

TensiNet Symposium 2019

**Softening the Habitats.**

**Sustainable innovation in Minimal Mass Structures  
and Lightweight Architectures**

Politecnico di Milano  
3-5 June 2019  
Milan – Italy

For more information please visit and contact us at:

[www.tensinet2019.polimi.it](http://www.tensinet2019.polimi.it)

[tensinet2019info@polimi.it](mailto:tensinet2019info@polimi.it)

#softeningthehabitats

Organised by:

**TensiNet**



**POLITECNICO**  
MILANO 1863

**TEXTILESHUB**

**TS**  
**19**

**THE 6<sup>TH</sup> TENSINET  
SYMPOSIUM 2019  
MILAN, ITALY  
3-5 JUNE**

**SOFTENING THE HABITATS**

SUSTAINABLE INNOVATION IN MINIMAL MASS STRUCTURES AND LIGHTWEIGHT ARCHITECTURES

## The 6<sup>TH</sup> TensiNet Symposium 2019, 3-5 June, Milan – Italy

### Softening the Habitats:

Sustainable Innovation in Minimal Mass Structures and Lightweight Architectures

The last few decades have brought numerous significant innovations of materials, design and computational tools, as well as construction detailing and installation methodologies.

As a consequence, membrane construction has now an established place in the field of Architecture.

The 2019 TensiNet edition will open a twofold reflection - by means of the conference and the exhibition - on current innovations, trends and strategies in the field of lightweight membrane structures.

### The Conference

It will focus on how building technologies on membranes are being more and more directed towards achieving a smaller environmental footprint and obtaining more resilient cities and landscapes.

### The Exhibition

The exhibit will start one week prior to the conference and it will show an exhaustive picture of responsibilities at various levels – academia, industries, practitioners, construction sector and standards – on tensile, membrane and foil constructions in Europe and worldwide.

### Symposium Secretariat

TS2019 Organizing Committee

*Politecnico di Milano*

Alessandra Zanelli | Carol Monticelli

*TensiNet association*

Evi Corne | Marijke Mollaert | Bernd Stimpfle

### Scientific Committee

Adriana Angelotti | Politecnico di Milano, Italy

Paolo Beccarelli | University of Nottingham, United Kingdom

Katja Bernert | Low & Bonar, Germany

Heidrun Bögner-Balz | DEKRA, Germany

Andrea Campioli | Politecnico di Milano, Italy

Roberto Canobbio | Canobbio Textile Engineering, Italy

Valter Carvelli | Politecnico di Milano, Italy

John Chilton | University of Nottingham, United Kingdom

Jan Cremers | Hochschule für Technik, Germany

Lars De Laet | Vrije Universiteit Brussel, Belgium

Christoph Gengnagel | Universität der Künste, Germany

Peter Gosling | Newcastle University, United Kingdom

Klaus-Michael Koch | Hightex, Germany

Sebastian Koch | Koch membranes, Germany

Nikolai Kugel | arch22, Germany

Benson Lau | University of Westminster, United Kingdom

Julian Lienhard | str.ucture, Germany

Josep Llorens | Universitat Politècnica de Catalunya, Spain

Stefania Lombardi | Canobbio Textile Engineering, Italy

Claudia Marano | Politecnico di Milano, Italy

Marijke Mollaert | Vrije Universiteit Brussel, Belgium

Carol Monticelli | Politecnico di Milano, Italy

Giorgio Novati | Politecnico di Milano, Italy

Arno Pronk | Eindhoven University of Technology, Holland

Andrea Ratti | Politecnico di Milano, Italy

Monika Rychtáriková | KU Leuven, Belgium

Franck Schoefs | Université de Nantes, France

Bernd Stimpfle | formTL, Germany

Natalie Stranghøner | Universität Duisburg-Essen, Germany

Martin Tamke | Royal Danish Academy of Fine Arts,

Denmark

Patrick Teuffel | Eindhoven University of Technology, Holland

Jean-Christophe Thomas | Université de Nantes, France

Jörg Uhlemann | Universität Duisburg-Essen, Germany

Alessandra Zanelli | Politecnico di Milano, Italy

Walter Zech | Eicon, Germany

## Monday, 3 June

Registration & Welcome ① 8:30 AM

**SOFT STRUCTURES** ①  
Chairs: Marijke Mollaert, Bernd Stimpfle

Plenary session 9:30 - 11:15 AM

Coffee Break 11:15 - 11:30 AM

Keynote lectures 11:30 - 1:00 PM

Introduction to the Exhibition 1:00 - 1:10 PM

Lunch Break ⑥ 1:10 - 2:00 PM

Parallel sessions ③a ③b 2:00 - 5:40 PM

**MOVEMENT IN LIGHTWEIGHT STRUCTURES**

Chairs:  
Natalie Stranghöner,  
Martin Tamke

Demountable structures

③a 2:00 - 3:40 PM

**RECENTLY BUILT LIGHTWEIGHT STRUCTURES**

Chairs:  
Josep Llorens,  
Jean-Christophe Thomas

Pneumatic structures  
Air-supported structures

③b 2:00 - 3:40 PM

Coffee Break ⑥ 3:40 - 4:00 PM

**Kinetic, Kinematic and Foldable structures**

③a 4:00 - 5:40 PM

**Complex/ Hybrid structures**

③b 4:00 - 5:40 PM

Field Trip 6:00 - 7:30 PM

## Tuesday, 4 June

Welcome ① 8:45 AM

**SOFTENING THE ENVIRONMENT** ①  
Chairs: Carol Monticelli, Peter Gosling

Plenary session 9:00 - 11:15 AM

Coffee Break 11:15 - 11:30 AM

Keynote lectures 11:30 - 1:00 PM

Exhibition / Poster session ⑤ 1:00 - 2:00 PM

Lunch Break ⑥ 1:00 - 2:00 PM

Parallel session ③a ③b 2:00 - 3:40 PM

**ENVIRONMENTAL COMPATIBLE MEMBRANE STRUCTURES \***

Chairs: Carol Monticelli,  
Petr Vegh

③a 2:00 - 3:40 PM

**MATERIAL ANALYSIS AND PERFORMANCE ASSESSMENT**

Chair: Peter Gosling

③b 2:00 - 3:40 PM

\* Joined IASS WG18 seminar

Coffee Break ⑥ 3:40 - 4:00 PM

**OPEN TALK session** ②  
on the main topics of the  
TensiNet Working Groups 4:00 - 5:30 PM  
Chairs: Stefania Lombardi, Bernd Stimpfle

TensiNet Partner Meeting 6:00 - 7:00 PM

Social Dinner 8:30 PM

## Wednesday, 5 June

Welcome ① 8:45 AM

**SOFT SKINS** ①  
Chairs: Alessandra Zanelli, Julian Lienhard

Plenary session 9:00 - 11:15 AM

Coffee Break 11:15 - 11:30 AM

Keynote lectures 11:30 - 1:00 PM

Exhibition / Poster session ⑤ 1:00 - 2:00 PM

Lunch Break ⑥ 1:00 - 2:00 PM

Parallel sessions ③a ③b 2:00 - 5:40 PM

**ADAPTIVITY OF MEMBRANE-BASED SKINS**

Chairs: Adriana Angelotti,  
Benson Lau

Extreme living +  
Design & Simulation

③a 2:00 - 3:40 PM

**ADAPTIVITY OF TRANSPARENT FOIL-BASED SKINS**

Chairs: Giorgio Novati,  
Monika Rychtáriková

Extreme living +  
Design & Simulation

③b 2:00 - 3:40 PM

Coffee Break ⑥ 3:40 - 4:00 PM

**Thermal & acoustic comfort**

③a 4:00 - 5:40 PM

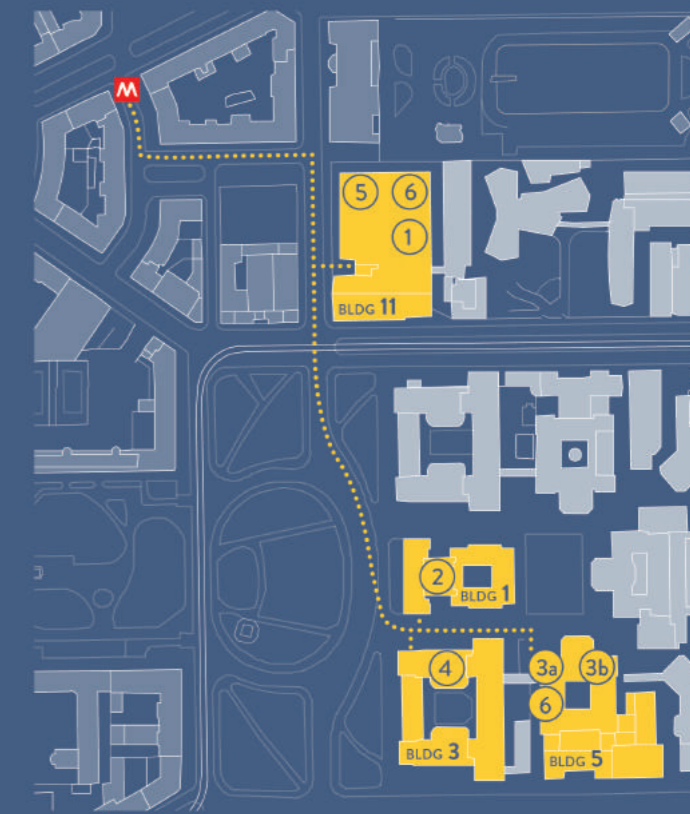
**Thermal & acoustic comfort**

③b 4:00 - 5:40 PM

Conclusion 6:00 - 6:30 PM

## Participate to the TensiNet Symposium 2019!

Call for Papers | deadline: 31 October, 2018  
Early bird registration | until: 28 February, 2019



- ① Aula E. N. Rogers | Building 11
- ② Aula Magna | Building 1
- ③a Aula Beltrami | Building 5
- ③b Aula Castigliano | Building 5
- ④ Aula De Donato | Building 3
- ⑤ Guido Nardi Exhibition room | Building 11
- ⑥ Lunch Area | Building 5, Building 11