

MetaboliQs

Quantum technology for human needs

We are very happy to send you our second MetaboliQs newsletter today!

The project MetaboliQs develops an innovative diamond polarizer that is able to work at room temperature with a 160 times higher efficiency, offering a polarization that is 40 times faster and 4 times cheaper than before.

In this newsletter we inform you roughly quarterly on current project highlights, publications, job advertisements and much more within the project.

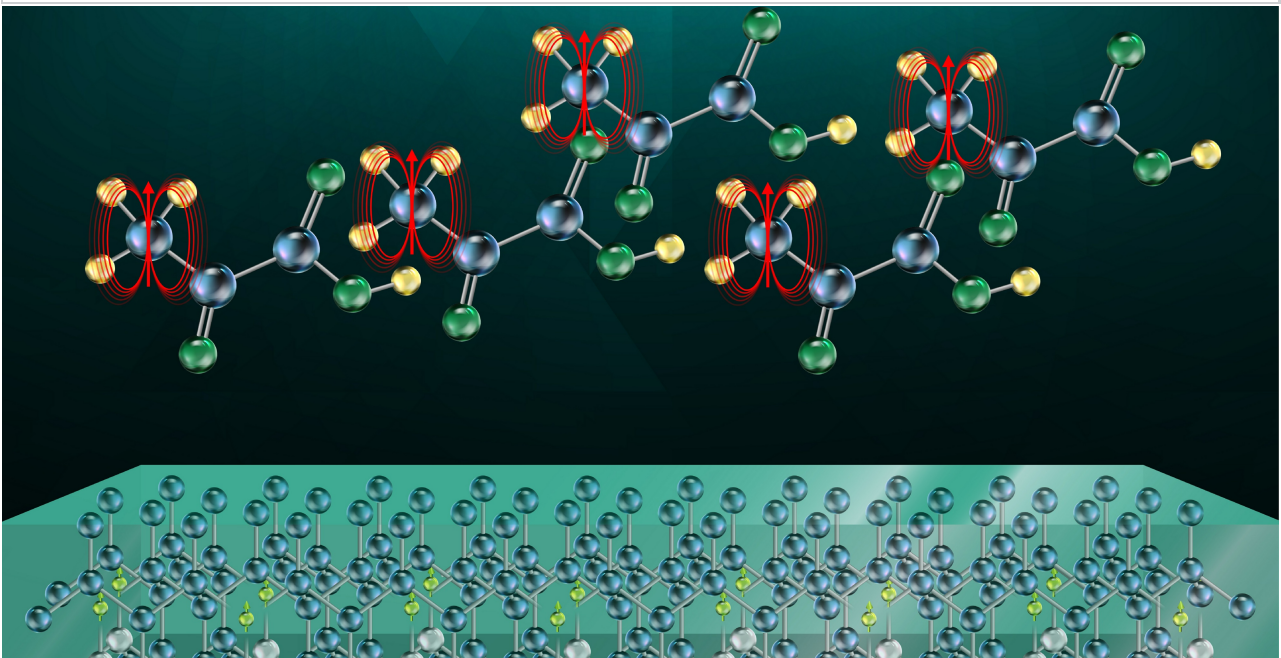
Please feel free to forward our newsletter to interested colleagues. Your feedback and suggestions are always welcome.

Happy reading!



Laura Hau

Project Communications



About the MetaboliQs project

A cooperation of Fraunhofer IAF, NVision Imaging Technologies GmbH, Element Six Ltd., Hebrew University of Jerusalem, Bruker BioSpin GmbH, ETH Zurich and TU Munich

The MetaboliQs project is developing an innovative diamond polarizer that works with any commercial MRI scanner and operates at room temperature. It consists of a diamond plate with a high number of nitrogen vacancy (NV) centers, which are used for the hyperpolarization of biomarker molecules. This procedure leads to an improved polarization and a higher resolution of the imaging.

MetaboliQs brings together a world-class multidisciplinary consortium and is part of the "Quantum Flagship" program funded by the European Union.

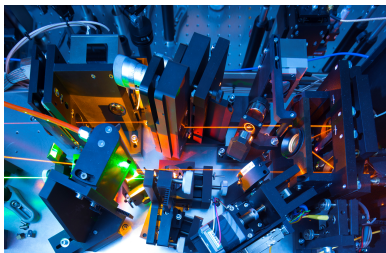
[PROJECT WEBPAGE](#)



MetaboliQs: News and Events

MetaboliQs was featured in an article by the EU magazine "Horizon"

[Quantum technology could revolutionise the detection and treatment of diseases](#)

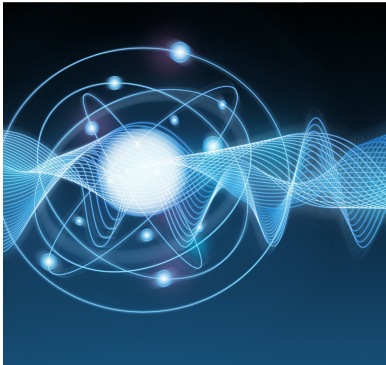


When you hear the word 'quantum', you may imagine physicists working on a new ground breaking theory. Or perhaps you've read about quantum computers and how they might change the world. But one lesser-known field is also starting to reap the benefits of the quantum realm - medicine.

[READ MORE](#)

MetaboliQs was featured in the "Microelectronics News"

Higher-precision diagnostics and personalized treatment using advances in quantum physics

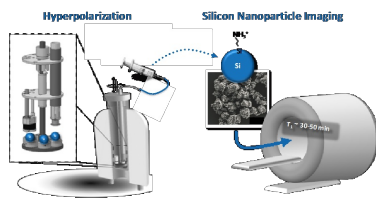


The "Microelectronics News" is a Newsletter initialized to keep track of topics, news and events from the world of microelectronics. In its latest copy, the "Microelectronics News" published an article about the project MetaboliQs.

[READ MORE](#)

News from ETH Zürich

Project Update



The Magnetic Resonance Imaging (MRI) framework to simulate cardiac metabolism, MRI pulse sequences, image reconstruction and data fitting to provide means for MRI sequence optimization and sensitivity analysis has been successfully accomplished. The work has been presented at the recent Annual Meeting of the International Society of Magnetic Resonance in Medicine in Montréal.

[READ MORE](#)

Events

22.07 → 26.07 2019 | Palacio Miramar
Spain

Summerschool: "Nanotechnology meets Quantum Information"



The Summer School "Nanotechnology meets Quantum Information" 2019 (NanoQI'19) provides an introduction to the basics and recent advances in several main areas of quantum information theory and solid state based quantum technologies. Eight leading researchers both from the experimental and theoretical field provide an overview of the main concepts and methods and explain promising current research directions.

[EVENT WEBPAGE](#)

17.10 → 18.10.2019 | Helsinki, Finland
European Quantum
Community Meeting 2019

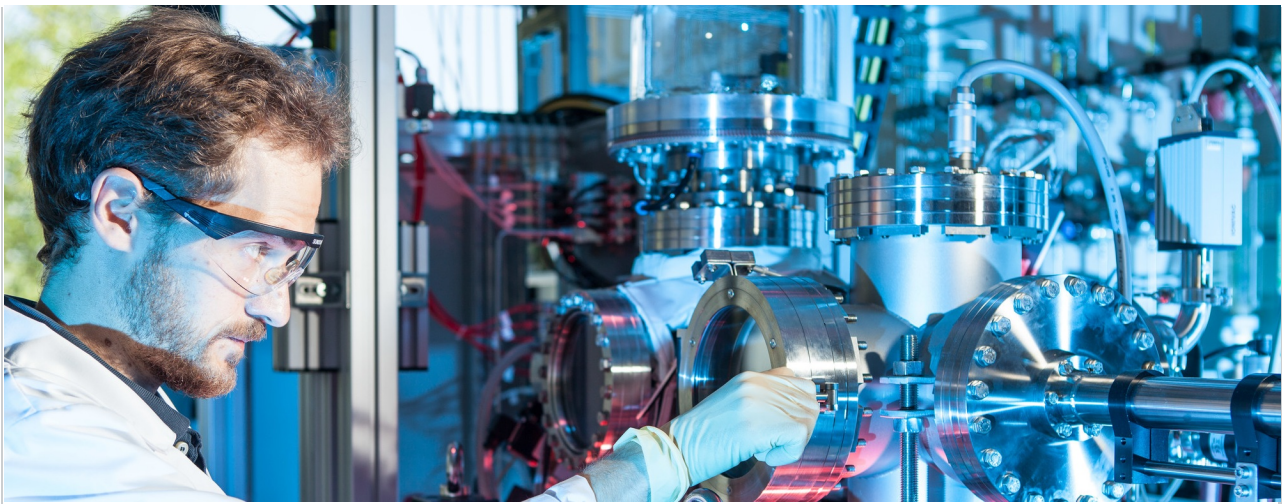


Join the Finnish Presidency-Quantum Flagship event that will take place in October in Helsinki.

The two day event will be dedicated to the Quantum Technology community, the Quantum Flagship as well as setting the Strategic Research Agenda, which will be presented and discussed among the community attending the event.

The program is currently being finalised and will be posted very soon.

[EVENT WEBPAGE](#)



Job offers

NVision Imaging Technologies - Mechanical engineer at a medical-device startup

Fraunhofer IAF - Scientist for Optoelectronics and Quantum Technology (m/f/d)



MetaboliQs is part of the Quantum Flagship. The Second Quantum Revolution is unfolding now. The Quantum Flagship is driving this revolution in Europe.



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