

International Brokerage Event  
Brussels, 26-27/10/2017



**TÇMB**

TÜRKİYE ÇİMENTO MÜSTAHSİLLERİ BİRLİĞİ

***TURKISH CEMENT  
MANUFACTURERS' ASSOCIATION***



**R&D INSTITUTE**

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# Turkish Cement Industry

66 cement plants are TCMA member in Turkey.



Turkey is the largest cement manufacturer country in Europe and 5th largest in the world. TCMA serves for 60 years with the purpose of creating social, environmental and legal solutions to the sectoral problems.

- Laboratories are accredited with
  - EN ISO/IEC 17025 (Analyses) standard with 45 main and 83 sub parameters,
  - EN ISO/IEC 17025 (Calibration),
  - EN ISO/IEC 17043 by Accreditation Agency (TÜRKAK),
  - Working for EN ISO/IEC 17034 accreditation.

- **TCMA is a member of;**

- The European Cement Association
- European Concrete Paving Association
- European Cement Research Academy
- Turkish Construction Products Producers Association



# TCMA R&D Institute

## Research and working areas



- Research studies on cement & concrete technology,
- Technical support for cement factories, universities and scientific institutions,
- Cooperating with international and national organizations on cement and concrete subjects,
- Evaluation of industrial waste materials in cement production with the scope of industrial symbiosis and circular economy, innovative approach to new cement types and testing methods,
- Participating innovative commercial projects to increase competitiveness.
- **FISSAC** (Fostering Industrial Symbiosis for a Sustainable Resource Intensive Industry Across the Extended Construction Value Chain) under **Horizon 2020**, **creates circular economy in a closed loop system with zero waste approach by implementing industrial symbiosis**, with participation of 26 partners from 9 countries. Please visit [fissacproject.eu](http://fissacproject.eu) for more information.
- Past suggested proposals under but very close to the threshold:
  - **AppleCore** Multidisciplinary Innovative Approaches For The Valorization And Reduction Of Food Waste And Food Packaging Waste By Technological Symbiosis,
  - **TECMAK-C** Advanced Technologies for Making High Performance Cements And Functionally Enhanced, Low Carbon Concrete Products,
  - **CEMENTUM** Optimization of Low Carbon Technologies For Cement Industry By Integrating Carbon Capture & Utilisation With Alternative Fuel Use,
  - **ADCCAP\_OPT** Advanced Adsorption-Based Carbon Capture Technologies Through Integrated Material and Process Optimisation,
  - **eMANtics** Energy Management for Industrial Circular Heat Recovery System.

# Previous and Current National Projects

- Influence Of A Finely Ground Waste Glass On The Microstructure Development Of Cement Pastes
- Utilization Of Waste Glass ,In Eco-Cement: Strength Properties And Microstructural Investigations
- Development Of Eco-Cement Containing High Volumes Of Waste Glass
- Utilization of Sewage Sludge as Secondary Fuel in Cement Production,
- Development of Special Inorganic Cements (alinite, calcium sulfoaluminate cement etc.),
- Self-cleaning White Cement with Nanotitanium Oxide,
- Investigation Construction and Demolition Waste (C&DW) as Aggregate.

- Long-term collaborative projects

- ✓ Utilization of Sewage sludge as secondary fuel in cement production
- ✓ Fluid catalytic cracking (FCC) Characterization
- ✓ Boron cement by using Colemanite
- ✓ Periodical cement quality assurance service in Construction projects
- ✓ Utilization of Humic Acid in cement & concrete



## **c) Recycling of raw materials from buildings (2018-2019):**

### Objectives

- Improving usage of alternative raw materials and additives including C&DW (Construction and demolition waste) in cement and construction industry.
- Expected results
  - Increasing usage of alternative materials instead of raw materials in accordance with protecting resources.
  - Enhancing circular economy by generating industrial symbiosis between different industries (Steel, glass, construction etc.)

# Other Interested Calls



- LC-CLA-01-2018: Supporting the development of climate policies to deliver on the Paris Agreement, through Integrated Assessment Models (IAMs),
- CE-SC5-06-2018: New technologies for the enhanced recovery of by-products,

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