**PROGRAMM**

|  |  |
| --- | --- |
| **Date: 26.08.2015 DISCOVER**  **Location:** Seminar Room 116, Institute of Design Technology, Riga Technical University, Azenes Street 18, Riga | |
| **9:00- 10:00** | **Registration opened** Seminar Room 116-117  **Welcoming and coffee** |
| **INTRODUCTION TO SMART TEXTILES** | |
| **10:00-10:10** | **Greeting and foreword**  Prof. Dr. sc. ing. Ausma Vilumsone, DTI, RTU (Latvia)  Dr. Christoph Monfeld, ITA, RWTH Aachen (Germany)  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **10:10–10:20** | **About STAR Project**  Viktorija Mecnika, ITA RWTH Aachen (Germany) |
| **10:20-10:50** | **Introduction to Smart Textiles for Healthcare: Opening New Horizons**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **10:50-11:00** | **Introduction of ITA, RWTH Aachen**  Dr. Christoph Monfeld, ITA, RWTH Aachen (Germany) |
| **11:00-11:15** | **Smart Textiles at ITA**  Dr. Christoph Monfeld, ITA RWTH Aachen (Germany) |
| **11:15-11:30** | **Introduction of DTI, RTU**  Prof. Dr. sc. ing. Ausma Vilumsone, DTI, RTU (Latvia) |
| **11:30-11:45** | **Smart Textiles at DTI**  Dr. sc. ing. Ingrida Sahta, DTI, RTU (Latvia) |
|  |  |
|  |  |
| **11:45-12:15** | **Tour over RTU Labs**  Dr. sc. ing. Ugis Briedis |
| **12:15-13:30** | **Lunch** Expo Café, BT1 Exhibition Centre, Kipsalas street 8, Riga |
| **MAKING OF SMART TEXTILES: DESIGN, MATERIALS AND TECHNOLOGIES** | |
| **13:30-13:35** | **Foreword**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| ***Before starting Smart Textiles for Healthcare*** | |
| **13:35-14:05** | **Introduction to physiological monitoring**  Dr. biol. Zbignevs Marcinkevics, Faculty of Biology, University of Latvia |
| **14:05-14:35** | **Statistical Analysis of Medical Data**  Dr. phys. Renars Erts, Riga Stradina University (Latvia) |
| **14:35-15:00** | **Coffee Break** Seminar Room 117 |
| ***Making of Smart Textiles*** | |
| **15:00-15:30** | **Electrically conductive textiles**  Dr. sc. ing. Ingrida Sahta, DTI, RTU (Latvia) |
| **15:30-16:00** | **Printing and Coating techniques for smart textile engineering**  Prof. dr. ir. Wim Deferme, IMEC, University Hasselt (Belgium) |
| **16:30-17:00** | **Technical Embroidery for Smart Textiles**  Dr. sc. ing. Ugis Briedis, DTI, RTU (Latvia) |
| **17:00-17:10** | **Wrap-up and closing of the lecture session**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **18:00-20:30** | **Dinner**  Restorant “Ostas Skati”, Matrožu iela 15, Riga, LV-1048 |

|  |  |
| --- | --- |
| **Date: 27.08.2015 DISCOVER& LEARN**  **Location: :** Seminar Room 116, Institute of Design Technology, Riga Technical University, Azenes Street 18, Riga | |
| **9:00-9:05** | **Foreword**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **SMART TEXTILES DEVELOPMENT: KNOW-HOW AND DESIGN** | |
| **9:05-9:20** | **Knitted strain and pressure sensors and their applications for healthcare**  Dr.sc.ing. Aleksandrs Oks, DTI, RTU (Latvia) |
| **9:20-9:35** | **Accelerometer Matrix on Textiles for Surface 3D Imaging**  Atis Hermanis, Institute of Electronics and Computer Sciences (Latvia) |
| **9:50–10:00** | **Textile sensors for pH level assessment: Review and Concepts**  Cassandre Rousell, ENSAIT Ecole Nationale Supérieure des Arts et Industries (France)/ ITA, RWTH Aachen (Germany) |
| **10:00-10:10** | **Textile Humidity Sensors**  Guilherme Gomes-Chagas, Universidade Federal de São Carlos (Brazil)/ ITA, RWTH Aachen (Germany) |
| **10:10-10:30** | **Coffee Break** Seminar Room 117 |
| **10:30-11:00** | **Smart Textiles Gallery** Seminar Room 117 |
| **11:00-11:15** | **Textile thermoregulation systems**  Dr. sc. ing. Ingrida Sahta, DTI, RTU (Latvia) |
| **11:15-11:45** | **Electronics for Smart Textiles**  Dr. sc. ing. Aleksandrs Valisevskis, DTI, RTU (Latvia) |
| **11:45-12:15** | **Wearable energy harvesters**  Asoc.prof. Dr.sc. ing. Juris Blums, Institute of Technical Physics, RTU (Latvia) |
|  |  |
|  |  |
| **12:15-13:15** | **Lunch** Expo Café, BT1 Exhibition Centre, Kipsalas street 8, Riga |
| **13:15-13:45** | **Textile Antennas**  Dipl.-Ing. Meike Reffenrath-Friedhoff, ITA, RWTH Aachen (Germany) |
| **13:45-14:00** | **Textile integrated GPS receiver**  Kolja Vornholt, ITA, RWTH Aachen (Germany) |
| **14:00-14:30** | **Clothing Design, Patterning and Sizing**  Dr. sc. ing .Inga Dabolina, DTI, RTU (Latvia) |
| **14:30-14:45** | **Coffee Break** Seminar Room 117 |
| **WORKSHOP**  **TOWARDS NEW IDEAS AND CONCEPTS FOR HEALTHCARE VIA SMART TEXTILES** | |
| **14:45-14:50** | **Introduction the workshop**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **14:50-15:45** | **Experiencing the Smart Textiles**  Dr. sc. ing. Ingrida Sahta, DTI, RTU (Latvia)  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **15:50-17:00** | **Generating new ideas and concepts for Smart Textiles for Healthcare**  Work in groups |
| **17:00-17:10** | **Wrap-up and closure of the session**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |

|  |  |
| --- | --- |
|  | |
| **Date: 28.08.2015 LEARN**  **Location:** **:** Institute of Design Technology, Riga Technical University , Azenes Street 18, Riga | |
| **WORKSHOP**  **TOWARDS NEW IDEAS AND CONCEPTS FOR HEALTHCARE VIA SMART TEXTILES** | |
| **9:00-9:05** | **Foreword**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **9:05-11:00** | **Generating new ideas and concepts for Smart Textiles for Healthcare**  Work in groups |
| **10:30-11:00** | **Coffee Break** Seminar Room 117 |
| **11:00-11:40** | **Presentation of the developed concepts**  Work in groups |
| **11:40-12:00** | **Feedback and Discussion “Potentials for the implementation of the generated ideas”**  Prof. Dr. sc. ing. Ausma Vilumsone, DTI, RTU (Latvia)  Dr. Christoph Monfeld, ITA, RWTH Aachen (Germany) |
| **12:00-12:05** | **Wrap-up and closure of the event**  Viktorija Mecnika, ITA, RWTH Aachen (Germany) |
| **12:05-13:00** | **Lunch and farewell** Seminar Room 117 |

Please be aware of slight changes possible in the program!