

Council for Development of Optics and Quantum Technologies

In the Name of God

Funding Opportunity Title:

Implementation of Novel Quantum Algorithms on real Quantum Computers for Optimization problems

Introduction:

The Vice-Presidency for Science, Technology, and Knowledge-Based Economy Affairs (ISTI) of Iran, in partnership with the Optics and Quantum Council (OQC) and The Mustafa Prize Investment and Endowment Fund (MPIEF), are announcing call for collaborative research projects. This opportunity is open to Iranian researchers affiliated with higher education or research institutions and distinguished Muslim researchers from high-ranked universities worldwide. The focus of this call for proposal is to design novel quantum algorithms and implementing on real quantum computers for optimization problems.

Goals and Research Themes:

The main goal of this call is to promote and encourage researchers in the fields related to quantum computer programming, with the aim of improve collaborations between Iranian researchers and the Muslim researchers in other countries. Furthermore, we are interested in creating opportunities for Iranian researchers to harness the power of quantum computers developed worldwide so far. Consequently, this call invites proposals in areas such as quantum programming, quantum machine learning, quantum algorithm design, and related subjects. Research themes include but not limited to:

- ✓ The development and implantation of novel quantum algorithms for real world problems such as
 - Drug discovery
 - Finance
 - New material discovery
- ✓ Development and Implementation of Quantum Machine Learning for Cutting-Edge Problems

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Funding Details:

- ✓ Selected projects will receive joint funding from ISTI and OQC of 10,000 USD.
- ✓ MPIEF will also fund projects with an additional 10,000 USD.
- ✓ The funding period for projects is one year, with the possibility of a 3-month extension without extra funding.

Researchers interested in this funding opportunity are encouraged to prepare research proposals in line with the specified research themes and sub-topics. This call for proposal aims to support innovative research in the field of Quantum Programming and Algorithms and promote collaboration among researchers in the Islamic world and beyond.