

Dear Sir or Madam,

For SQC and FOKUS the past few months certainly stood under the star of aerospace technology. For the launch of a microsatellite for early fire detection, Fraunhofer FOKUS took on the development of the operating system and control computer. Moreover, the research project OBC-SA for the development of aerospace system architecture has successfully launched into its third phase.

Of course, everyday operations didn't stand still in our domestic sphere either. The SQC-led international ITEA research project DIAMONDS received the EUREKA Innovation Award 2015/2016. The project was honoured in the category 'Added Value' for its successful development and implementation of a new model-based testing and monitoring paradigm for security testing of networked software systems.

As it is the case every year, SQC will feature on a number of events and fairs. The next exhibition is the InnoTrans in Berlin in September and we warmly invite you to pay us a visit there.

At the System Quality Center (SQC) of Fraunhofer FOKUS, nearly 100 dedicated experts provide you with methods, processes and tools for the development and quality assurance of software-intensive systems that often perform business-critical or security- and safety-relevant functions in urban infrastructures, cars, trains, planes or factories.

If you have questions or feedback, or if you want to learn more about how to achieve higher product quality, you are very welcome to contact us.

Enjoy reading!

Best regards

Dr. Tom Ritter & Friedrich Schön (Directors SQC) and the Fraunhofer FOKUS SQC-Team

Projects & Activities

Version 2.0 of ModelBus® released



ModelBus® is a framework for managing complex development processes and integrating heterogeneous tools. With version 2.0, the newest Eclipse versions are supported, Eclipse Communication Foundation is integrated and standalone services are supported better and ModelBus® is more standard compliant.

→ [more info](#)

→ [ModelBus website](#)

Third phase of OBC-SA Project started



On July 1, 2016, the third phase of the OBC-SA project started. As computer systems for satellites and space craft must provide an ever increasing computer power while at the same time being fault tolerant, Fraunhofer FOKUS is about to develop an architecture for computer systems in space flight among others.

→ [more info](#)

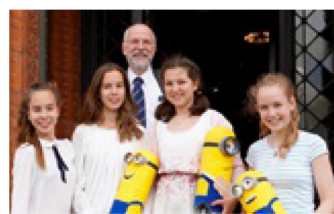
Launch of microsatellite BIROS



On June 22, 2016, the microsatellite BIROS with the mission of the early detection of fire departed from an Indian spaceport. Fraunhofer FOKUS was in charge of the development of the control computer as well as of the operating system.

→ [more info](#)

Meeting with Governing Mayor Michael Müller



After months of preparation, the team "Alpha Dancers" participated at RoboCup Junior with their mentor Prof. Holger Schlingloff from SQC. As a special price of the jury, the team won a meeting with the Governing Mayor of Berlin Michael Müller at the end of June 2016.

→ [more info](#)

TAG Cloud Project successfully completed



With the last review on the 16th of March, the project TAG CLOUD was successfully completed in which the COOLTURA app and platform was developed. Through COOLTURA, it is possible to explore cultural content via augmented reality, games and social networks. Interactive maps, routes or audio guides make it possible for cultural institutions to present themselves.

→ [more info](#)

Establishment of Papyrus Industry Consortium



Developing modeling tools for the embedded system branch will be the main task of the Papyrus Industry Consortium. Fraunhofer FOKUS is among the co-founders together with companies like Airbus and Ericsson. The aim is to develop an industry-grade open source MBE solution.

→ [more info](#)

Project RASEN ranked as »excellent« by EU-Experts



The project RASEN develops techniques, tools and methods to derive security test cases from security risk assessment results and to verify and update of the security risk assessment based on security test results. Fraunhofer FOKUS co-designed two innovations among seven partners. The main results were ranked as »excellent« by EU-Experts in November 2015.

→ [more info](#)

Events & Presentations

4th International Workshop on Risk Assessment and Risk-driven Quality Assurance (RISK)



Risk-based approaches for ensuring the quality of software and cyber-physical systems will be addressed in this workshop. In this year's edition, contributions that address reliability or the Internet of Things are particularly encouraged. The workshop will take place from October 17-19, 2016 in Graz, Austria and is organized by Jürgen Großmann from SQC among others.

Call for papers: Authors are invited to submit abstracts and manuscripts reporting original unpublished research and recent developments. Please submit your paper via EasyChair.

→ [RISK Workshop](#)

→ [Call for Papers](#)

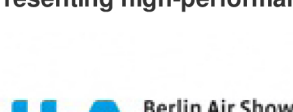
InnoTrans 2016 Trade Fair



The InnoTrans 2016 trade fair is set to take place in September 20-23, 2016. Fraunhofer FOKUS' SQC department will host a booth (Hall 23b – Booth 206), showcasing the provision of quality assurance services for railway systems. Services include advice on certification, operation and analysing requirement.

→ [more info](#)

Presenting high-performance computer systems for spacecraft at ILA



On June 1-4, 2016, ILA Berlin Air Show took place. In this frame, Fraunhofer FOKUS presented a high-performance On-Board Computer System Architecture for autonomous controlling of spacecrafts.

→ [more info](#)

Hosting of Eclipse DemoCamp 2016



On Thursday, May 12, 2016, SQC hosted the Eclipse DemoCamp which is a great opportunity to discuss new technologies built on Eclipse. This year's keynote speaker was Mike Milinkovich, Executive Director of the Eclipse Foundation. Various projects and demos related to Eclipse were presented and discussed.

→ [more info](#)

Publications & Awards

Hartmut Lackner received a doctorate



»Domain-Centered Product Line Testing« was the topic Hartmut Lackner wrote his dissertation about. On July 13, he received his doctorate at the Humboldt-University Berlin. Back in 2010, Hartmut Lackner started his dissertation at Fraunhofer FOKUS and since 2013 completed in the research training group "METRIK" at the HU Berlin. Congratulations!

EUREKA Innovation Award for ITEA research project DIAMONDS



ITEA project DIAMONDS was announced as the winner of the EUREKA Innovation Award 2016 in the category »Added Value«. Prof. Dr.-Ing. Ina Schieferdecker, Director of the Fraunhofer-Institute FOKUS, is the project coordinator of DIAMONDS. In several industry case studies, efficient and automated security testing methods of industrial relevance for highly secure systems in multiple domains have been evaluated by the consortium of 21 partners.

→ [more info](#)

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