This course will offer theoretical and hands-on training in advanced analytical instrumentation, such as a mass spectrometry-based metabolomics approach to identify specific metabolites, which will lead to the production of biofuels and high-value biorenewables by the valorization of carbon dioxide (CO₂) in these algal cell factories.

Topics will include:

- Bottom-up metabolomics-based approach to evaluate algal cell factories subjected to CO₂ supplementation
- Data analysis and visualization employing MetaboAnalyst, a comprehensive platform for metabolomics
- Reconstruction of metabolic regulatory pathways involved in the valorization of carbon dioxide (CO₂)

**Participants**

- Applicants must have basic working knowledge of algal biology. Preference will be given to pre-doctoral, post-doctoral and early-career researchers
- Registration fees of EURO 300 will be charged for non-ICGEB Member State nationals and Indian participants, which includes training fees, accommodation (twin sharing) and local hospitality

**Funding**

- No fee is charged to attend this course for nationals of ICGEB Member States
- A limited number of grants, covering accommodation (twin sharing) and local hospitality for the duration of the course, are available to selected number of nationals of ICGEB Member States (excludes travel/visa charges)

**Online application** https://isg.icgeb.org/auth/login

**Deadline** 10 November 2023