

Korea-EU Horizon Europe Researchers Networking Forum on Energy & Advanced Mobility

Eric Duffner, Natasya Riza

- **Position: Project-
/Workinggroup-
leader**
- **Organization: BAM (Federal
Institute for Material Research
and Testing)**
- **Research Area:
Hydrogen/ Gas
Storage/ Safety**



1. Short Introduction of your Organization



The Federal Institute for Materials Research and Testing (BAM) – Berlin, Germany is a senior German federal scientific and technical institution operating under the authority of the Federal Ministry for Economic Affairs and Energy.

Our Mission: We ensure safety in technology and chemistry.

Department 3:
Division 3.5:

**Containment Systems for Dangerous Goods; Energy Storage
Safety of Gas Storage Systems and Tanks for Dangerous Goods**



© Linde AG

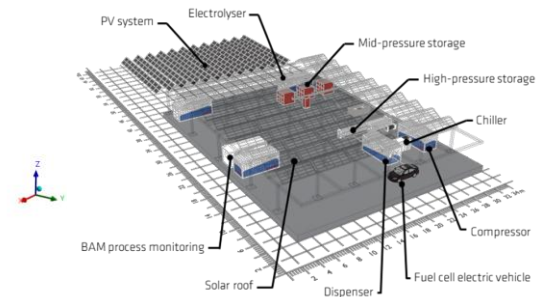
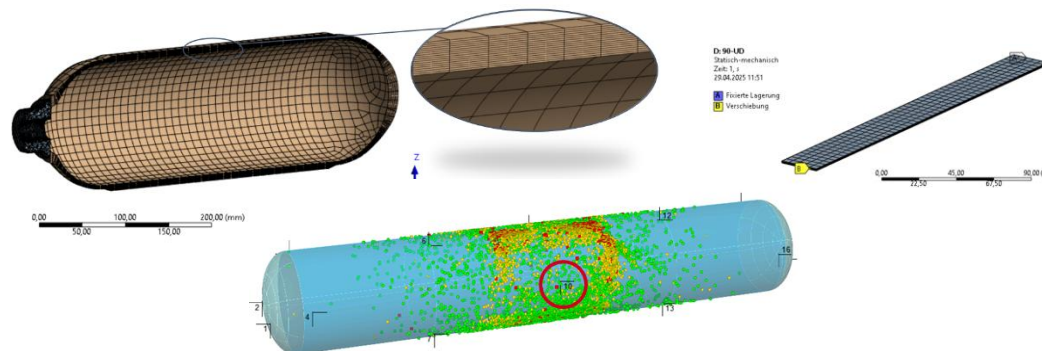
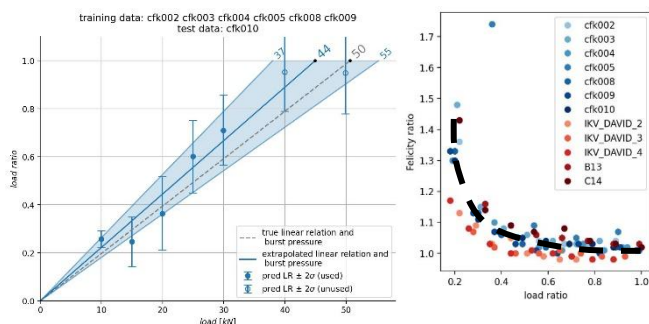




2. Expertise – part 1

➤ Safety of gas storage systems incl. CGH2 or LH2

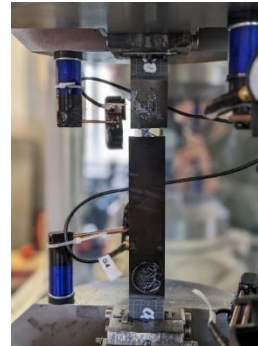
- Improvement and development of national and international regulations, codes and standards
- Probabilistic safety analysis with regard to probability of occurrence and risk
- Enabling end-to-end digitization of all relevant data from production to approval and operation to 2nd-life and end of life.
- Evaluation of composite gas storage systems with regard to their lifetime determination, in-service degradation and operational stability
- Numerical analysis, simulation and development of digital twins (e.g. H2 living-lab)





2. Expertise – part 2

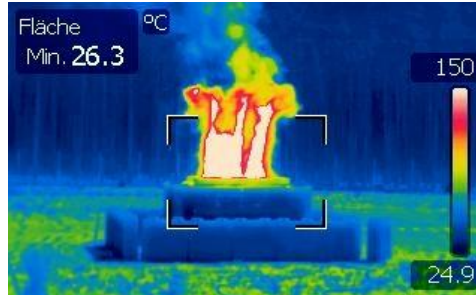
- **Safety of gas storage systems** incl. CGH2 or LH2
 - Hydraulic testing of gas storage systems with extensive measurement capabilities, especially for hydrogen applications
 - Systematic development of destructive and non-destructive testing methods
 - Investigation of accident scenarios in lab- or large-scale testing



2. Expertise – part 3

➤ Safety of gas storage systems incl. CGH2 or LH2

- Gaseous testing of gas storage systems with extensive measurement capabilities, especially for hydrogen applications
- Investigation of accident scenarios in lab- or large-scale testing





3. Contact Details

Contact:

BAM

Unter den Eichen 44-46

12203 Berlin

Division 3.5 “Safety of Gas Storage Systems
and Tanks for Dangerous Goods”

Rizka Natasya

Rizka.Natasya@bam.de

Telefon: +49 30 8104 3221

Eric Duffner

Eric.Duffner@bam.de

Telefon: +49 30-8104-3905