COBURG UNIVERSITY
of applied sciences and arts

Research at Coburg University of Applied Sciences and Arts

Prof. Dr. Jürgen Krahl

Technology Transfer Center Automotive Coburg (TAC) of Coburg University of Applied Sciences and Arts

COBURG UNIVERSITY
of applied sciences and arts

Agenda

- Introducing Coburg University of Applied Sciences: Facts and Figures
- Research Focus Areas
- Current Research Project: Diesel R33
- Networking Activities
- Search for project partnerships

COBURG UNIVERSITY
of applied sciences and arts

Coburg University of Applied Sciences

COBURG UNIVERSITY
of applied sciences and arts

Facts and figures

- 5.000 students
- 100 scholarship recipients
- 117 professors
- 380 employees in teaching, research and administration

6 faculties:

- Applied Sciences
- Electrical Engineering and Computer Sciences
- Mechanical and Automotive Engineering,
- Social Work and Health
- Economy
- Design

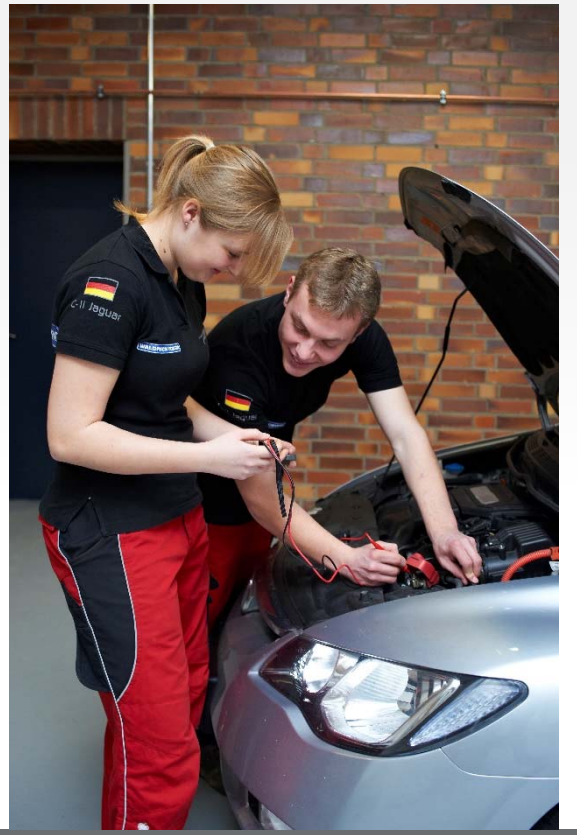
COBURG UNIVERSITY
of applied sciences and arts

Five Institutes

- Technology Transfer Center Automotive Coburg (TAC)
- Institute for Sensor and Actuator Technology (ISAT)
- Institute for Applied Health Sciences (IaG)
- Institute for Integrated Product Design (IP.CO)
- Institute for Prototype and Modelling Technique (IPM)

Automotive Engineering

- Combustion and emissions for diverse fuels
- Energy management for (hybrid) powertrains
- Development of fail-safe automotive software functions (powertrain, chassis)
- Motion systems
- Innovation process management



Measurement and Sensor Technology

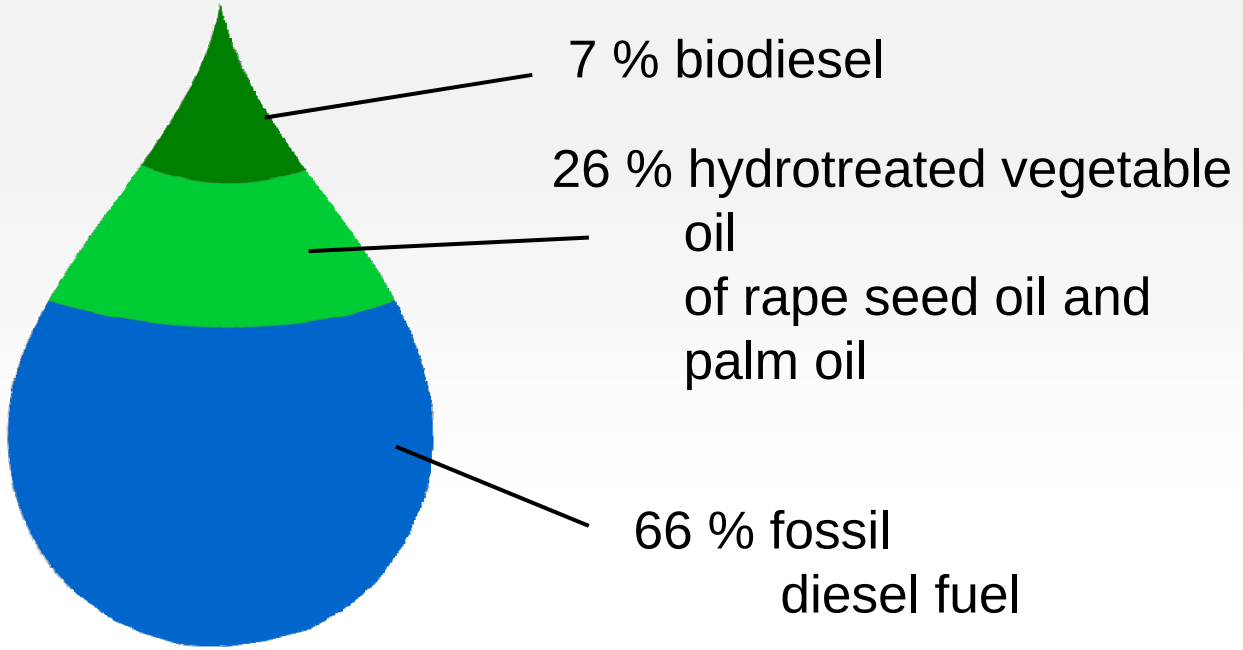
- Novel sensor concepts and applications
- Touch-sensitive surfaces
- High-voltage sensors,
- Bio-analytics in micro-biology and molecular-biology
- Mobile monitoring
- Wireless energy-efficient transmission of sensor measurement data

COBURG UNIVERSITY
of applied sciences and arts

Health promotion through organisation developments

- Regional health promotion policy
- Health literacy
- Demography and technology – quality of life of the elderly

Diesel R33



Diesel R33 is according to the diesel fuel standard DIN EN 590.

Scientific targets

- Emissions and health impact
- Fuel-oil-interactions
- Fuel-fuel-interactions
- Material compatibility
- Sustainability and green house gas effect

COBURG UNIVERSITY
of applied sciences and arts

Diesel R33

COBURG UNIVERSITY
of applied sciences and arts

Current project status

- Diesel R33 is conforming to the diesel fuel standard
- Useable in all diesel vehicles
- Reduction of the CO_2 emissions
- Opening of the first filling station of Diesel R33
  Filling volume (Dec 2014) over 1,500,000 liter

COBURG UNIVERSITY
of applied sciences and arts

Project partners of Diesel R33

ASG Analytik-Service Gesellschaft

bender automobile und mehr

bft

CEB

Continental

DAIMLER

ERC

HOCHSCHULE COBURG

HUK-COBURG Aus Tradition günstig

LASCO UMFORMTECHNIK WERKZEUGMASCHINENFABRIK

NESTE OIL

DB BAHN

Frankenbus

Steinbeis-Transferzentrum Biokraftstoffe und Umweltmesstechnik

SÜC Energie Und mehr.

tac technologietransfer automotive hochschule coburg

TECOSOL liquid organic energy

THÜNEN

ufop

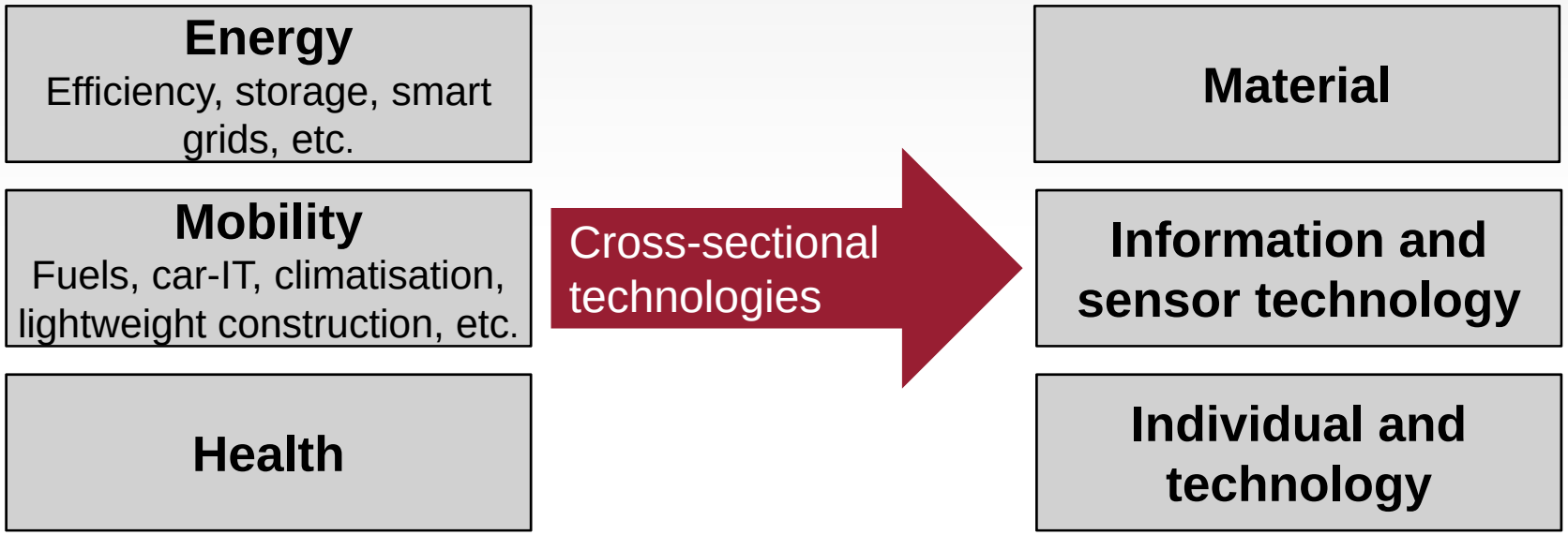
Walther

„Investition in Ihre Zukunft“

Das Vorhaben
wird von der Europäischen Union aus dem
Europäischen Fonds für regionale Entwicklung
und vom Freistaat Bayern kofinanziert.

Technology Alliance of Upper Franconia (TAO):

- Initiative of the **Universities of Bamberg** and **Bayreuth** as well as the **Universities of Applied Sciences Coburg** and **Hof**
- Concentration of regional competencies in **teaching** and **research** in academia and business



COBURG UNIVERSITY
of applied sciences and arts

Networking Activities

- **Fraunhofer Applied Research Center for Wireless Sensor Technology**
  - Focus on the development of practical solutions for industry based on wireless sensor network technologies
- **Partnership with the University of Winnipeg (Canada) and University of Shanghai for Science and Technology (China)**
  - Preparation of a joint international bachelor program in optical engineering and technical physics

COBURG UNIVERSITY
of applied sciences and arts

Search for project partnerships

- Search for partnerships to initiate new European projects
- Search for European partnerships to cooperate within existing research projects in research focus areas of the Coburg University of Applied Sciences and Arts

COBURG UNIVERSITY
of applied sciences and arts

Contact

Technology Transfer Center Automotive Coburg (TAC)

Prof. Dr. Jürgen Krahl

Friedrich-Streib-Straße 2

D-96450 Coburg

Tel.: +49 (0)9561/317-127

Fax.: +49 (0)9561/317-514

Mail: juergen.krahl@hs-coburg.de

Center of Research and Transfer

Dr. Victoria Bertels

Friedrich-Streib-Straße 2

D-96450 Coburg

Tel.: +49 (0)9561/317-360

Fax.: +49 (0)9561/317-390

Mail: victoria.bertels@hs-coburg.de