

## **Sewage Sludge Ash in Concrete – Risk of Corrosion in Reinforced Concrete**

***G. Kurt***

DTU Department of Civil Engineering, Technical University of Denmark

Incinerated sewage sludge ash (ISSA) is interesting to investigate, regarding concrete mix design. ISSA reduces CO<sub>2</sub> emission of cement production. Leaching of a mortar sample with ISSA yields less heavy metal, which will lead to a greener environment. We performed various experiments with ISSA, examining its effects on the compressive strength of concrete and the risk of corrosion in various conditions. The results indicate that ISSA can be advantageous to use in a mortar sample, producing higher strength, better economy and environmental benefit. In terms of corrosion, we found no indication of inconvenience for utilizing ISSA in reinforced concrete.