INDTECH2018

Innovative industries for smart growth

29-31 October, 2018 Vienna, Austria

www.indtech2018.eu @IndTech2018

#IndTech2018

PILLAR 2

Session 2.3

Improve the competitiveness of the industry through the provision of design-driven innovative solutions

Bertrand FILLON

IPC

30 October 2018





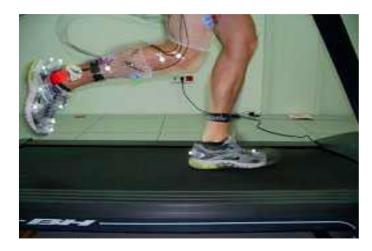




Towards smart and connected shoes



Virtual Technologies for the Point of Sale

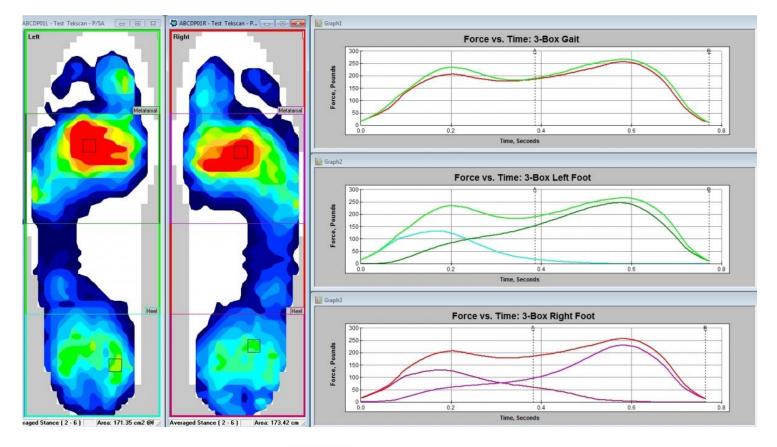


The biomechanics of human-shoe-environmental interactions



Advise related to fashion design. Advise related to industrial design.

Pressure measurement and analysis system.









The technologies are ready to be transfered in application

3 D Prototyping to validate pressure requirement



= Federal Ministry

Republic of Austria
Transport, Innovation

and Technology





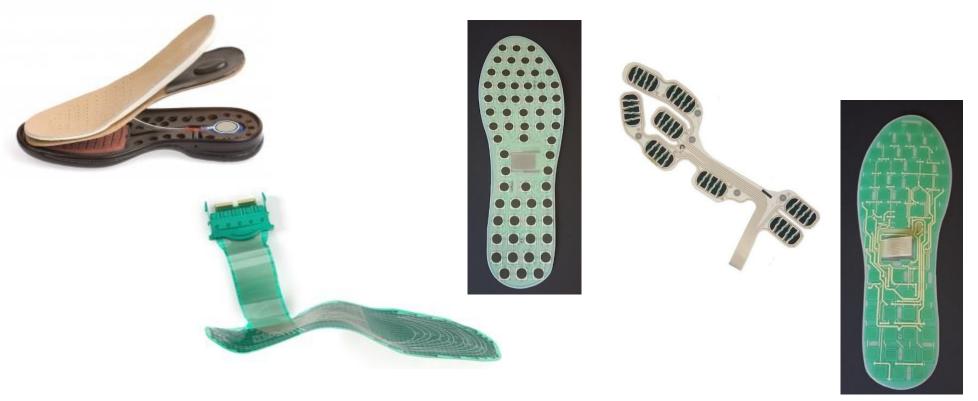




The technologies are ready to be transfered in application

Difficulty to integrate sensors into the shoe: space, flexibility...

We need solutions for these problems: OLAE can be very helpful to make smaller and more flexible devices







Iterative et collaborative approaches

Design as a strategic tool to lead innovation

Innovative design methodology

Design thinking

Artistic ideation

Eco innovation

Rapid prototyping and testing

User centric experience

Industrial product design

Material processes development

2

Printed conductive ink

Printed polymers with function

Assembling/Disassembling

Overmolding polymer

Material & process scientisrs

Material suppliers

Creative /design companies

Artistic community

Shoes Application

Artistic

Design showcase

Technical integration

3

Manufacturer

Social stakeholders

End users

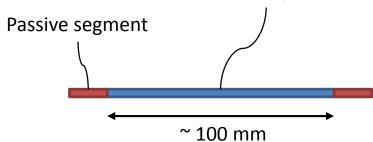
Advanced printed materials and integration enabling novel and versatile solutions

Example: a connected cross country ski boot

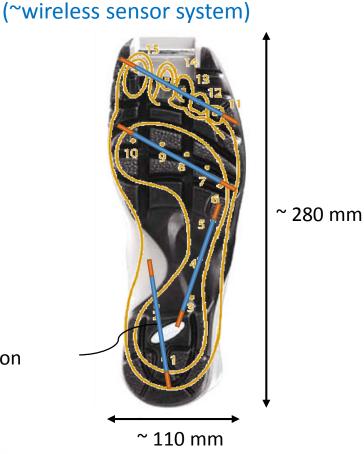
Smart ribbons integration

Smart ribbon system (~wireless sensor node)

> Active segment (5 pressure sensors, batterie, wireless communication)



Smart ribbon system



Cross country ski boot with integrated foot plantar pressure measurement





Federal Ministry Republic of Austria Transport, Innovation and Technology



