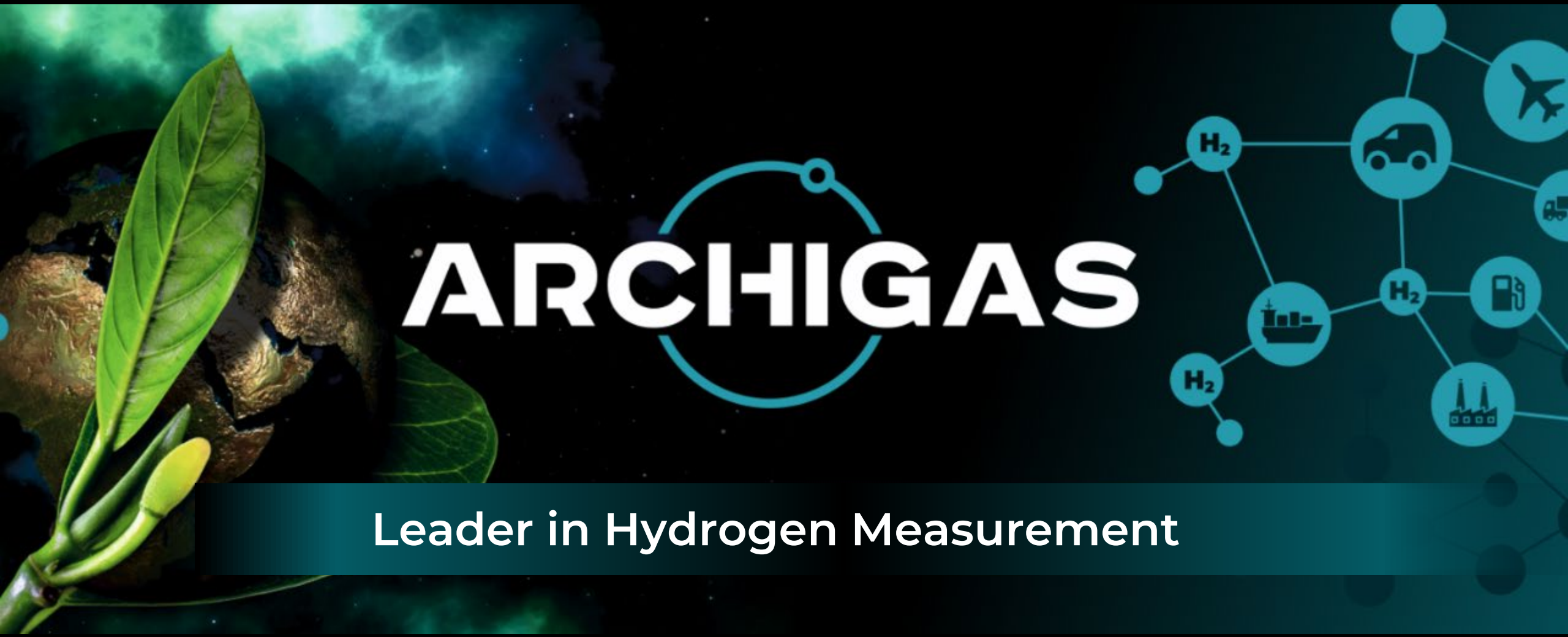
ARCHIGAS
H2
H2
H2
Leader in Hydrogen Measurement

About Archigas

- ✓ Specialized in gas analysis and microsensor technology
- ✓ Founded in 2020 in Rüsselsheim, near Frankfurt am Main
- ✓ Team of physicists, sensor and production experts with a total of over 60 years of experience
- ✓ Winner of the prestigious “Hermes Startup Award 2024”

HERMES STARTUP AWARD 2024

HESSEN CHAMPIONS
Der Innovations- und Wachstumspreis
Finalist 2023
Innovation

Hydrogen measurement

- ✓ Hydrogen is highly reactive
- ✓ The entire process chain - from production, transportation, storage to usage - requires gas analysis
- ✓ Appropriate measurements are used to determine H_2 purity and leakages in particular

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Optimal H_2 gas analysis is essential for hydrogen ramp-up!

Challenges

Previous measuring systems are often:

- ✓ Slow and imprecise
- ✓ Unstable and prone to defects (e.g. due to condensation)
- ✓ Large, complicated (e.g. due to sample preparation)
  and very expensive overall

Comprehensive optimization of H_2 gas analysis was therefore required - for a safe and economical hydrogen ramp-up!

Solution

H_2 gas analyzers from Archigas

- ✓ TCD3000 Transmitter
- ✓ TCD3000 Si Screw-in
- ✓ TCD3000 SiA Screw-in ATEX

Features

- ✓ The technology combines thermal conductivity measurement (TCD) with microsensor technology (MEMS) in a unique way
- ✓ It offers a highly dynamic measuring range from ppm to 100 vol%, ensures long-term stability, and provides an exceptionally fast response time of 30 ms
- ✓ The resistance to high pressures, high temperatures, condensation and corrosion enables direct use in the process without sample preparation

The innovative H_2 gas analyzers set new standards worldwide in terms of speed, precision, stability, robustness, convenience, dimensions and price savings!

Application areas

- ✓ **Electrolysis**

  LEL – H_2 in O_2 with H_2O; UEL – O_2 in H_2 without H_2O or with compensation; Purity of H_2

- ✓ **Fuel cell**

  LEL – H_2 in Air with H_2O

- ✓ **Leack testing**

  H_2 in Air; He in Air

- ✓ **Injection of H_2 into Natural Gas**

  CH_4 in NG; H_2 in NG


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Merci beaucoup pour votre attention