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Open VQE – Empowering Quantum Education and Collaboration

Mohammad Haidar

Former Senior Researcher, Postdoc in Quantum Computing Sorbonne University, Paris, France

Open VQE (Open Variational Quantum Eigen solver) is an open-source platform designed to make quantum computing accessible for education, research, and global collaboration. Built around the Variational Quantum Eigen solver, a cornerstone algorithm in quantum chemistry, Open VQE provides learners with a pathway to incrementally master quantum methods while fostering innovation in a shared space for students, educators, and researchers.

Developed by Mohammad Haidar, a senior researcher at Sorbonne University, Open VQE integrates seamlessly with leading quantum frameworks like Qiskit, Cirq, and QASM, promoting interoperability and collaboration. The platform empowers users to tackle real-world challenges in material science, drug discovery, battery development, and CO₂ capture, while exploring the transformative integration of AI with VQE.

At the Conference, Mohammad Haidar will discuss the technical details of Open VQE, its role in revolutionizing quantum computing education and research, and its applications in quantum chemistry and industry research. Attendees will also gain insights into the state-of-the-art quantum computing technologies being employed in quantum chemistry.

Discover More About OpenVQE

- Published Article (14 citations): <https://wires.onlinelibrary.wiley.com/doi/epdf/10.1002/wcms.1664>
- Community Participation: <https://openvqe.netlify.app/>

OpenVQE offers a unique, accessible pathway to mastering quantum computing while fostering collaboration and driving innovation to address global challenges.