

## About the Organizers

**KMM-VIN AISBL** ([www.kmm-vin.eu](http://www.kmm-vin.eu)) is an international non-profit association that creates conditions for conducting joint research on advanced materials. It offers mobility programme for young researchers, courses and trainings on materials for Transport, Energy and Biomedical sectors.

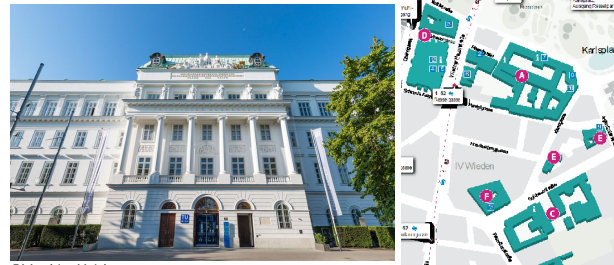
**TU Wien** ([www.tuwien.ac.at](http://www.tuwien.ac.at)) is one of Europe's leaders in science and technology-related research and education. As part of TU Wien, the Institute for Mechanics of Materials and Structures (**IMWS**) ([www.imws.tuwien.ac.at](http://www.imws.tuwien.ac.at)) is at the international forefront in the broad field of mechanics-driven engineering sciences, delivering fundamental knowledge and technology towards the relief of our challenged planet through sustainable building materials and technologies, circular economy, and health. We teach the next generation of civil, material, and biomedical engineers in a seamless education path from essential topics of continuum mechanics and strength of materials, via structural engineering, to timber construction, green building, and computational biomedicine.

**VICEM** ([www.vicem.at](http://www.vicem.at)), the Vienna Center for Engineering in Medicine is a joint cooperation center of TU Wien and Medical University of Vienna. This center is entitled both to research and teaching at a top international level, and to a leading role in the national context - as a competent partner for the public sector and the industry. The cooperation partners look back on a decade-long tradition of joint research activities at the research group level. These activities have triggered joint teaching activities, such as the master study for biomedical engineering at TU Wien.

**ESB-AC**, the Austrian chapter of the European Society of Biomechanics ([www.esbiomech.org/affiliated-societies/esb-national-chapters/austrian-national-chapter/](http://www.esbiomech.org/affiliated-societies/esb-national-chapters/austrian-national-chapter/)), represents all ESB members who are affiliated with an organization in Austria. The vibrant Austrian biomechanics community spreads over almost all Austrian universities and research institutions.

## Workshop Venue

The meeting will take place in the Main Building of TU Wien, located (building A, see map), located at Karlsplatz 13, 1040 Vienna.



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Within Vienna, the conference venue can be easily reached by public means of transport (underground lines U1, U4; tramway lines D, J, 1, 2, 62, 65; and bus lines 4A, 59A).

### Your Way to the Venue from the Airport

By train

„Schnellbahn - S7“ - Trains run at intervals of 30 minutes; the ride to the train station (“Wien Mitte/Landstraße”, connections to U3, U4) takes approx. 25 minutes.

InterCity & Railjet - Trains run at intervals of approx. 30 minutes; stops at train station “Wien Hauptbahnhof” (connection to U1, 20 minutes) or “Wien Meidling” (connection to U6, 30 minutes)

By CAT (City Airport Train) - Trains also run at intervals of 30 minutes; the ride to the train station (“Wien Mitte/Landstraße”, connections to U3, U4) takes only 16 minutes.

By bus

Buses VAL 1 run at intervals of 60 minutes in front of the arrivals' area of the airport: the ride to station “Wien Hauptbahnhof” (connections to U1) takes approx. 25 minutes.

By taxi - the ride takes approx. 20 minutes.

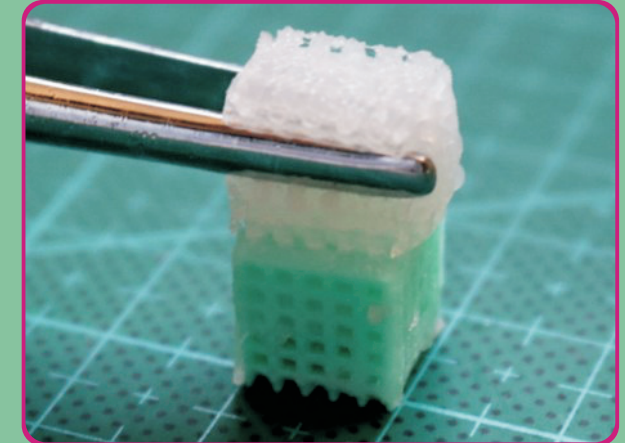
Joint KMM-VIN / ViCEM / ESB  
cross-disciplinary workshop

on

**Biomedical and bioinspired  
materials and structures: a  
cross-disciplinary approach**

combining the

**9th KMM-VIN Industrial Workshop  
Biennial ViCEM Meeting  
Austrian Chapter Meeting of ESB**



September 22-23, 2022  
Vienna, Austria

[www.kmm-vin.eu/workshops/  
vienna\\_2022](http://www.kmm-vin.eu/workshops/vienna_2022)

## Objectives

The joint workshop will be held at TU Wien (Vienna University of Technology), on September 22-23, 2022 as a pure onsite event.

This workshop will be the ninth in the series of industrially oriented workshops organized by KMM-VIN in collaboration with leading research centres and industries. Presenting the most recent advances in material science and technology, the KMM-VIN workshops provide a unique opportunity for starting and/or intensifying the communication and cooperation between scientists and engineers, aiming at material-driven transformation of various industrial sectors.

**In order to broaden the effect of the event, this time, KMM-VIN joins forces with ViCEM, the cooperation center linking engineering with the biomedical world; and with the Austrian Chapter of the European Society of Biomechanics, which encourages, on a general level, research, disseminate knowledge and promote progress in Biomechanics.**

The workshop will cover, but is not necessarily restricted to, the following topics:

Mathematical modeling, experimentation, and design of biomedical and bioinspired materials and structures

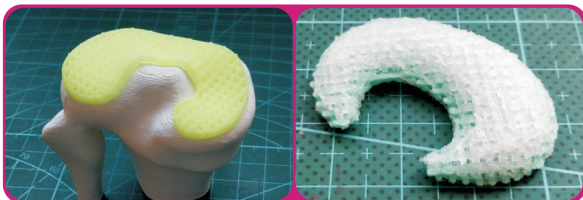
Microstructure-property relationship for hierarchical materials

Artificial intelligence-aided design of innovative biomaterials and bioinspired materials

Manufacturing hierarchical biomaterials

Cases of success in different industrial sectors: health, energy, transport, space and construction

Medical perspectives and demands concerning biomedical and bio inspired materials and structures



## Workshop Programme

The programme will consist of keynote lectures and original contributions (oral and posters).

The scientific programme is expected to start on September 22 in the morning and to end in the early afternoon of September 23.

Besides technical aspects, the workshop will provide a good opportunity for networking that may result in future collaborative projects.

### Abstract Submission

Potential participants from industrial and academic organizations are encouraged to submit contributions to the workshop. Both, oral and poster presentations are welcome.

Abstracts of oral or poster presentations (max. 300 words) can be submitted by July 15, 2022 at [www.conftool.com/kmm-vicem-esb-2022](http://www.conftool.com/kmm-vicem-esb-2022).

### Confirmed Keynote Speakers

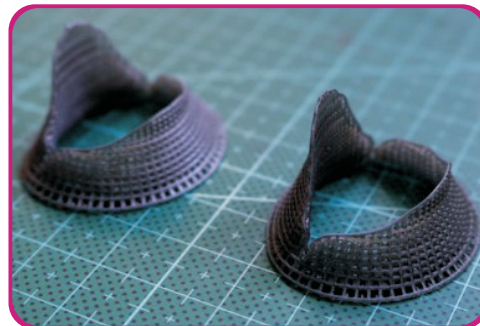
Stéphane AVRIL (École des Mines de Saint-Étienne, France)

Tomasz LIPNIACKI (IPPT PAN, Warsaw, Poland)

Andreas MENZEL (TU Dortmund University, Germany)

Jon MOLINA-ALDAREGUIA (IMDEA Materials, Madrid, Spain)

Francesco MOSCATO (Medical University of Vienna, Austria)



## Registration and Fees

The Workshop participation fees are as follows:

KMM-VIN / ViCEM / ESB Austrian Chapter members: 150 €

Non-members: 250 €

Registration fees include coffee breaks, lunches, and buffet dinner on day 1.

Interested participants are requested to register online at [www.conftool.com/kmm-vicem-esb-2022](http://www.conftool.com/kmm-vicem-esb-2022).

Deadline for registration of presenters: September 2, 2022

## Accommodation

Recommended hotels near TU Wien are:

Motel One Wien-Staatsoper

(<https://www.motel-one.com/de/hotels/wien>)

Austria Trend Hotel beim Theresianum

(<https://www.austria-trend.at/en/hotels/theresianum>)

Hotel Erzherzog Rainer

(<https://www.hotelerzherzograinier.wien/en/index.html>)

Hotel Kaiserhof

(<https://wien.hotel-kaiserhof.at/>)

## Workshop Chairs

Christian HELLMICH (TU Wien, Austria)

Katarzyna KOWALCZYK-GAJEWSKA (IPPT PAN, Poland)

Andrés DÍAZ LANTADA (Universidad Politécnica de Madrid, Spain)

Dieter PAHR (Karl Landsteiner University of Health Sciences & TU Wien, Austria)

Siegfried TRATTNIG (Medical University of Vienna, Austria)

## Contact

For any organisational questions concerning the workshop please contact the local organizer:

Martina PÖLL ([martina.poell@tuwien.ac.at](mailto:martina.poell@tuwien.ac.at), +43 1 58801 20211)

or Michal BASISTA at the KMM-VIN office

([michal.basista@kmm-vin.eu](mailto:michal.basista@kmm-vin.eu))