PRESS RELEASE
Munich, Germany
Information can be disclosed as of March 1st, 2023

Zurich Instruments Germany GmbH is part of OpenSuperQPlus

OpenSuperQPlus unites 28 European research partners from 10 countries aiming to develop a 1,000-qubit quantum computer

Jülich, 1 March 2023 – The project OpenSuperQPlus – part of the European Quantum Technology Flagship – gets underway. It is continuing and enhancing the project OpenSuperQ and brings together most of its team with new partners – including the key partners of the national initiatives of the Netherlands, France, Finland, Germany, Hungary and Sweden, full-stack quantum computing startups and many other key players in the field. The large-scale follow-up project coordinated by Forschungszentrum Jülich involves a total of 28 partners from 10 countries.

This team has formed a framework partnership and put forward an ambitious seven-year agenda ultimately leading to a 1,000-qubit quantum computing system. The consortium is now launching its first stage OpenSuperQPlus 100 that on the one hand aims at developing several systems for evaluating hard- and software as well as a user-oriented 100 qubit system for first quantum applications within the next 3.5 years. With regard to the second stage, it will also look at the critical components and technological decisions needed for the 1,000-qubit quantum computing system.

OpenSuperQPlus (Open Superconducting Quantum Computers) is funded by the European Union with 20 million euros from a specific quantum grant within the Horizon Europe framework programe. This budget goes a long way through synergies with local and national initiatives. “We are bringing together European specialists for all the components of such a quantum computing system under a unified framework – be they in the public or private sector. The technological challenge of beating errors in quantum computers and scaling them up needs all hands on deck from the outstanding quantum ecosystem in Europe“, says coordinator Frank Wilhelm-Mauch of Forschungszentrum Jülich.

Like its predecessor project OpenSuperQ, the project's continuation within the framework of OpenSuperQPlus aims at a versatile quantum computer made in Europe. The consortium anticipates special use cases in quantum simulation for the chemical industry, materials science or in solving optimisation problems and in machine learning.

Zurich Instruments Germany GmbH
Mühldorfstraße 15
81671 München
Germany

Phone +49 89 37 04 00 47
Fax +49 89 37 04 00 46
Email info.de@zhinst.com
Web www.zhinst.com

Managing Director: Dr. Claudius Riek
Handelsregister B des Amtsgerichts
München: HRB 270506
Tax Number VAT-ID DE349732684

Zurich Instruments Germany GmbH will contribute scalable software solutions to its project partners and enable them to program and execute complex quantum experiments with high throughput. “The project allows us to partner up with an outstanding European consortium and collaborate with our mother company, Rohde & Schwarz, in an innovative setup. I am confident the solutions we develop together will make our partners’ quantum computing control systems less complex, more scalable, and will bring us closer to useful quantum computers,” says Dr. Claudius Riek, Zurich Instruments Germany GmbH’s managing director.

For more information, please visit

- https://opensuperqplus.eu
- https://twitter.com/opensuperqplus
- https://www.linkedin.com/showcase/93100945

OpenSuperQPlus Partners

Germany:

- Forschungszentrum Jülich GmbH
- Bayerische Akademie der Wissenschaften
- Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e. V.
- Karlsruher Institut für Technologie
- Qruise GmbH
- Rohde & Schwarz GmbH & Co. KG
- Supracon AG
- Zurich Instruments Germany GmbH
- EURICE – European Research and Project Office GmbH

Finland:

- Aalto korkeakoulusäätiö SR
- BlueFors Cryogenics Oy
- CSC – Tieteen tietotekniikan keskus Oy
- IQM Finland Oy
- Teknologian Tutkimuskeskus VTT Oy

Netherlands:

- Netherlands Organisation for Applied Scientific Research
- Orange Quantum Systems Operational Bv
- QuantWare B.V.
- Technische Universiteit Delft

France:

- Alice & Bob
- Centre National De La Recherche Scientifique
- Commissariat à l'Energie Atomique et aux Energies Alternatives

Hungary:
- Budapest University of Technology and Economics
- Wigner Research Centre for Physics

Austria:
- Institute of Science and Technology Austria

Sweden:
- Chalmers Tekniska Högskola AB

Estonia:
- Tartu Ülikool

Spain:
- Universidad del País Vasco / Euskal Herriko Unibertsitatea

Israel:
- The Hebrew University of Jerusalem

About the Quantum Flagship

The Quantum Flagship was launched in 2018 as one of the largest and most ambitious research initiatives of the European Union. With a budget of €1 billion and a duration of 10 years, the flagship brings together research institutions, academia, industry, enterprises, and policy makers, in a joint and collaborative initiative on an unprecedented scale. The main objective of the Flagship is to consolidate and expand European scientific leadership and excellence in this research area as well as to transfer quantum physics research from the lab to the market by means of commercial applications and disruptive technologies. With over 5,000 researchers from academia and industry involved in this initiative throughout its lifetime, it aims to create the next generation of disruptive technologies that will impact Europe's society, placing the region as a worldwide knowledge-based industry and technological leader in this field.

Contact

Project Coordinator:
Forschungszentrum Jülich GmbH
Prof. Dr Frank Wilhelm-Mauch
Mail: f.wilhelm-mauch@fz-juelich.de
Web: https://www.fz-juelich.de/en

Project Management:
EURICE GmbH
Antonija Zrno Culap
Mail: A.Zrno-Culap@eurice.eu
Web: www.eurice.eu

Press contact:
Zurich Instruments Germany GmbH
Claudius Riek, Application Scientist and Managing Director
Mail: claudius.riek@zhinst.com
Web: www.zhinst.com