



# Focus on Fundamentals About Nanocem

**Just like buildings, research into cement and concrete needs foundations. That is what we do. We do fundamental research into the nano and micro-scale phenomena that govern the performance of cements and concrete.**

Nanocem is a consortium of European academic and industrial partners, all interested in fundamental research of cement and concrete. Working together, we combine passion with pragmatism, cooperation with independence and long term vision with hands on experience.

We don't develop products directly. But the combined academic and industrial knowledge that we produce drives the development of new and improved materials and products that are adapted to modern needs, whilst minimising the environmental impact of the construction cycle.

Nanocem was founded in 2004, and has grown to a network of 24 academic and 9 industry partners. There are some 120 academic researchers in the team who, between them, are in the process of managing some 60 PhD and PostDoctoral research projects in related areas.

Nanocem is now recognised as the world reference for quality research in cementitious materials.



## Our Aims

Nanocem has three main aims:

### RESEARCH

To grow the basic knowledge needed to develop new cementitious materials, linking features and processes that take place at atomic level and their impact once used in buildings, bridges or other structures, and to disseminate the results of our work.

### EDUCATION

To prepare the next generation of researchers, by educating university graduates and providing a platform for future employment in the cement and concrete industry.

### RESPONSIBILITY

To help find solutions that will further reduce the environmental impact of cement and concrete.

## What we do

Nanocem sponsors fundamental research projects, and serves as a centralised platform for academic researchers to share results.

We do this by:

- organising workshops and seminars;
- sponsoring research in multi-partner projects;
- acting as a recruitment base for researchers in cementitious materials;
- highlighting the importance of R&D on cementitious materials at the European level;
- acting as a networking body ensuring academic research is relevant.



## Our Partners

### INDUSTRIAL PARTNERS

- Aalborg Portland (Cementir Holding), Denmark
- BASF, Germany
- CRH, Ireland
- HeidelbergCement AG, Germany
- GCP Applied Technologies, USA
- LafargeHolcim, Switzerland
- SCG Cement-Building Materials, Siam Research and Innovation Co. Ltd, Thailand
- SIKA Technology AG, Switzerland
- TITAN Cement Company, Greece

### ACADEMIC PARTNERS

- Ecole polytechnique fédérale de Lausanne, Switzerland
- Aarhus University, Denmark
- Agencia Estatal Consejo Superior Investigaciones Científicas, Spain
- Bauhaus-Universität Weimar, Germany
- Commissariat à l'énergie atomique et aux énergies alternatives, France
- Czech Technical University in Prague, Czech Republic
- Danish Technological Institute, Denmark
- Eidgenössische Technische Hochschule Zurich, Switzerland
- Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland
- Imperial College London, United Kingdom
- Institut français des sciences et technologies des transports, de l'aménagement et des réseaux (ex-LCPC), France

- Lund University, Sweden
- Norwegian University of Science and Technology (NTNU), Norway
- Technical University of Denmark, Denmark
- Technische Universität München, Germany
- Technische Universität Wien, Austria
- Universitat Politècnica de Catalunya-Barcelona Tech, Spain
- Université de Bourgogne, France
- University of Aberdeen, United Kingdom
- University of Leeds, United Kingdom
- University of Sheffield, United Kingdom
- University of Surrey, United Kingdom
- VDZ gGmbH, Germany
- ZAG, Slovenia