

INTERNATIONAL EXCELLENCE FELLOWSHIPS

Experience Report 2021/2022

Name and title of fellow	Dr. María Paula Zappitelli
Duration and time of research stay	Two months/ 11-07-22/11-09-22
Host professor and host institute at KIT	Prof Dr-Ing. Frank Dehn/ Institute for Building Materials and Concrete Structures (IMB) and Materials Testing and Research Laboratory (MPA)

Testimonial

My research field is

I study free and restrained shrinkage concrete behavior using thermal and transport models to determine capillary pressure and temperatura fields, as load states of fracture mechanic models, with the aim of predicting cracking initiation and propagation.

How is my research field going to affect the world of science?

Cracking in concrete is a very big issue due to concrete is the construction material most used around the world and cracking affect concrete durability. The possibility to predict cracks occurrence and propagation allows to take measure to avoid later deteriorations.

My main finding / highlight during my research work at KIT was

The possibility to meet new researchers which allows me to start new research topics.

Also, I could expand my research expertise to alkali activated slag concrete and improving my coding skills.

I have chosen the Karlsruhe Institute of Technology because

KIT is one of the most prestigious research institutions around the world, especially in engineering field.

If you want to, you can give advice to the next fellows. What should they know about Karlsruhe, KIT and the International Excellence Fellowships program?

The Excellent Fellowship program represents a great opportunity to know an excellent

research institution, which gives you a completely comfort working environment. Also,

you can get in touch with a lot of researchers that represents a possibility of improving or



defining new research topics.