



POLITECNICO
MILANO 1863

BioM&M

1st International Conference on Materials, Mimicking, Manufacturing
from and for Bio Application

Chairs: L. Vergani and M. Guagliano - Politecnico di Milano, Italy

Milan (Italy), 27-29 June, 2018

Call for Papers

<http://www.biomm.org>

info@biomm.org

Foreword

The world "Bio" is used as prefix in many different scientific and industrial fields to define subjects and applications that have something to do with "life" or the living world. Nowadays a lot of different subjects are classified in the "bio" area: from materials inspired by biological microstructures for high-tech applications, to artificial bio-compatible tissues, from the imitation of efficient movements of some animal species to the design of surfaces for superior biocompatibility and many more could be cited. All these subjects originated different research fields with different aims and attracted the interest of many researchers acting in quite separate areas, with almost no relation.

Indeed a deeper focus on the different "bio" fields shows that there are many possible interactions among them and that a stricter dialogue and communication among scientists, doctors and engineers acting in the different fields could result in a virtuous synergy, allowing a complete exploitation of the results, differently and independently obtained.

The **BioM&M** Conference is aimed at fostering research on bio medical/materials/mimicking/manufacturing, promoting related international cooperation among scientists and engineers acting in different fields and providing means for the public dissemination of the results from these efforts. The conference brings together users, producers and researchers, engineers, doctors and scientists who have a common interest in various aspects of biological issues. The final objective is to facilitate and encourage the exchange of knowledge and experience among different "bio" communities involved in using, improving, developing, assessing and conducting basic and applied research.

Topics of the conference

Additive manufacturing
Nature Inspired systems
Mechanical behaviour
Mechanical characterization
Tissue design
Composites

Medical coatings and surfaces
Medical devices
Health monitoring
Computed aided surgery
Bio-Compatibility
Advanced diagnostic tools

Smart-Sensors
Multi-scale modelling
Prototyping
Markers
Smart devices

Scientific Committee (to be completed)

M. Aliofkhaezrai (Iran)
M. Alfano (Italy)
F. Auricchio (Italy)
M. Ayatollahi (Iran)
K. Bertoldi (USA)
M.J. Buehler (USA)
A. Carrado (France)
A. Khademhosseini (USA)
L. Kunz (CZ)
R. Müller (CH)

R. Pietrabissa (Italy)
N. Pugno (Italy)
Z. Qin (USA)
A. Redaelli (Italy)
T.S. Sudarshan (USA)
P. Vena (Italy)
T. Webster (USA)
J. Yíng (Singapore)
A. Zadpoor (NL)

Local Organising Committee

Sara Bagherifard
Chiara Colombo
Mario Guagliano
Flavia Libonati
Mohammad Mirzaali
Stefano Monti
Matteo Strano
Laura Vergani

Important dates

Call for papers: May 2017
Submission of abstracts: 31st January 2018
Notification of acceptance: 20th February 2018
Submission of papers: 10th April 2018
Notification of paper acceptance: **30th April 2018**
BioM&M: 27-29 June, 2018



The Last Supper, by Leonardo da Vinci

Conference venue

BioM&M will be hosted at **Politecnico di Milano (POLIMI, www.polimi.it)**, Campus Bovisa. POLIMI is ranked as one of the foremost technical universities in Europe and is the largest technical university in Italy. The Campus is well served by public buses, suburban trains and metro lines.

Milan is the second largest Italian city, the main industrial, commercial and financial centre of the country, recognized as a major world fashion and design capital. Milan is characterized by its dynamism, creativity and innovation (<https://youtu.be/Hcsbuabrevl>). Milano is also full of historical and cultural monuments and sites: the Cathedral (Duomo), a masterpiece of Gothic Architecture, the Castle, the Opera House "Alla Scala", the famous mural painting Last Supper by Leonardo Da Vinci are examples of what Milan offers to visitors. Further info about Milan and the Conference Venue can be found on the website www.biomm.org.



Politecnico di Milano



The Cathedral of Milan, il Duomo.



The Opera House "Alla Scala"

Plenary lectures



Professor Ralph Müller

Institute for Biomechanics, ETH Zurich
<http://www.bone.ethz.ch>

"Biomimetic 3D printing of bone"



Professor Thomas Webster

Chemical Engineering Department,
Northeastern University, Boston
<http://www.che.neu.edu>

"The Age of Nano-biotics: Killing Bacteria and Growing Tissues Without Drugs"



Professor Jackie Y Ying

Institute of Bioengineering and Nano
technology, Singapore
<http://ibn.a-star.edu.sg>

"Nanomaterial and Nanosystems for Biomedical Applications"

Abstracts and papers, Special sessions, Symposia

Abstracts (max 200 words) will be uploaded directly on the website. Instruction on how to prepare paper with template will be on the Web site of the conference. The official language of the conference is English.



The Conference Proceedings will be distributed in electronic format at the conference and published on **Materials Today: Proceedings** (Elsevier), indexed in **Scopus**.

Extended version of selected papers will be recommended for publication in special issues of journals with high recognition in the field and ranked in Scopus database.

People wishing to organize **special sessions** as well as **symposia** are invited to contact secretary@biomm.org.

Presentation of the papers

ORAL: Multimedia projectors and notebooks will be provided in the lecture hall. The presentation should be prepared in MS Power Point or PDF.

POSTER: Authors are kindly asked not to exceed the size 800 mm (width) x 1000 mm (height).

SUBMISSION: The submission procedure will be published on the **BioM&M** website, (<http://www-biomm.org>).

Conference fees

BEFORE 01. 05. 2018:

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|---------------------|----------|
| Regular participant | 600 EUR* |
| Student | 400 EUR* |
| Accompanying person | 250 EUR* |

Conference fee for a regular participant includes conference proceedings, book of abstracts, participation on oral and poster sessions, welcome drink, lunches, coffee breaks, technical/cultural visit and conference dinner.

AFTER 01.05. 2015:

| | |
|---------------------|----------|
| Regular participant | 700 EUR* |
| Student | 480 EUR* |
| Accompanying person | 250 EUR* |

*VAT is not included

Student conference fee includes conference proceedings, book of abstracts, participation on oral and poster sessions, welcome drink, lunches, coffee breaks, technical/cultural visit.

Accompanying persons fee includes welcome drink, lunches, coffee breaks, excursion, guided visits in Milan, conference dinner.

Information about the payment of the conference fee (i.e. about bank account and payment card procedure) can be found in the web pages of the Conference (<http://www.biomm.org>) or contacting info@biomm.org.

Accommodation

Many hotels are available both near the Campus and in the centre of Milan. 15-20 minutes from the Campus by public transport (Urban Trains and Metro), with special rates for the Conference attendees. More information can be found in the website of the Conference (<http://www.biomm.org>) or contacting info@biomm.org.