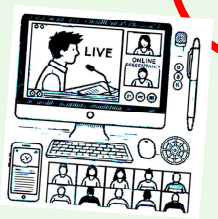
MAGICON

2025

INTERVIEW

RECRUITING

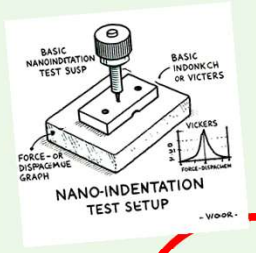
KICK OFF



2026

DESIGN OF EXPERIMENTS

SELF–HEALING STRATEGIES

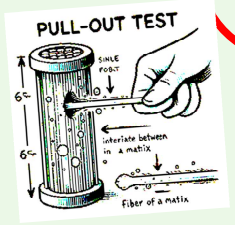


2027

MECHANICAL TESTING

EIGEN STRESSES

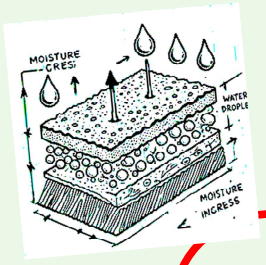
CREEP

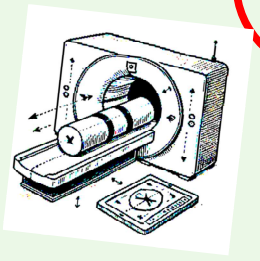


2028

MOISTURE TRANSPORT TESTING

DURABILITY





2029

NUMERICAL SIMULATIONS

AI MODELLING

2030

PHD GRADUATIONS

WORKSHOP

CLOSURE

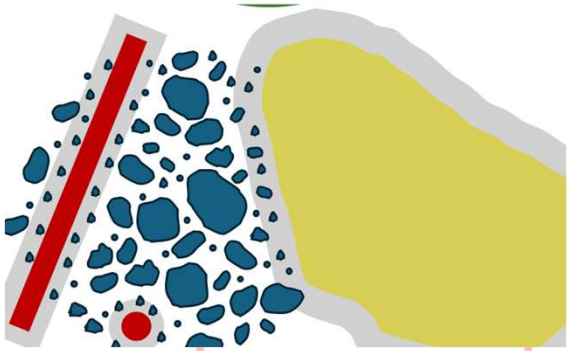
Erik Schlangen

ERIK's 10 tips for ERC

1. Build your CV (articles, keynotes, organise conferences, PhD-students....)
2. Make sure that people in your field know you and like you
3. Have an 'increasing' h-index
4. Make a personal website
5. Choose a topic for your ERC that no one else is working on
6. Start 1 year before the deadline
7. Empty your calendar the last 3 weeks before the deadline
8. Propose research methods that are realisic but challenging...
9. ...and that do not conflict with work of others; they should see a benefit for their work.
10. If you make it to the presentation stage.... Make sure it leaves an impression

MAGICON

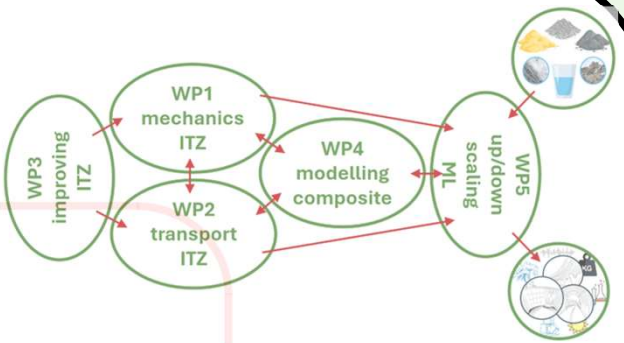
2025

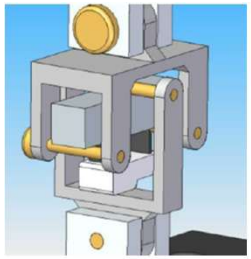


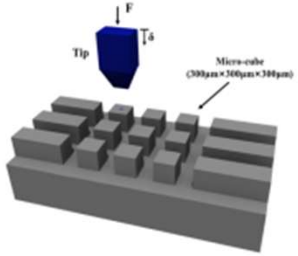
- MAterials Genome engineering for re-Inventing CONcrete
- March 18th: Interview ERC-Panel-PE8
- June 15th: MAGICON is Granted
- Launching MAGICON-website www.erc-magicon.eu
- Contacting peers/competitors
- Selecting PhD's and Postdoc

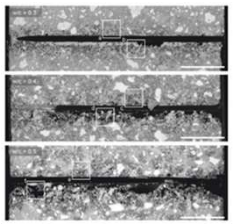
MAGICON

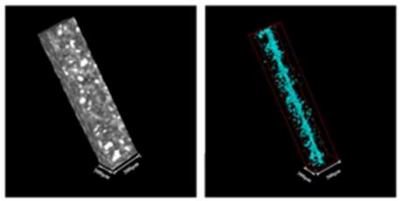
- GOAL (  )
- Design of experiments
- *Challenge*: Design self-healing strategies
- *Challenge*: Make samples with eigen-stresses
- Design and 2026 building climate chambers

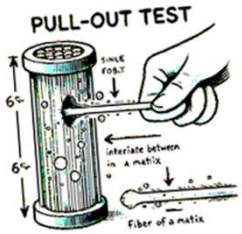










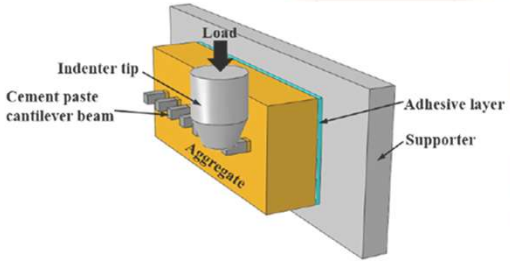


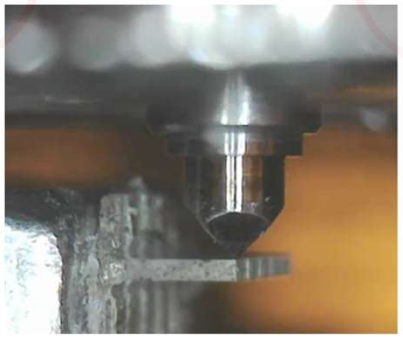
MAGICON

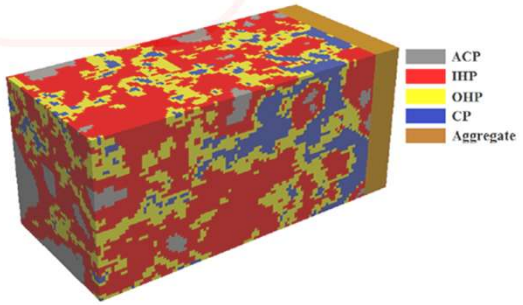
- ITZ micro-structure and
- Mechanical performance

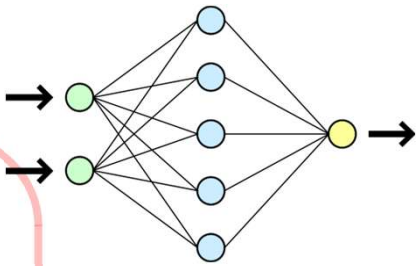
2027

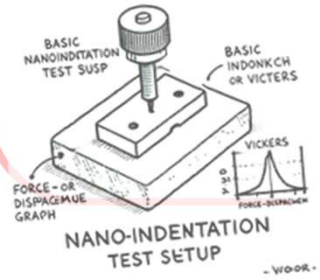
- *Challenge*: measure eigen-stress
- Initial moisture tests
- AI for generation of ITZ-micro-structures





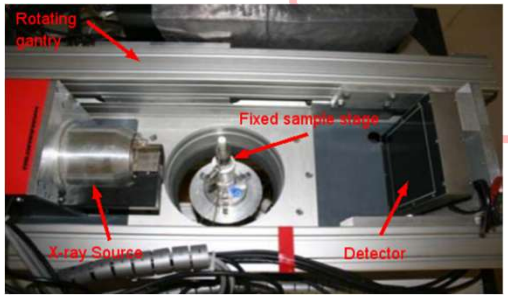


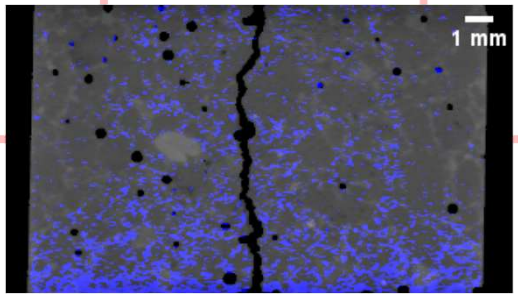




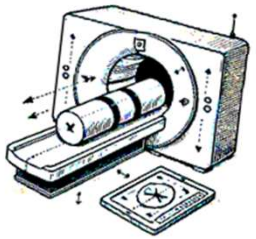
MAGICON

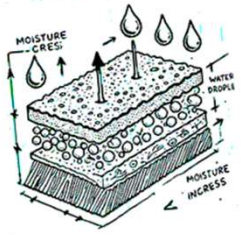
- *Challenge*: **ITZ-transport measurements**
- **Research stay of PI and PhD**
- **Postdoc new job**





2028





ESRF
The European Synchrotron

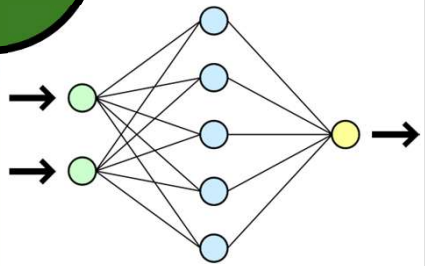
GHENT UNIVERSITY UGCT

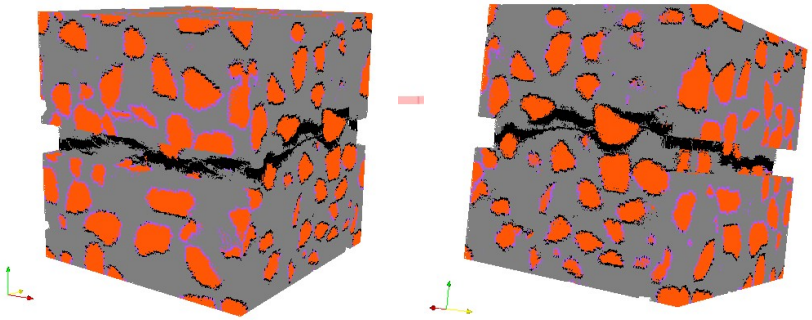
TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

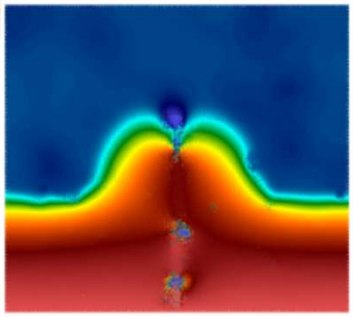
MAGICON

- *Challenge*: AI modelling
- Deterministic and probabilistic simulations
- ITZ - transport, durability and fracture processes

2029

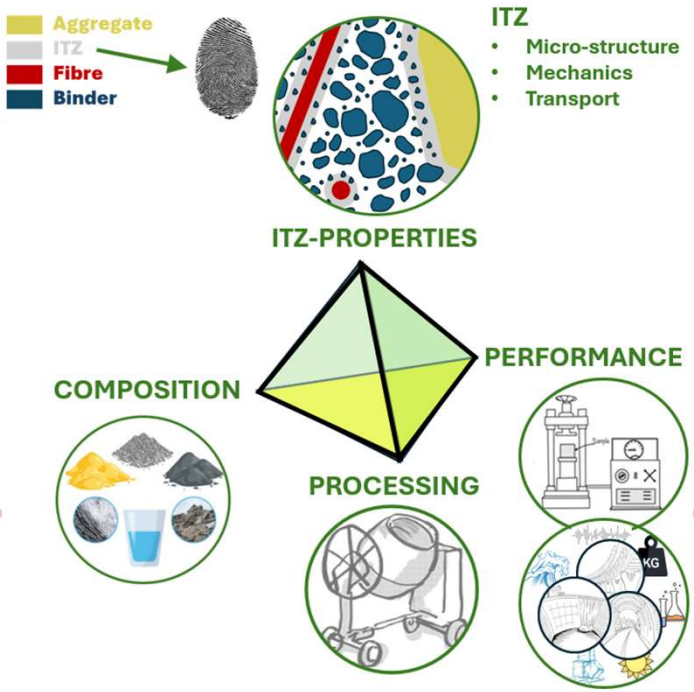






MAGICON

- MAGICON-Workshop
- 4 PhD's graduate
- Publications in top journals
- *Challenge*: Fingerprint strategy
- Performance tests
- Design guidelines
- Save structures with
  new 'green' materials



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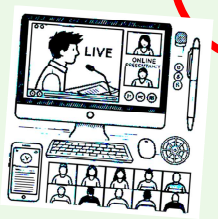

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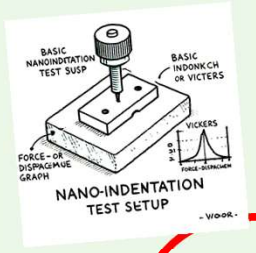

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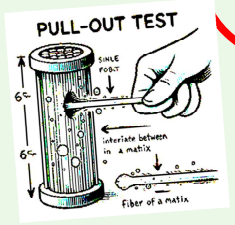

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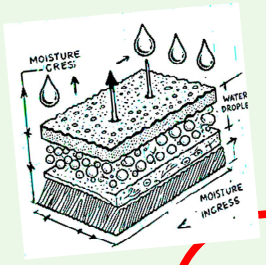

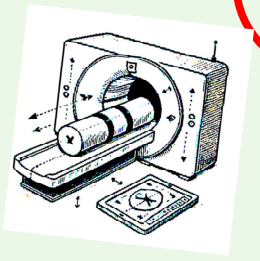

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