvard.

List of participants

Univ.	Professor	Topic
UPM	José M Páez	Welcome
UCM	José M. Martínez	Welcome
UPM	Carlos del Cañizo	Welcome
SUNYSB	Emilio Méndez	The Brookhaven National Lab
Harvard	Philip Kim	Quantum transport in graphene
UPM	Fernando Calle	Graphene foams
MIT	Tomás Palacios	Graphene for microelectronics
MIT	Pablo Jarillo	2D materials
UPM	Miguel Ángel Sánchez	Novel optoelectronics devices
Harvard	Marco Loncar	Diamond photonics and Nanomechanics
MIT	Jesús del Álamo	Welcome & Novel transistor materials
MIT	Kim Hamad-Schifferli	Medical applications of nanoparticles
UCM	Miguel Manzano	Advanced bioceramics for medicine
Harvard	Omid Farokhzad	Nanoparticle drug delivery
UCM	Nazario Martín	Organic molecular materials for PV
Harvard	Eric Mazur	Hyperdoped silicon
UPM	Antonio Martí	Intermediate band solar cells
MIT	Tonio Buonassisi	Tandem solar cells
UCM	Francisco J Pérez-Trujillo	Corrosion in fuel cells & CEI Moncloa
MIT	David Zhitomirsky	Solar thermal fuels
UPM	Alejandro Datas	Ultradense high energy storage
Harvard	Michael Aziz	Flow batteries
UPM	Alfredo Güemes	Smart composites
Harvard	Shriram Ramanathan	Correlated oxides
UCM	Carlos León	Physics of Complex Materials
UPM	Manuel Perlado	Materials for nuclear fusion
UPM	Roberto Prieto	CEI Moncloa
MIT	Lita L Nelsen	Funding and transfer opportunities