



Quantum Computing for Chemistry - The Next Revolution

PUBLIC

Industry professionals, students

PREREQUISITES

Participation in this training does not require any specific prerequisites with regard to the public to which it is addressed.

LEARNING OBJECTIVES

- > Understand the basics of quantum computing and its applications
- > Understand the basics of quantum chemistry and the limitations of classical computing
- > Identify, analyze and prioritize relevant use cases
- > Code quantum algorithms using software development tools

PROGRAM

This intensive five day industry training is targeted to industry professionals to provide them with an early advantage to leverage the transformative potential of quantum computing and its applications to chemistry, innovative materials and associated sectors. It will provide in-depth training on quantum computing, including lectures covering the foundational concepts of quantum computing and its application to chemistry, example use cases from different industries, hands-on coding of quantum algorithms, and a workshop to ideate and discuss use cases."

Lectures on quantum computing and its applications by experts

- > Lectures on quantum computing and its applications by experts
- > Example use cases from different industries
- > Hands-on coding of quantum algorithms
- > A workshop to ideate and discuss use cases
- > Ample opportunities to create lasting partnerships

TEACHING METHODS

- Lectures by recognised experts
- A workshop to ideate and discuss use cases
- Hands on programming using the Qamuy quantum development tool

SCIENTIFIC RESPONSIBLE

WHITLOCK Shannon

Mail : whitlock@unistra.fr

Institut de Science et d'Ingénierie Supramoléculaires Laboratoire de Matière Quantique Exotique / Laboratory of Exotic Quantum Matter

Co-organised by Qunasys the EquipEx+/PEPR Quantique project aQCess of the University of Strasbourg, as part of the QAREER pilot programme of the QTedu coordination and support action of the EU Quantum flagship »

USEFUL LINKS

<http://q4chem.strasbourg2022.eu>

CONGRÈS-FORMATION

Durée : 5 days to adjust with the program

In 2022

Ref. : MOD22-0447

Lieu

Institut de Science et d'Ingénierie Supramoléculaires (ISIS)
8 Allée Gaspard Monge
67083 Strasbourg Cedex

Renseignements et inscriptions

Marion OSWALD

Tél : 03 68 85 65 56

Fax : 03 68 85 49 41

marion.oswald@unistra.fr

Nature and sanction of the training

This training is an action of adaptation and development of skills.

It gives rise to the issuance of a certificate of participation.

An evaluation at the end of the training measures the satisfaction of the trainees as well as the achievement of the objectives of the training congress.