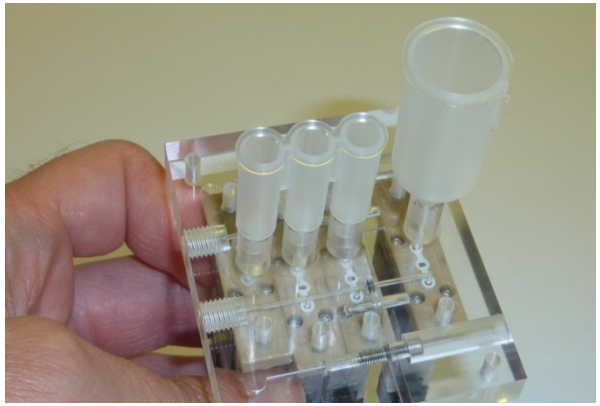
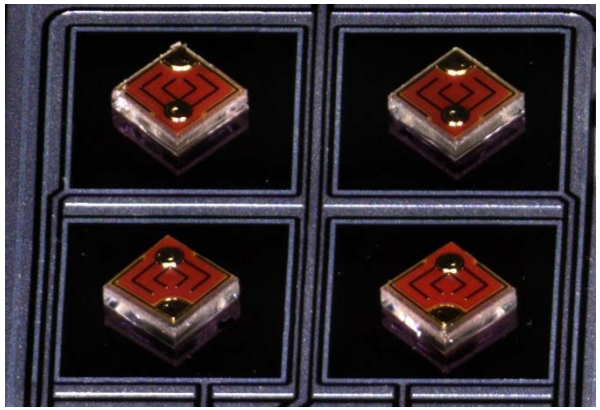


Innovation by **Cooperation** in **Manufacturing**

SMARTER - SI

Contact us to realise new ideas for smart products

- Innovative product enhanced with Smart Systems Integration
- Broader opportunities with integration of new technologies
- Need for small scale production but with the potential for high market value

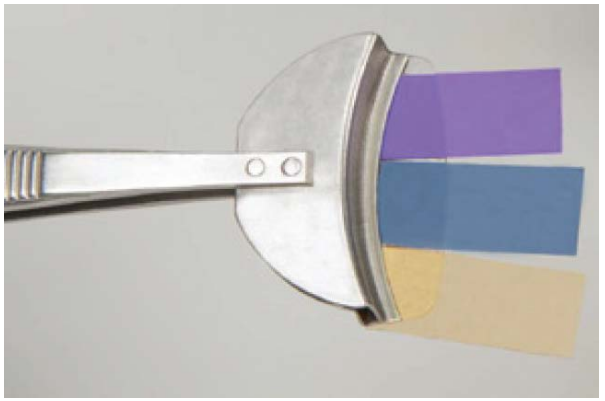


The Application Experiments

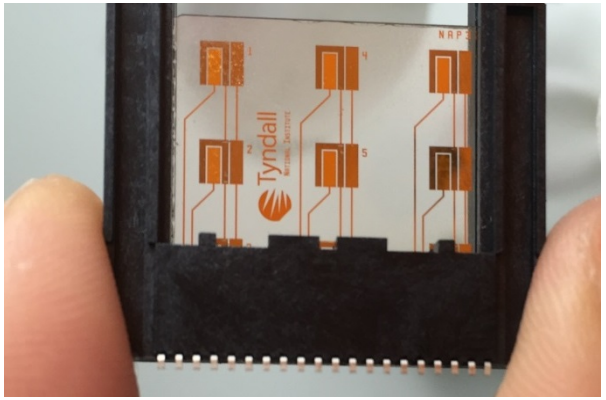
SMEs and Mid Caps profit from SMARTER-SI

Eleven smart products already in implementation:

- Portable device for testing the quality of drinking water
- Energy-autonomous dew-point measuring system with short response time and high precision to be applied in freeze-drying and process control



- Maintenance free carbon dioxide measuring system with minimum power consumption, high sensitivity and low detection limit
- High-sensitive and robust pressure sensor for harsh environments based on silicon strain gauge and ceramics membrane
- Portable multi-parametric point-of-care testing device that can be operated without previous knowledge to check e.g. groceries on micro-toxins



- Sensor platform to detect and record condensation as means to protect electronics against damage caused by humidity
- Portable, miniaturized capillary electrophoresis system with the potential to replace expensive and cumbersome methods for detection of bio-markers and drugs
- Modular system for respiratory applications with re-usable parts and disposals. A highly integrated and miniaturized sensor platform for different medical and wellness applications.
- Integrated smart system to detect toxic substances in a standard 24 multi-well plate
- Innovative integrated smart tools to enable new processes to supersede the hitherto existing ones that use hazardous substances causing health damages
- Wireless sensor system with energy autonomous operation to enlarge periods of maintenance for environments that might be dusty and oily (engines, heavy equipment, clutch brakes etc.)

Photos: IK4-Ikerlan / CiS / Tyndall / CSEM / Swerea / Hahn-Schickard

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Facts

Project Acronym	SMARTER-SI
Project Full Title	Smart Access to Manufacturing for Systems Integration
Grant Agreement No.	644596 (SERI contract number 15.0085)
Call	H2020-ICT-2014-2
Funding Scheme	Innovation Action
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Project Cost: ca.	10 Mio. €
Project Funding	5.3 Mio. €
Project Coordinator	Hahn-Schickard Wilhelm-Schickard-Str. 10 78052 Villingen-Schwenningen Tel. +49 7721 943 -188 or -133 Dr. Rainer Günzler Rainer.Guenzler@Hahn-Schickard.de Dr. Stephan Karmann Stephan.Karmann@Hahn-Schickard.de
Homepage	www.smarter-si.eu

Project Partners

Research & Technology Organisations (RTOs):

- Hahn-Schickard, Villingen-Schwenningen (Germany)
- CiS Forschungsinstitut für Mikrosensorik GmbH, Erfurt (Germany)
- Centre Suisse d'Èlectronique et de Microtechnique, Neuchâtel (Switzerland)
- IK4-Ikerlan, Arrasate / Mondragón (Spain)
- Leibniz-Institut für Photonische Technologien, Jena (Germany)
- Swerea IVF AB, Mölndal (Sweden)
- Tyndall National Institute, Cork (Ireland)

Small and medium-sized enterprises (SMEs):

- Martin Christ Gefriertrocknungsanlagen GmbH, Osterode (Germany)
- ConSens GmbH, Ilmenau (Germany)
- Environmental Laboratory Services Ltd., Cork (Ireland)
- IL Metronic Sensortechnik GmbH, Ilmenau (Germany)
- Ingenasa, Madrid (Spain)
- microLiquid SL, Arrasate / Mondragón (Spain)
- TechnoLab GmbH, Berlin (Germany)

Others:

- VDI/VDE Innovation + Technik, Berlin (Germany)

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Benefits of our cooperation

- Enhanced collaboration between European RTOs by working together to deliver technology solutions that meet SMEs needs and contribute to a return on investment
- Customised integration of technology building blocks from project partners to deliver platform prototypes for SMEs to test new and existing markets
- Proactive participation of industry in the various SMARTER-SI Application experiments
- Ability to tailor building block technology to adapt the integration requirements for specific Application Experiments making the process flexible and highly modular in nature

Small and medium-sized enterprises (SMEs) will get an easier access to manufacturing capabilities for Smart Systems by addressing one of the participating institutes. Each institute acts as access point and coordinates the contributions from the others in Smart Systems design, manufacturing and testing

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Innovation by Cooperation in Manufacturing

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Horizon 2020 Programme