Smart Textiles



POST-ACADEMIC COURSE 3–6 JUNE 2013 f fauundum

It is time to see what has actually been achieved – It's SHOWTIME!

Worldwide more than 100 research projects have been accomplished, numerous papers have been presented in journals and at conferences and thousands of gadgets have been introduced to the market. It feels like intelligent or smart textiles are around now for ages. With this workshop, we aim at informing people about intelligent textiles on a theoretical level, but also want to emphasize the practical application of the knowledge – from theory to application in real prototypes.

Part I will equip the participant with fundamental theoretical knowledge and practical insights in the field of intelligent textiles.

Part II will consolidate the knowledge gained in the first part. During the interactive exhibition, Smart Textiles Salon, the participant can see, touch and experience realized smart textiles in functioning prototypes. The knowledge gained in Part I can directly be transferred – from theory to reality – in various fields of applications. Besides stimulating the participant's creativity, this concept will inform the participant about existing prototypes and possible application areas of smart textiles.

Target audience

The course is open to all persons involved or interested in the field of smart textiles. Besides research institutes, academia, industry or public institutions, capital investors as well as designers are welcome.

This international event should lead to new ideas and alternative routes for carrying out research and hence to more effective work.

Teachers

Scientific coordination Prof. dr. ir. Lieva Van Langenhove Lina Rambausek Department of Textiles, Ghent University

Teachers

- Prof. Lieva Van Langenhove, Department of Textiles, Ghent University
- Mr. Riccardo Marchesi, Plug and Wear
- Mrs. Evelyn Lebis, Saturday Light Fever

Post-academic Course Certificate granted by Ghent University

To receive a certificate, one should attend all parts of the course and successfully complete the exam.



Part I: Intelligent Textiles (Workshop) 3, 4 & 5 June 2013

03 June 2013 at MIAT

Lecture given by Prof. Lieva Van Langenhove (Ghent University) Starting with a brief introduction into the field of smart textiles, the topic of the first day will include a definition of smart textiles and an overview about the evolution and functions of smart textiles. Furthermore, electro-conductive materials and various smart textile applications, such as in sensors, will be presented.

04 June 2013 at MIAT/TIO3

Lecture given by Prof. Lieva Van Langenhove (Ghent University) The lecture of the second day will continue with smart textile applications in different fields, for instance in actuators. Besides mechanical actuators, also colour change materials and options for microencapsulation will be discussed. Subsequently, the research carried out at the Department of Textiles (Ghent University) will be presented and available prototypes will be demonstrated and explained. In the afternoon session, STS ToolTime, the theory will be transferred to practice.

STS ToolTime presented by Riccardo Marchesi (Plug and Wear) supported by Evelyn Lebis (Saturday Light Fever)

During the practical part of the workshop, STS ToolTime, the participant will make his or her own smart textile product.

Each participant will complete the SOFT ORGAN project. In this first session of the practical training, Riccardo Marchesi together with Evelyn Lebis assist the participant in realizing a hands-on project. Participants will learn how to make music with six textile buttons and a small integrated circuit (IC). Some dexterity is necessary since participants will have to sew or solder the components on a piece of fabric.

05 June 2013 at MIAT

Lecture given by Prof. Lieva Van Langenhove (Ghent University), guest lecture by Natascha van der Velden (Technical University Delft) The final theoretical part of the workshop will deal with smart textile applications in the field of energy and other functions. An additional presentation rounding up the lecture will be given by Natascha van der Velden, who will talk about "Sustainability in the Design Process of Smart Textiles".

STS ToolTime presented by Riccardo Marchesi (Plug and Wear) supported by Evelyn Lebis (Saturday Light Fever)

The participants will complete their individual smart textiles project.

Part II: Smart Textiles Salon 6 June 2013 at MIAT



Welcome to the World of Smart Textiles. Welcome to the Smart Textiles Salon 2013!

In 2009, we started organizing the Smart Textiles Salon in an attempt to bring topical research in the field of Smart Textiles to the stage and showcase it to the world. We wanted to make clear that Smart Textiles are not only existing in research projects, but that the potential for market introduction is huge already today. This should be recognized and taken to the next level. The concept of the interactive exhibition has been amazingly successful, so it became a biennial event.

On 06 June 2013, we are organizing the 3rd edition of the Smart Textiles Salon, by its followers also amorevolously called: STS. In the upcoming edition, the concept is as had: simple and straightforward.

Show me what you got!

The same old story... intelligent or smart textiles are around for years now. Worldwide hundreds of research projects have been accomplished, numerous papers have been presented in journals and at conferences, and thousands of gadgets have been introduced to the market. Besides informing people about intelligent textiles on a theoretical level, STS2013 emphasizes the practical application of the knowledge – from theory to real prototypes. It is time to see what has actually been achieved – It's SHOWTIME!

The Smart Textiles Salon (STS) is an innovative exhibition concept. It combines the transfer of theory through a presentation of various exposés with hands-on practical insight through demonstration of the prototypes' working principle. The participant can experience the inventions on three different levels: listening to the information given by the presenter, seeing the prototype working and trying out the prototype personally.

More than 20 prototypes were chosen for display at the Smart Textiles Salon 2013. The prototypes will be shown to the audience in a 10 to 15 min. presentation following a preset program (t.b.d.). **More information can be found on www.smarttextilessalon.com**.

One of the presenters of the Smart Textiles Salon is the winner of the **SYSTEX Student Award 2012**, Eef Lubbers (Eindhoven University of Technology). Mrs. Lubbers won the SYSTEX Student Award 2012 for her outstanding work in the field of Smart Clothing and Lingerie. Through this award, SYSTEX wants to raise students' interest in intelligent textiles. Their work contributes to further scientific and technological developments, and being our future employees their drive will push our sector forward.

A **booklet** including the descriptions of all prototypes exhibited will be distributed to the participants.

MORE INFO & SUBSCRIPTION www.ivpv.ugent.be/smarttextiles

Fee

The participation fee includes the tuition fee, course notes, soft drinks, coffee and sandwiches. Payment occurs after reception of the invoice. All invoices are due in thirty days. All fees are exempt from VAT. Travelling expenses and accommodation are at the expense of the participant.

Part I: Intelligent Textiles (Workshop)	€ 500
Part II: Smart Textiles Salon	€ 200
Part I and II	€ 600

Reduction

- When a participant of a company subscribes for the complete course, a reduction of 20% is given to all additional subscriptions from the same company, even on single modules. Invoicing is then done by one company invoice.
- Special prices for the Smart Textiles Salon for BSc/ MSc students and PhD students who are presenting a prototype at STS: see www.ivpv.ugent.be/ smarttextiles
- Reductions cannot be combined.

Cancellation policy

When cancelling up to 10 days before the start of the course or module 25% of the participation fee will be charged. When cancelling less than 10 days before the start of the module, the full fee is due.

Training cheques

Ghent University accepts:

- training cheques for employees (http://www.vdab.be/ opleidingscheques).
- For employers we refer to the KMO-portefeuille (http://www.kmo-portefeuille.be; use authorization ID: DV.0103 194).

IN ASSOCIATION WITH





Time:

3 - 6 June 2013, each day from 8.30 a.m. till 5.30 p.m. Each day is provided with 2 coffee breaks and a lunch break with sandwiches.

Locations:

 MIAT – Museum of Industrial Archaeology and Textiles

Address: Minnemeers 9, 9000 Gent, Belgium (directions to the location, can be found on www.ivpv.ugent.be/smarttextiles)

 TIO3 – Textiles Open Innovation Centre (on 4 June 2013 in the afternoon) Address: Oscar Delghuststraat 60, 9600 Ronse, Belgium.

A bus transfer will be organized bringing the participants from MIAT to TIO3 and return.

Accommodation

MIAT

BFUNTEX

European Union

More info on www.ivpv.ugent.be/smarttextiles

TIO3

met steun van het

plua付

Oost-Vlaanderen

Wear

MORE INFORMATION AND SUBSCRIPTION www.ivpv.ugent.be/smarttextiles



ORGANISATION

Ghent University Institute for Continuing Education Instituut voor Permanente Vorming Technologiepark 913, 9052 Zwijnaarde, Belgium Tel: +32 9 264 55 82 / Fax: +32 9 264 56 05 E-mail: ivpv@UGent.be