



WE CAN DO RESEARCH FOR YOU

Materials and Corrosion

You

- » are looking for support developing and qualifying new materials?
- » would like to develop a suitable corrosion protection strategy?
- » would like to perform a failure analysis of a damage in your plant or on an application?

We

- » are an independent research institute working in the areas of materials, chemical engineering, and biotechnology.
- » offer one-stop materials and corrosion research, starting from developing new materials and protective measures, up to damage assessment. Thus we cover the entire lifecycle of materials in diverse industrial environments and over the entire temperature range.

Our strengths

- » Continuity and expertise: Experienced scientists will work on your project
- » Lean organization: We keep bureaucracy to a minimum
- » Flexibility: IP arrangements are negotiable
- » Speed: We will start working on your project immediately
- » Experience: Year-long collaboration with medium and large industrial companies

We are your partner for fundamental as well as applied research and development.

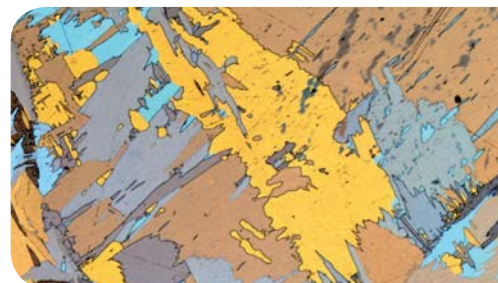
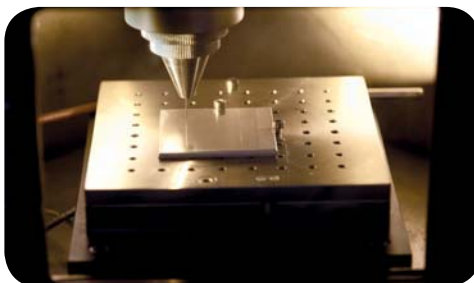
Contact us for more information!

Our know-how

- » Investigation methods for corrosion
- » Developing innovative concepts for corrosion protection
- » Systematic assessment of damage events

Research facilities

- » Electron microscopes (SEM, TEM) with energy dispersive analysis (EDX)
- » Electron probe micro analysis (EPMA) with wavelength dispersive analysis (WDX)
- » X-Ray diffraction (XRD), including Goebel mirror and high-temperature in situ analysis
- » Atomic Force Microscope (AFM) with equipment for in-situ AFM
- » Confocal Raman spectrometer with optional in situ spectroscopy
- » Classical and interference layer metallography
- » Spark emission spectrometer (OES)
- » Nano-indenter (hardness measurement)
- » Dilatometer
- » Universal testing machine up to 50 kN
- » 4 point bending test apparatus (4PB)
- » Acoustic emission analysis (AE)
- » Isothermal and thermocyclic high temperature furnaces corresponding to the newest ISO standards
- » Contact angle measuring instrument for ambient and for high temperature (up to 1200°C)
- » Salt spray chamber
- » Corrosion test facilities
- » Electrochemical measurement systems including impedance spectroscopy
- » Scanning Kelvin Probe
- » Single and four source sputtering facility
- » Vacuum induction melting furnace (up to 2000°C)
- » Arc melting furnace (up to 3000°C)



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