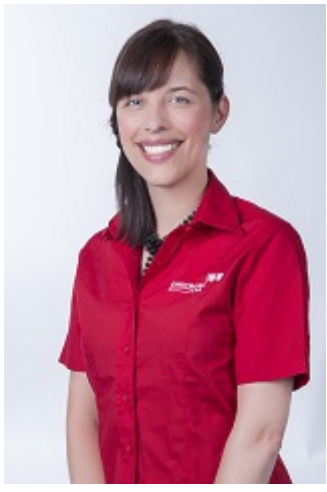

Dear Reader,
People often abstract things in their daily lives. They fill up their cars with fuel without knowing more about its complex chemistry or composition. This phenomenon can be compared with the scientific black box. But for us, as engineers, such relationships are very important.

Our new SPECTANO 100 enables a look into the black box of insulation materials. The gained knowledge of the dielectric behaviour of such materials can increase the safety, stability and durability of electrical systems and components.

Enjoy your reading!
Britta Pfeiffer

PS: Make sure that you scroll down to the last story of this Newsletter - I'm sure you'll like it.

Exact characterization of solid and liquid dielectric materials

If you are working with solid or liquid insulation materials, our newly released dielectric material analyzer SPECTANO 100 might be just right for you. It offers you a fast and effective solution to characterize and analyze solid and liquid dielectric materials from 5 µHz to 5 kHz. By combining measuremets in the time and frequency domain it will **save up to 75% of measurement time in comparison to conventional test methods**. The SPECTANO Analyzer suite enables you to quickly analyze material specific polarization phenomena as well as all electrical material parameters like permittivity, dielectric losses, capacitance and impedance. These dielectric properties reveal the secrets of a dielectric material which will help you to understand the relationship between the structures, the quality, availability for use, and the condition of the specific material under test. Due to SPECTANO's wide output voltage range of 100 mV_{peak} to 200 V_{peak}, **you will not need an additional external voltage booster**. For more information on the SPECTANO 100 and its applications simply visit: **http://www.omicron-lab.com/spectano-100**

New OTMC 100 Firmware available

With the release of the Firmware V1.11, we have added the power utility profile in accordance to IEC/IEEE 61850-9-3:2016. This profile is now available in parallel to the classic power profile IEEE C37.238-2011 for our PTP Grandmaster clock OTMC 100p. But updating also pays off for all users of the OTMC 100i. To find out more about the changes and improvements of our new Firmware check out the **version history** on our webpage. There you can also to **download** the new Firmware V1.11.

Check out our latest Extreme Measuring Adventure

Sometimes, you need to do crazy things. Our extreme measuring ad campaign is a cool excuse for us to do so. So feel free to check out the video of our latest adventure. We use the Bode 100 to measure the load on a climbing rope during rappelling / abseiling into a 35 m vertical cave, the Kessiloch.

Enjoy watching the **video** and reading the **background story**!