

MOBILE LOW-COST MATERIAL SENSING

Dr. Christian Körner

SENORICS Dresden, Germany

PROBLEM What's the best laundry setting?

SOLUTION

SENORICS sensor platform identifies fabric types and optimizes wash program

PROBLEMIs it time to exchange coolant?

SOLUTION SENORICS detects coolant composition and recommends replacement in real-time

PROBLEM When should farmers harvest crops?

SENORICS detects optimal level of moisture and protein

WHAT MAKES US SPECIAL

SENORICS USPs

Patented Spectroscopy-on-chip technology



LOW COST

 Organic electronics reduces prices to a few \$/chip

 Mature manufacturing from OLED technology SMALL, ROBUST, EXACT

 Patented optical design for monolithic spectroscopy chips

No moving parts, no diffractive optics

BROAD SPECTRAL COVERAGE

 Patented optical absorption effect for 450 nm to 2000 nm

• Broad range of possible applications



ABOUT CHEMOMETRICS

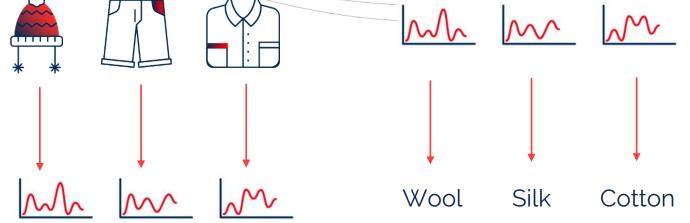
How to translate spectral information into useful information

Example use case: FABRIC IDENTIFICATION FOR WASHING MACHINES









Christian Körner --- Senorics GmbH EPIC Online Technology Meeting on Precision Horticulture and Agriculture

∧ SENORICS

 (\bullet)

MATERIAL SENSING PLATFORM

How to get started

DEVELOP

First easy-to-use-toolbox for spectroscopy integration

DEPLOY

Standard OEM spectrometer modules

USE

Cloud services for data interpretation and storage

Evaluation KitSoftware

⊙ Cloud Access

• Services



Develop your Chemometric model Develop your Senorics powered product and ship it to the customer



Spectroscopy

raw data

Enable the end user to make better decisions

Material

sensing

results

∧ SENORICS

Christian Körner --- Senorics GmbH EPIC Online Technology Meeting on Precision Horticulture and Agriculture

SUMMARY

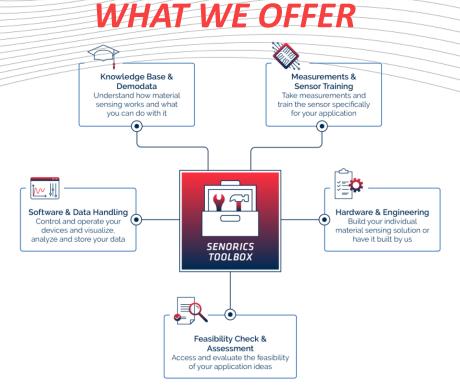
OPEN FOR EU-FUNDED PROJECTS





PHOTONICS²¹

Multimodal and hyperspectral sensing solutions for woodworking, steel and food (chocolate) industries



WHAT WE NEED

O Use cases

• Problems

Challenges

System IntegratorsPeople in the field



LET US HELP YOU TO BRING SPECTROSCOPY INTO EVERYDAY LIVES

detect. know. decide.

Christian Körner --- Senorics GmbH EPIC Online Technology Meeting on Precision Horticulture and Agriculture

∧ SENORICS



0

GET IN TOUCH!

Dr. Christian Körner

Räcknitzhöhe 35 01217 Dresden Germany

christian.koerner@senorics.com www.senorics.com

