



IRISH
CONCRETE
SOCIETY

Joint Technical Seminar
1 hour CPD

Institute of
Concrete
Technology



Advanced Concrete Technology Lecture

Concrete - Future Technologies: 3D Printing, Concrete AI Optimisation and In-Process Quality Control with AI

Who should attend:

- Ready-mixed and Precast Concrete Producers
- Cement Producers
- Concrete Technologists
- Design and Consulting Engineers
- Main Contractors

Presented by:

Dr.-Ing. Gregor Zimmermann

Founder and CEO of G.tecz Engineering GmbH, Germany

11th March 2024 at 5.45pm

Simon Perry Building, Trinity College Dublin

Email: events@concrete.ie to register

Introduction

Embark on a journey through the evolving landscape of concrete technology. The latest developments in 3D concrete printing and its challenges will be shown as well as the AI-controlled optimisation of concrete mix designs from normal concrete to ultra-high-performance concrete (UHPC) based on raw material parameters. In combination with this, the future role of AI-controlled in-process quality control with sensor systems and prediction of concrete quality. This trifecta of innovations demonstrates a paradigm shift in the concrete industry that promises sustainable, efficient and high-performance concrete solutions.

Who should attend

This free to attend lecture will be of interest to all those who are involved in the design, specification, production and construction of concrete. Those who should attend include ready-mixed and precast concrete producers, concrete technologists, cement producers, design engineers, consulting engineers and engineers in contracting and sub-contracting firms.

Speaker Biography

Dr.-Ing. Gregor Zimmermann is a founder and CEO of G.tecz Engineering GmbH, an innovative research and development company located in Germany that develops cement bonded high tech materials for industry applications. G.tecz is recognized worldwide for their contribution to innovative concrete technologies such as UHPC, ultra-lightweight concrete with aerogel and innovation technologies to reduce CO₂ in concrete and construction.

As CEO, Gregor is involved in the development of innovation projects and out of the box thinking with clients. The latest development by Gregor is concrete DNA for the optimisation and quality control of concrete with artificial intelligence, based on raw-material data and a huge database of concrete formulations realised by G.tecz since 2006.

Programme

5.45pm: Registration, Tea/Coffee

6.30pm: Concrete - Future Technologies: 3D Printing, Concrete AI Optimisation and In-Process Quality Control with AI

7.15pm: Q&A

7.30pm: Event Ends

7.45pm: Group Dinner*

* Please indicate when booking if you would like to join the group for dinner and avail of the opportunity to talk further.
Please note that there will be a charge for dinner.

The Irish Concrete Society is a not for profit learned body established in 1973 to support and encourage excellence in the use of concrete

www.concrete.ie