

Title: GeniusTex – Smart Textile Platform

Partners: Infineon Technologies AG, ASYS Group, ottobock, eccenca GmbH, Technology and Innovation Management Group der RWTH Aachen; Fraunhofer-Institut für Angewandte Informationstechnik FIT

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Univ.-Prof.
Prof. h.c. (Moscow State Univ.)
Dr.-Ing. Dipl.-Wirt. Ing.
Thomas Gries
Institutsleiter

David Schmelzeisen
Inga Gehrke
Wissenschaftliche Mitarbeiter

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Mission Statement

Despite significant advances in both hardware and software technology and in the design of user interaction, smart textiles have not yet grown beyond the prototype phase. The GeniusTex project will create cooperation and coordination opportunities for the development of smart textile products, services and business opportunities in order to reduce barriers to entry, especially for small and medium-sized enterprises will be developed.

Aims

1. generate a new B2B business model based on an information technology, interactive innovation platform between producers, smart textile developers and users
2. implement software architecture to develop individualized services based on Smart Textiles
3. development of a product-oriented design methodology of manufacturing processes for system integration for Smart Textiles for the use of the platform as a cyber-physical system

Solution

The aim for the ordering and development platform "GeniusTex" will be to establish an integrated value chain for smart textiles. By using innovative technologies and applications of the project partners, a stronger user orientation is created. The solution is divided into four sections:

1. designing the interfaces in the innovation process
2. implementation of an open information technology innovation platform
3. product modularization & product-oriented design of cyber-physical manufacturing processes for Smart Textiles, implemented as Semantic Web Ontology
4. broadly effective pilot testing of the innovation platform on industrial application examples involving the users

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Contacts

David Schmelzeisen

Inga Gehrke

Institut für Textiltechnik der RWTH Aachen

Otto-Blumenthal-Str. 1

D-52074 Aachen

David.Schmelzeisen@ita.rwth-aachen.de

<http://www.ita.rwth-aachen.de>

<https://geniustex.net/>