



1–3 Weathered test cubes.



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## BIOGENIC SULFURIC ACID CORROSION (BSA)

### MATERIAL TESTING

The number of damages caused by biogenic sulfuric acid corrosion (BSA) is increasing. The development of materials resistant to BSA requires testing methods that allow for a testing of the materials that is both oriented towards practice and accelerated. To achieve this, test rigs were setup at Fraunhofer UMSICHT.

In cooperation with Dr. Brill + Partner GmbH – Institut für Hygiene und Mikrobiologie weathering tests are carried out to assess the BSA resistance of materials. The results provide indications for a targeted optimization and further development of the materials.

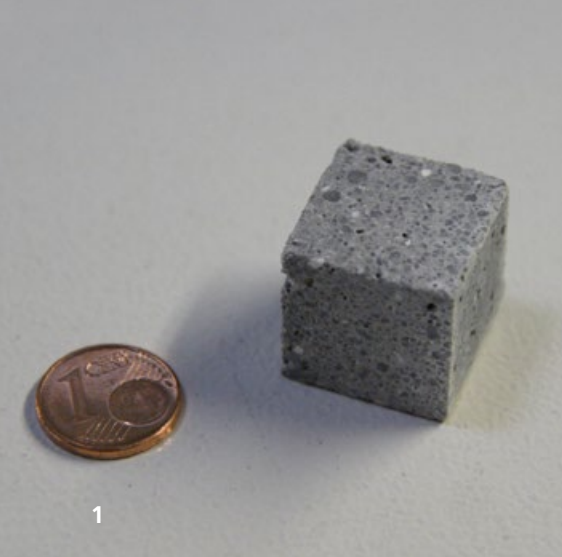
#### Keywords

- BSA
- Damage to material
- Material testing
- Microorganisms
- Analytics

#### Industries

- Wastewater treatment
- Biogas plants
- Canal construction
- Drinking water supply
- Sewage engineering





1 Test cubes in original condition.

2 Testing plant.

In collaboration with:

**Dr. Brill + Partner GmbH**  
**Institut für Hygiene und**  
**Mikrobiologie**  
 Stiegstück 34  
 22339 Hamburg, Germany

**Dr. Florian H. H. Brill**  
 Managing Partner

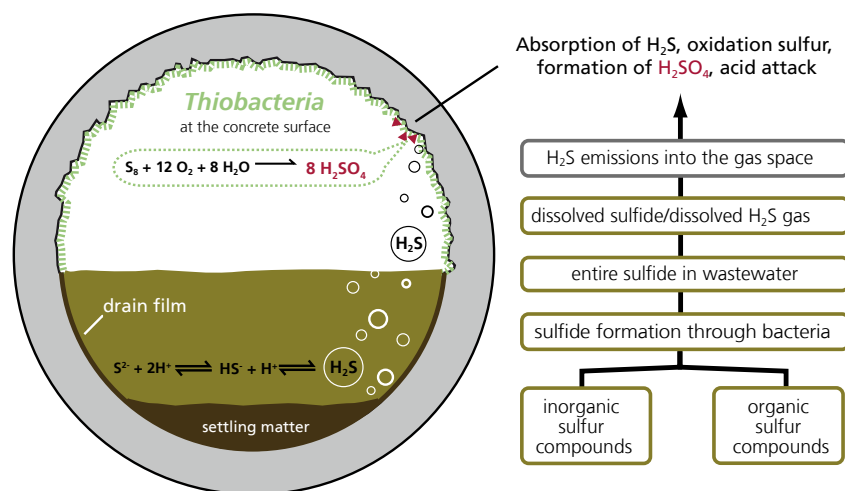
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Our services

- Conducting weathering tests
- Use of different materials and substrates
- Use of different micro organisms
- Accompanying microbial analytics
- Material optimization

Development of biogenic sulfuric acid corrosion in the sewer system\*



\*according to: Bock, E.; Sand, W.; Pohl, A.; Bedeutung der Mikroorganismen bei der Korrosion von Abwasserkanälen (Importance of Micro-Organisms for the Corrosion of Drainage Channels), TIS Tiefbau – Ingenieurbau – Straßenwesen, Sonderdruck zum 4. Statusseminar »Bauforschung und -technik« (TIS Magazine for Civil Engineering & Road Construction, special print for the 4th Status Seminar "Building Material Research and Technology"), 1983, pg. 47 – 49.

