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EC's Framework Programme for Research and Innovation Horizon 2020 (2014-2020)  
Grant agreement no. 636820

## Cross-sectorial real-time sensing, advanced control and optimisation of batch processes saving energy and raw materials (RECOBA)

Start of the project: Jan 1<sup>st</sup>, 2015  
Duration: 36 month

### Symposium for process industry

Due date: Dec. 31, 2016

Lead contractor for this deliverable: BFI

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### Dissemination level

PU	public	<input checked="" type="checkbox"/>
PP	restricted to other programme participants (incl. the Commission Services)	<input type="checkbox"/>
RE	restricted to a group specified by the consortium (incl. the Commission Services)	<input type="checkbox"/>
CO	Confidential, only for members of the consortium (incl. the Commission Services)	<input type="checkbox"/>

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#### 1 Training workshop on high temperature sensor technology

A training workshop will be held at the conference center, Steel Institute VDEh in Düsseldorf at the 23<sup>rd</sup> of February, 2017. The workshop will focus on different sensor technologies for high temperature melts and is organized by the project partners BFI and Minkon. Process and quality engineers as well as technical sales agents from all process industries producing high temperature melts, such as the iron and steel industry, non-ferrous metals (e.g., copper, aluminum, silicon and glass industries) are invited to the event. A variety of sensors developed within the RECOBA project will be presented during the workshop. These sensors include the liquid steel temperature measurement system for spot and long term measurements, the coverage efficiency sensor to quantify radiation losses of different melt covers, as well as fiber optical sensors for refractory temperature measurement.

The oral presentations will focus on working principle of the sensors, their industrial applications as well as possible benefits of hard sensors for relevant industry. Physical samples of the sensors will be available at the workshop and after each presentation there will be a hand-on session. The participants will have time to explore the sensors and to discuss specific application conditions with the experts.

It is expectant that the workshop will benefit European process industry directly by advertising the research results of RECOBA project within H2020 SPIRE program.

Annex:  
Flyer of the workshop



The flyer features a photograph of a workshop booth with several people. To the right is the RECOBA logo. Below the photo is the text 'Project partners' followed by logos for MINKON Sp. z o.o., BFI, ThyssenKrupp, UNIVERSITY OF CAMBRIDGE, UNIVERSITY OF CHEMISTRY AND TECHNOLOGY PRAGUE, BASF, Elkem (A Bluestar Company), POLYMAT, RWTH AACHEN UNIVERSITY, and CYBERNETICA. On the right side, the text reads: 'H2020 – Cross-sectorial real-time sensing, advanced control and optimisation of batch processes saving energy and raw materials', 'Workshop', 'High Temperature Sensor Technology', 'VDEh-Betriebsforschungsinstitut Stahl-Zentrum', 'Sohnstraße 65', '40237 Düsseldorf', 'Germany', and '23<sup>rd</sup> February, 2017'.



## High Temperature Sensor Technology

The scope of the workshop is to present novel sensors and measurement techniques developed within the H2020 Spire1 project RECOBA for high temperature applications, and to discuss industrial applications in iron, steel, silicon, copper, glass and other high temperature processes.

**Please confirm your participation in this workshop by email registration:**

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## Programme

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|-------|--|
| 10:00 | Welcome to Stahlzentrum and BFI<br><i>Dr.-Ing. Bernd Kleimt (BFI, Head of Department)</i>                              |
| 10:15 | „DynTemp applications in steelmaking“<br><i>Mark Potter (Minkon, CEO)</i>  |
| 11:00 | <b>Coffee break</b>  |
| 11:15 | „DynTemp applications in other high temperature processes“<br><i>Marek Cichonski (Minkon, Project Leader)</i>          |
| 11:45 | “Other sensors for high temperature processes“<br><i>Dr. Tobias Kordel (BFI, Project Group Leader)</i>                 |
| 12:30 | <b>Lunch break</b>   |
| 13:30 | „Online measuring of dissolved gasses in high temperature melts“<br><i>Dr. Torsten Lamp (Minkon, Director R&amp;D)</i> |
| 14:00 | Exhibition<br><i>Explore measurement systems for high temperature processes</i>  |
| 15:00 | <b>End of event</b>  |