



**FAST**  
GROUPE CLAIRE



## **INTERNATIONAL** Leak Detection Seminar



19<sup>th</sup> - 21<sup>st</sup> July 2023

F.A.S.T. GmbH invites international customers and interested people for an intensive 3 days' leak detection seminar at our professional training center with own test field at our headquarters in Langenbrettach, Germany. We transfer latest knowledge about methods and applications for leak detection, in theory and practice. The participants can test and try various different equipment's at our own test infrastructure directly on site and experience best practices from our dedicated training staff.

## THEORETICAL BASIC PRINCIPALS

- Sound propagation in pipes
- Sound propagation with homogeneous and inhomogeneous grounds
- Correlator mode of operation (analogue / digital)
- correlation- / coherence-funktion
- Settings of analogue and digital filters
- AZ-radio system (acoustic zone monitoring) mode of operation with different pipe materials
- Geophon mode of operation
- Autonomous data transmission system mode of operation
- Pipe searching / object searching

## TRAINING INCLUDES

Seminar participation and documentation

3 overnight stays in a hotel including breakfast

3 joint lunch dinners

3 joint dinners



## PRACTICAL TRAINING

- Correlation on:
  - metallic pipelines
  - non-metallic pipelines
  - long pipeline sections
  - more than one leakage on a pipe section
  - mixed materials
- Geophone measurements
  - measurements at different surfaces and soil properties
  - pipe searching with the geophone
- AZ-radio logger (acoustic zone monitoring)
  - evaluation of the data acquired
  - set up of the radio loggers
  - correlation with the radio loggers
  - work with WATERCLOUD software
- Boundaries of correlation
  - plastic pipes
  - ambient noises/disturbing noises
  - right filtering
- Real case leak detection at selected on site demonstrations



## GOOD TO KNOW

- Transportation from and to the hotel for the 3 days will be organized by FAST.
- In the evening we will visit either an old mill museum or a local sheep farm. Joint dinner will be hosted in a local "Besenwirtschaft" (local vine tavern)
- Closest airport to Langenbrettach is Stuttgart or Frankfurt. Joint collection can be organized, if required.
- The course starts at 9 am on Wednesday and ends at 2 pm on Friday.
- There is always room for individual sessions, if participants have special requests. Our complete team is available to assist with anything during the whole time.

We provide our customers with benefits in knowledge about products, as well as to methods of leak detection in drinking water networks. All training courses are consistently oriented to the practice. The use of our products and systems and the associated leak detection methods are internalized. We would be glad to meet you or your employees on one of our trainings. For further information or if you have any questions please do not hesitate to contact us.

### APPOINTMENT COORDINATION

Mrs. Katharina Kemppel

phone: +49 (0) 7946 92100 37

E-Mail: [kemppel@fastgmbh.de](mailto:kemppel@fastgmbh.de)