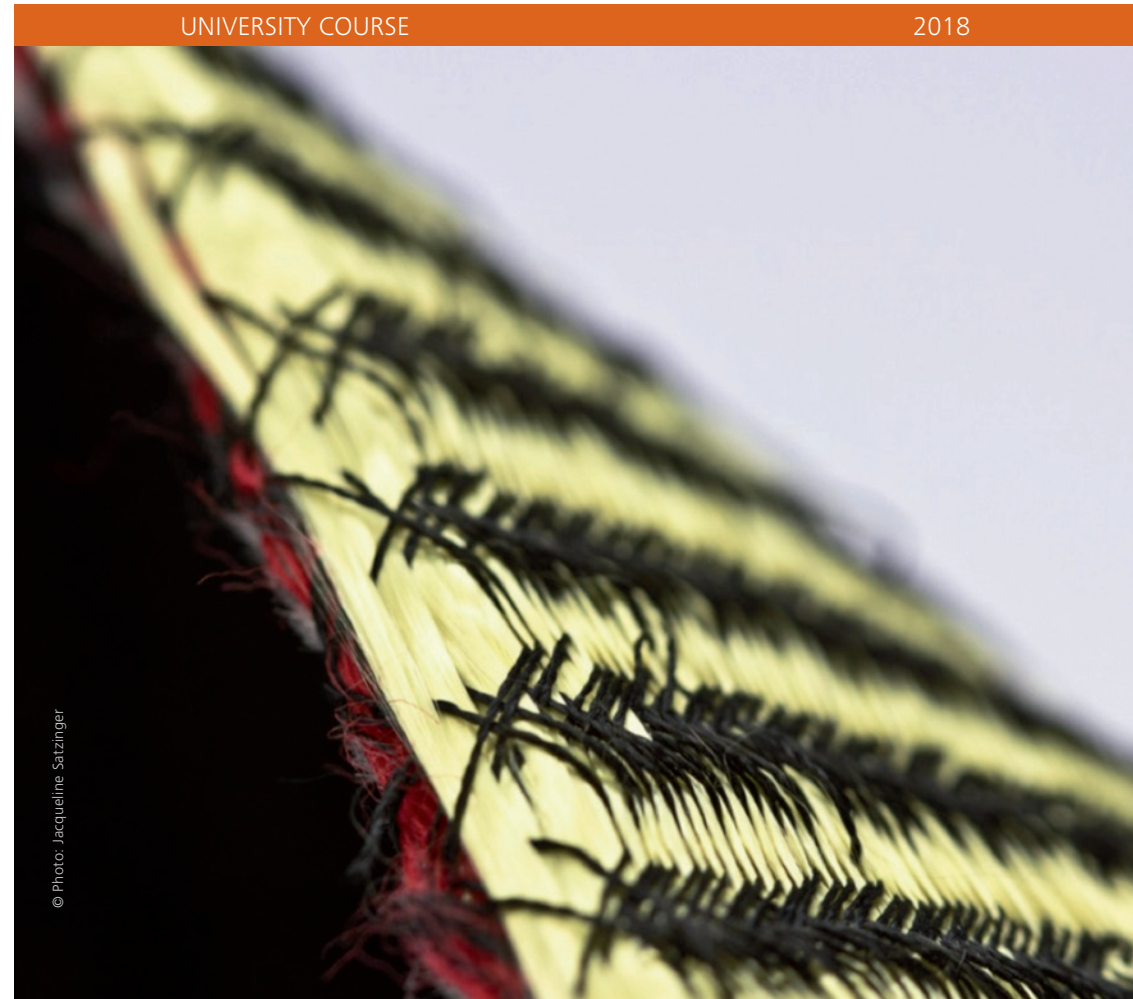


TEXTILE AND POLYMER SCIENCE

UNIVERSITY COURSE

2018

Head	Univ.-Prof. Dr. Tung Pham Research Institute of Textile Chemistry and Textile Physics
Key lecturers	 <p>Univ.-Prof. Dr. Tung Pham Research Institute of Textile Chemistry and Textile Physics</p>  <p>Univ.-Prof. Dr. Thomas Bechtold Research Institute of Textile Chemistry and Textile Physics</p>
Duration / Credits	2 weeks / equal to 7.5 ECTS-Credits
Location	University of Innsbruck Research Institute of Textile Chemistry and Textile Physics Höchsterstraße 73, 6850 Dornbirn
Period	16 th - 27 th July 2018
Course Fee	€ 1.500,-
Contact	Dr. Avinash P. Manian Tel.: +43 512 507-28533 Avinash.Manian@uibk.ac.at
Enrolment	http://bit.ly/texpol Division of Continuing Education Innrain 52f 6020 Innsbruck Tel.: +43 512 507-39402 weiterbildung@uibk.ac.at



Research Institute of Textile Chemistry and Textile Physics

Since its foundation in 1982, the Research Institute of Textile Chemistry and Textile Physics at the University of Innsbruck has developed into one of the leading research institutions in the field of textile chemistry and textile physics in Europe. With an international team and modern laboratory facilities the research areas of the institute cover:

- » Fibre research
- » Textile dyeing processing
- » Integration of functionalities (electrical conductivity, sensors etc.)
- » Functional textiles / garments
- » Textiles in technical applications
- » Textile and fibre reinforced composites
- » Near net shape manufacturing
- » Surface & interface in multiphase polymer systems

The teaching activities of the institute staff include lectures in polymer science and textile technology within the Master programme materials and nano science and Ph.D. programme in chemistry at the University of Innsbruck.

Target audience

The target audience includes participants from external universities and institutes with a basic prerequisite of a Master degree in chemistry, physics, material science or related disciplines as well as students of the Master programme "Materials Sciences and Nanosciences" or the Ph.D. / Doctoral programme "Chemistry" at the University of Innsbruck.

Learning target

Participants will get a comprehensive, interdisciplinary training in textile and polymer science comprising basic and advanced in-class courses and practical lab works through guided executions of defined scientific projects. Gained knowledge is substantial for pursuing Master and / or Ph.D. degree in material science.

Content

This course is divided in three parts: basics, advance understanding and lab training. The first two parts teach a basic and later advance understanding in textile chemistry and physics as well as in polymer science. These lectures will be held in the morning in the first six days. The lab training and project work in small groups is placed in the afternoon and later the whole day. Within the framework of this training, the previously received knowledge will be applied. The lab training will be supervised by the institute's research staff based on actual research topics.

VU1 Basics

1.5 ECTS-Credits

in textile chemistry and textile physics

in polymer science

- » Fibres, yarns, fabrics
- » Dyeing, finishing
- » Textile testing
- » Polymer chemistry and physics
- » Processing
- » Polymer analytics

VU1 Advance understanding

1.5 ECTS-Credits

in textile chemistry and textile physics

in polymer science

- » Functional textiles
- » Smart Textiles
- » Textiles in technical applications
- » Polymer modification
- » Polymer composite
- » Polymers in advanced applications

PR5 Lab training and project work

4.5 ECTS-Credits

- » Production of textile and polymer materials
- » Modification
- » Analytical methods
- » Characterization
- » Reporting and final presentations

Duration

This course runs for 2 weeks from 16th to 27th July 2018 and equates 7.5 ECTS-Credits.

Qualification

Certificate of the University of Innsbruck in Textile and Polymer Science. Additional requirements for obtaining the ECTS-Credits are final report on project work and final exam.