

Newsletter – May 2014

Dear colleagues,

Even after aixACCT has been established 15 years ago and became world leader in testing piezoelectrics, we are still full of beans to improve our products according to market needs – your needs. It is our ambition to be close to, better ahead of the market.

I don't need to look far to find the origin of this ambition. It is the education of my former supervisor Rainer Waser, who has strongly supported the companies foundation in the late 90s. His pursuit to steadily optimize and improve scientific models and theories has definitely been the inspiration to do the same for our products.

Focussing on material characterization systems of ferroelectrics has led to various innovations in this field and gave us confidence to do the same for electroceramics in general. In the recent past we have also build systems for magnetic and resistive materials and multiferroics.

Since a couple of years more general issues of quality assurance play a role for aixACCT Systems. We increasingly have to deal with the engineering of mechatronic systems. To keep our focus on material characterization systems we have, in a joint venture with an engineering specialists Klotz&Gangloff founded the aixACCT mechatronics GmbH, which will take care of such issues.

Our team at aixACCT Systems remains almost unaffected thereof. Only Roland Kessels changes to aixACCT mechatronics into a leading position.

I would like to congratulate on behalf of aixACCT Systems my former supervisor Prof. Rainer Waser to his extraordinary honour, he has become Leibniz Prize winner, Germany's most important science award. As a member of Rainer's team for eight years, I could observe how much work and also austerity over a long period are behind this price. I greatly respect this scientific achievement. Chapeau Rainer!

Happy reading,
Stephan Tiedke



■ **aixACCT exhibiting at ISAF conferences**

New products and new features for existing products will be presented at ISAF conference at Penn State University in State College, USA. Live demos will be given of aixPES Piezoelectric Evaluation System for bulk ceramics. New options like scanning PES for the automated testing of arrays including impedance measurement up to 10MHz are demonstrated. High temperature sample holder for piezoelectric measurements up to 800°C will be exhibited but not demonstrated due to safety reasons. The aixPES system has quite some history, more than 100 tools have yet been sold worldwide. A large number of users comes from industry and pushes us to steadily implement new features. High temperature piezoelectrics are important for aircraft industry requiring reliable measurements up to 1000°C. aixACCT runs a prototype in-house at that temperature range.

■ **World first d33,f versus temperature measurements with aixDBLI**

aixACCT Systems managed to implement the temperature option into the aixDBLI tool that has been demanded by industry since more than a year. Room temperature up to 500°C has been demonstrated on PZT material. Our development team did a great job allowing us to test up to 1 by 1 inch samples in this temperature range. This is unique and allows for the first time this important test for product qualification and therefore it is of interest for the piezoMEMS industry.

■ **World first e31,f measurements on full wafers utilizing DBLI technology**

aixACCT Systems' development team and the development team at XAAR has invented a method to derive e31,f on full wafers. This method utilizes well established aixDBLI technology and therefore benefits from extremely high reliability and reproducibility of the tool.

■ **Magnetic Test System for large and small signal testing**

According to market needs of multiferroic community aixACCT has extended its magnetic test systems to combined small and large signal measurement. The solution is based on a combination of a quasi static magnet that generates e.g. 1.5Tesla and a Helmholtz coil for small signal generation 3 of 30mT, depending on the configuration.

■ **Meet us at**

- ECC XIV 16th to 20th June in Bucharest, Romania
- ISAF X 12th to 16th May in State College, USA
- ECAPD, 7th – 11th July 2014, Vilnius Lithuania
- ICT, 6th – 10th July 2014, Nashville, USA

■ **Automation Test Equipment for industry solution**

aixACCT Systems has extended its line card for industry solutions, based on the automation assistant software. Beside the aixDBLI tool a wider range of automated tools is now available for impedance analysis, temperature studies as well as reliability testing. Ask for more details for your specific application.

■ **aixACCT mechatronics started on 28th April 2014**

aixACCT Systems has started a joint venture with Klotz&Gangloff a specialist in mechanical engineering. aixACCT mechatronics focuses on supplying advanced customized characterization tools that require a combination electrical and mechanical components to semiconductor, MEMS, automotive and medical industry, e.g. test rigs for driveline and power trains. aixACCT Systems will support aixACCT mechatronics with specialized measurement components.

■ **aixACCT Systems has extended production capacity and prepares for further growth**

Since November 2013 eight new employees have joined aixACCT Systems: Friedrich, Guido, Daniel, Klaus, Thomas, Jochen, Stefanie, Robin

Friedrich supports the development team, circuit design and circuit layout. Friedrich started to work with Philips in 2002, worked for two other companies before joining aixACCT Systems.

Guido worked for an automotive industry's tools supplier and another company before joining aixACCT Systems. He supports the production team as group manager.

Daniel joined aixACCT recently, formerly he has been working at Mitsubishi Electric and Renesas. With his long experience he will be responsible for our In-House Testing Service.

Klaus has been working for different high tech companies in the field of solar and printer industry. He supports our development team. One of his activities is thermoelectric characterization.

Stefanie supports our administration team and may have contact with you in the future.


Thomas joined the aixACCT team due to his testing expertise in the field of automotive industry. He will support aixACCT to expand its activities in building various kinds of test rigs for automotive industry.

Jochen has been working in automotive industry for more than a decade. He has a broad range of experience when working in different positions. He will be responsible for finance and organisation within the aixACCT group.

Robin will join the production team from June 1st. He is specialized in analog circuit design.

Production area and capacity has been extended in order to cut down lead times of our products, especially for more complex and customized tools.

■ **Contact**



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