

## PhD and postdoc positions in Quantum Acoustics and Optomechanics

Fri, 2018-11-23 19:52 - [Yiwen Chu](#) [1] **At:** ETH Zurich

**Deadline:** 30 April, 2019

### Location

ETH Zurich Zurich Switzerland

See map: [map.search.ch](#) [2], [Google Maps](#) [3]

The newly established Hybrid Quantum Systems Group (<http://hyqu.ethz.ch/> [4]) at ETH Zurich, led by Prof. Yiwen Chu, is looking for PhD students and postdocs, starting after January 2019.

In our group, we will be developing new ways to connect different types of quantum objects together. Our focus is on a variety of solid state and optical systems, including superconducting microwave circuits, acoustic resonators, color centers, and visible/infrared light. By combining them, we hope to build more sophisticated quantum machines that can do more than the individual components alone. Along the way, we hope to learn more about how to get this diverse group of objects to work well together while preserving their unique useful properties. Moreover, exploring physics at the interface of very different quantum degrees of freedom often leads to new phenomena and perspectives. We hope to gain a better understanding of the quantum world through our work.

We are currently looking for motivated researchers with experience or interest in areas related to electromechanics and optomechanics, including circuit QED, nonlinear optics, and quantum optics. Given the hybrid systems focus of our group, we value a wide variety of skills and expertise, including:

- Cryogenics and operation of dilution refrigerators
- Design and setup of infrared and visible optical systems
- Measurement and control techniques in quantum optics and quantum information
- Microwave circuit design and fabrication
- Nanofabrication and metrology: lithography, growth and deposition, reactive ion etching, SEM, AFM, x-ray diffraction, etc.
- Experimental control, simulation, and data analysis software

Interested candidates should send Yiwen Chu (yiwen [dot] chu [at] phys [dot] ethz [dot] ch) a CV and brief description of why you'd like to work with us.

- [Position](#) [5]

### Source URL:

<http://qurope.eu/db/jobs/phd-and-postdoc-positions-quantum-acoustics-and-optomechanics>

### Links:

[1] <http://qurope.eu/users/yiwen>

[2] <http://map.search.ch/-Zurich/>

[3] <http://maps.google.ch?q=%2C+Zurich%2C+%2C+ch>

[4] <http://hyqu.ethz.ch/>

[5] <http://qurope.eu/db/jobs/type/position>