

## Open call: IQST Graduate School @Quantum<sup>BW</sup>

The Centre for Integrated Quantum Science and Technology ([www.iqst.org](http://www.iqst.org)) invites applications for PhD projects within the IQST Graduate School @QuantumBW. The graduate school supports **doctoral projects in quantum science and technology** in Baden-Württemberg (BW).

The proposed PhD projects should focus on **fundamental research**, whilst encouraging consideration of potential **transfer opportunities** from the **early stages**, including unexpected or emerging directions. In this funding round, the graduate school expands beyond BW by supporting **internships at European companies**.

The **PhD project should be** organized as follows:

### 1 PhD project = 1 academic supervisor + 1 industry advisor + 1 PhD student

- The **academic supervisor** is supervising the project, and must be located at a **university or research institute in BW**, and an **IQST fellow**.
- The **industry advisor**, working at a **company in Europe**, takes the role of a mentor for the PhD candidate, maintains a regular dialogue, opens up company-side support and provides the internship.
- The **PhD student** is employed by a university in BW and performs an **internship of in total min. 3 months at the company** of the industry advisor over the duration of the project (obligatory).

### Funding

For **up to 4 years**, we support:

- **Salary: 50% E13 funded by IQST**, according to the DFG rates. An additional own contribution **of at least 25% E13** by the academic supervisor is required such that the student is employed **at least 75% E13 in total**.
- **20 T€** for consumables and travel expenses per year.

### Requested commitment by the academic supervisor

- **Supervisor is IQST fellow or application pending** (open to all universities in BW) & eligible to independently supervise PhD students.
- Active participation of supervisor & student in (previous and/or) future IQST events
- At least 25% E13 salary must be funded from own resources.

## Requested support from the industry advisor

- hosting the internship with provision of equipment and components
- continuous mentoring and supervision
- access to infrastructure/training programs

## What's favourable, but not mandatory:

- **new connection** between academia and industry
- **an unconventional idea**, something that doesn't cost much time or money and yet gives the project something special, makes the project partners smile again and again and perhaps makes it known far beyond the participants...

## Review Criteria

- Scientific excellence and originality
- Innovative and pioneering ideas & topics in quantum science and/or technology
- Quality and feasibility of the scientific and management plans
- Substantive added value of the planned industry internship for the PhD student, including the contribution of the industry advisor
- Building new connections and collaborations while incorporating unconventional elements

## General Application Information

Applicants are invited to submit their PhD project proposals to the IQST office via [office@iqst.org](mailto:office@iqst.org) by **30.06.2026**.

*For questions about your application, please contact the IQST office ([office@iqst.org](mailto:office@iqst.org)).*

Please send your application as a **single pdf-document**.

The **application template with detailed information and required documents** is attached below and can also be found on the IQST website (<https://www.iqst.org/iqst-graduate-school/>).

Based on the above criteria, submitted project proposals will be evaluated through a review process conducted by independent reviewers. The final decision is taken by the IQST Executive Board.

## **Project Application (max. 5 pages)**

### **1. Let's start with your passion: What is the project about? Summary (~0.25 page)**

*Give a short, generally understandable description of the project idea.*

### **2. Let's dive deep: Content and Objectives (~0.5 page)**

*In what sense contributes the project to the frontiers of quantum science and technology? What are the relevant scientific questions, what makes the project unique?*

### **3. Look around: Current status of research (~0.5 page)**

*Please summarise the current status in the context of international research in the field. Cite the relevant publications (max. 10) using the format given below.*

### **4. Look back: Own preliminary work (~0.5 pages)**

*Describe your contribution to the research in the field so far. Cite all relevant own publications (max. 10).*

#### **List of most relevant and published preliminary work (max.10)**

*Please include all relevant authors of your own papers.*

[1] S. Giovanazzi, A. Görlitz, and T. Pfau, Phys. Rev. Lett. **89**, 130401 (2002)

### **5. Now it's your industry advisor's turn. Status of applications/prototypes (~0.5 page)**

*Please describe why this project is of interest, what are fundamental open questions from the industry side, and how the academic side can contribute to that.*

### **6. Look at each other: Why are the academic supervisor and industry advisor the best fit?**

*What unique qualities do the respective mentors bring to the table? What does the student learn from the academic supervisor and industry mentor?*

### **7. Make two plans. Project plans and milestones**

Scientific plan: *Describe how the objectives of the project are to be achieved. Define milestones for the next 4 years.*

Management plan: *How will the cooperation be realised in practice? How will the continuous mentoring be organized? When and for how long will the PhD candidate be undertaking the internship?*

## 8. What do you need? Funding

*Please quantify the required funding/year*

- *Staff* (according to the DFG rates and usual percentage of respective discipline) for a funding duration per project up to four years and specify own contribution
- *direct costs* (up to 20 T€ for consumables and travel expenses per year)

## 9. Description of support by industry advisor

*Describe, how the industry advisor supports the project by mentoring, hosting the internship and giving access to infrastructure, training programs, provision of equipment and components and/or other project-specific contributions.*

## 10. Be unconventional and creative, if you like. Do something special.

*Describe a little something that you always look forward to when there are tough phases - nothing expensive or time-consuming - and perhaps something that many people learn about your project - during your work or once it's done...*

## 11. Almost done! Look at your work once again – and give it a name. Project Title

*title*

## 12. Last but not least – you. Applicants

Academic supervisor	Industry advisor
<i>Name</i>	<i>Name</i>
<i>Affiliation</i>	<i>Affiliation</i>
<i>e-mail address</i>	<i>e-mail address</i>

### Application deadline: June 30, 2026

Only applications submitted **in due time and in the proper form** will be considered in the selection process.