

**TOPSTARS 2017**  
**EIT Raw Materials Winter School**  
**November 6-15, 2017**  
**CLab, Piazza Fiera 4, Trento**



## **Call for Applications**

### **TOP STARS 2017 EIT Raw Materials Winter School**

**Innovation challenge for PhD students and researchers**

**November 6-15, 2017**

**CLab - Contamination Lab, Piazza Fiera 4, Trento**

#### **Organizing institutions**

Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy

Department of Industrial Engineering, University of Trento, Italy

HIT - Hub Innovazione Trentino, Trento, Italy

University of Leuven - KU Leuven, Belgium

National Technical University of Athens, Greece

#### **Scientific committee**

**Matteo Leoni** - Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy

**Alessandro Pegoretti** - Department of Industrial Engineering, University of Trento, Italy

**Massimo Pellizzari** - Department of Industrial Engineering, University of Trento, Italy

**Milena Bigatto** - Hub Innovazione Trentino (HIT), Trento, Italy

**Bart Blanpain** - University of Leuven - KU Leuven, Belgium

**Antonis Politis** - National Technical University of Athens, Greece

**Alessandro Rossi** - University of Trento, Italy

#### **Local organization committee**

**Matteo Leoni** - Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy

**Alessandro Pegoretti** - Department of Industrial Engineering, University of Trento, Italy

**Milena Bigatto** - Hub Innovazione Trentino (HIT), Trento, Italy

**Vanessa Maria Caleca** - University of Trento, Italy

#### **Supported by**

EIT Raw Materials - European Institute of Technology, Project 16-422 TOP STARS. innovaTion challenge fOR PhD STudents And ReSearchers

#### **Theme of The Winter School**

**TOP STARS** has an emphasis on ways of applying the currently available techniques in improving the everyday life & business activities. Topics of challenges proposed by companies are introduced through presentations, tutorials and workshops on approaches focused on techniques to assess and promote

feasible solutions on both technical and business aspect. Enhancing entrepreneurial skills and specific business capacities from idea to a clear business proposition remains the key objective of the winter school. The winter school offers PhD students and young researchers a unique hands-in opportunity to address a societal challenge in the Raw Materials framework by combining the technical expertise with innovation and entrepreneurship experience. For about two weeks, students will work in teams to identify a technical solution and develop it into a business proposal. The winter school will introduce students to entrepreneurial thinking and behaviour, business and innovation processes, high-tech ventures marketing, and business model generation techniques. This experience will help to foster a community of students among various universities and to create an interaction with companies and start-ups operating in the specific field.

### **Format of the Winter School**

With respect to traditional winter schools, TOP STARS combines focus-lectures of academics and practitioners, project work, field and usability tests, customer validation work, field visits and socializing events. Focus is put on harmonizing the technical capacities with soft-skills such as: business project work, team building, (personal) networking, cultural exchange, knowledge on interaction between ethics and society and creation of a global awareness of societal and business trends.

In the school, students are confronted with participating stakeholders (companies and start-ups) to consider the sustainability and relevance of their ideas. The course emphasizes multi-disciplinarity and draws attention on specific components related to; conceptualization of usability and technical realization; and commercialization (marketing plan and business realization) of their ideas. The applied approach is based on the following pillars:

- A balanced combination of Theory and Practice;
- Horizontal & vertical approaches on the above-mentioned thematic issues;
- Combination of lectures with practical tutorials, mentoring, study visits, and teamwork
- Social events to identify project ideas.

Throughout the winter school, students will work in teams of 5-7 participants to craft and develop into project-ideas the solutions they have identified to address the technical problems presented to them. A selection of initial use-cases are planned to be provided in cooperation with partner companies participating in the winter school.

The whole initiative is valued **10 ECTS**.

### **Intended Learning Outcomes**

TOP STARS is an opportunity for PhD students and young researchers in the Raw Materials subjects to grasp a clear understanding of how to turn their research into a potential business chance. The school aims at focusing the attention of the participants on how to direct their research towards societal challenges. In this way they don't only contribute to improve the quality of life of citizens by employing innovative ideas/solutions/services, but they can also produce results which have a potential for further development by the market. So the bottom line is to

orient research towards market and social needs. Beyond building technical competences and offering potential solutions to societal challenges, in the two weeks, the students will learn how to work in teams, how to prepare a business plan, how to be effective in passing key information and how to be successful in pitching. They will transform the way they interact with the job market and they will create opportunities for their future. Companies will provide challenges under the form of use cases. The teams will work on these cases and at the end of the school propose their business solution that could potentially be transformed into their future.

## How to apply

The Winter school is open to PhD students and young researchers. PhD candidates that will be enrolled before the start of the school, can also participate. A total of **40 participants** will be selected on a merit basis. Should one of the selected candidates give up, the next candidate in the shortlist will be given the possibility to participate, until all available positions are filled or the shortlist is exhausted. Potential candidates are requested to fill out the application form at [goo.gl/forms/sChZoWbpz4QDy50Z2](https://goo.gl/forms/sChZoWbpz4QDy50Z2) and to provide any relevant documentation. The documents to be included in the application (to be sent to [topstars2017@unitn.it](mailto:topstars2017@unitn.it)) are:

- Academic career
- CV (maximum of two A4 pages)
- A motivation letter (why the participant wishes to be part of the Winter School and what are the expectations)
- Qualification certificates relevant to the topic and to the EIT Raw Materials initiative
- Copy of your Identity card or of the first page (identification page) of the Passport

Any other documents such as letter(s) of support from supervisor/peers or English language proficiency certification will be considered by the Committee as preferential titles. The call will close on October 4, 2017.

## Selection process

The candidates applying for the school will be shortlisted based on the documentation they will provide. Students from KIC Raw Materials partners, European students and/or students from other countries associated with the H2020 program will be preferential candidates.

## Costs

Due to the generous contribution of the EIT Raw Materials, the participation to the event is free of charge for the selected students. Moreover, a grant covering travel expenses (up to 300 Euros) and accommodation (handled by the school), will be available to all selected students that meet the reimbursement criteria of the EU H2020 programme.

## Deadlines

**September 4, 2017:** call for applications opens

**October 4, 2017:** call for application closes

**October 9 2017:** confirmation of places for selected participants

**October 15, 2017:** confirmation of participation by selected students

## Contact

TOPSTARS 2017 Winter School Secretariat

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UNIVERSITY  
OF TRENTO - Italy



KATHOLIEKE UNIVERSITEIT  
**LEUVEN**



National  
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University of  
Athens