



## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

GQSP Colombia/210915

### Provision of a course on Computational chemistry-QSAR methods according to GHS

#### 1. Background

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes Inclusive and Sustainable Industrial Development (ISID) for poverty reduction, inclusive globalization and environmental sustainability. The mandate of UNIDO is to promote and accelerate inclusive and sustainable industrial development in developing countries and economies in transition. UNIDO's vision is a world where economic development is sustainable and economic progress is equitable.

One of the projects implemented by UNIDO is the Quality Programme for the Chemical Value Chain- GQSP Colombia funded by the Secretary of State for Economic Affairs of the Swiss Confederation (SECO), the Ministry of Commerce, Industry and Tourism of Colombia and Colombia Productiva.

The main objective of the project is to promote the integration of Colombia in the regional and multilateral trade systems, through the strengthening of the National Quality Subsystem within the framework of the priorities of ten (10) industrial groups that integrate the chemical value chain, and also to increase and improve the capacities of SMEs to meet technical requirements, international quality standards, private and sustainability standards, necessary for trade facilitation.

The project is being implemented over a four-year period and its interventions include increasing technical capabilities in chemical sector through specialized training to implement regulations such as Globally Harmonized System of classification and labelling of chemicals (GHS). This is where the knowledge in computational chemistry begins to take relevance, due to it is a scientific prediction tool recognized by this system, for the classification of hazards of chemical products, as an alternative to, for example, perform tests on animals..

This purpose is covered by the product 2.2 of the GQSP Colombia logical framework:

**Product 2.2.** The technical capacity and knowledge of the MSMEs of the Chemical Value Chain is strengthened through a training and technical support programme regarding the classification of chemical substances and products according to the Globally Harmonized System, as well as on quality topics.

To learn more about the project Global Quality and Standards Programme – GQSP Colombia, visit <https://gqspcolombia.org/>.

## 2. Scope of required service

The objective of the required service is the provision of a course to introduce the knowledge in Computational chemistry, focus on QSAR methods. This course will be offered to enterprises technical personnel of chemical sector.

- The contents of the course must include at least:
  1. Introduction Chemical Computational
  2. In-silico studies
  3. International QSAR Framework
  4. Advantages of QSAR studies
  5. Prior process to a QSAR analysis
  6. General process of a QSAR analysis
  7. Introduction to the QSAR Toolbox of studies
  8. Evaluation methods and Determination of predictive parameters (use of databases): Physicochemical, Toxicological and Ecotoxicological that can be done by QSAR.
  9. Practical comprehension exercises
  10. Comprehension evaluation
- The course must be delivered on an online platform provided by the contractor or agreed with UNIDO.
- The instructors/facilitators designated to deliver the course must demonstrate experience of at least 6 years in QSAR Toolbox and prediction of Physicochemical, Toxicological and Ecotoxicological properties in chemical products.
- The contractor will submit the methodology proposed for the course to be agreed with UNIDO / GQSP Team.
- The contractor must issue a certificate of participation to attendees who have completed the course according to UNIDO guidelines. The certificates issued must include, in addition to the provider's logos, the UNIDO and GQSP logos. The use of the program's image must follow the guidelines of the GQSP Colombia once the contracting is official.

- The contractor will provide the necessary documentation and the memories of the course to all attendees.
- The course will be developed at least in 10 hours. The distribution of the course hours can be agreed; however, it is preferred to schedule morning sessions.
- The course will be given to a limited number of attendees previously selected by GQSP Colombia. The number of attendees will be at least 30 people (Spanish speakers), with technical qualifications as biologists, chemical engineers, chemists, and pharmacists and similar.
- The course must be taught in Spanish and the support material should be prepared in Spanish as well.
- Topic presentations, study cases and discussions should be included to facilitate the understanding of the academic content.
- The course content is expected to be delivered at basic-intermediate level.

If any technical resource is required from the attendees to the proper development of the course, it must be specified in the technical proposal (i.e. RAM, computer availability, etc.).

At the end of the training, the attendees will fill out an evaluation of the event. The information collected will be an input for the contractor if is needed.

The selection of the eligible proposal will comprehensively contemplate the **facilitator's** experience, the quality of the technical proposal and the comparative evaluation of the economic proposal.

### 3. Description and General Time Schedule

All activities/deliverables shall be finalized and all stated payment supporting documents shall be submitted to UNIDO no later than 31 November 2021. Estimated time frame for activities to be delivered is October – November 2021.

Following activities/deliverables are expected from the bidder or consultant

Main Activities	Deliverables	Expected duration
<p><b>Launch meeting</b> Before the planned course, the contractor meet UNIDO / GQSP technical team in order to clarify concerns and approve the detailed work schedule. It can be done through a video call.</p>	<p>Aid memory Lists of topics and methodology agreed</p>	<p>1 hour</p>

<p><b>Training documentation</b> Before the course, the contractor must send UNIDO / GOSP team the academic material that will be used in the course program.</p>	Training documentation	At least 5 working days before the training
<p><b>Technical test</b> Prior to the online training, the trainer makes an appointment with UNIDO/ GOSP team to test the technical processes in the platform.</p>	Technical test	At least one working day before the course
<p><b>Online course</b> It should be delivered according to the planned and approved program and content.</p>	Online course	At least 10 hours, it can be divide in 3 or 4 sessions
<p><b>Memories of the event</b> It should includes all material used during the course, as well as support documents or material, to be shared with the attendees</p>	Training documents (presentations, photos, training materials)	Before 10 working days after course completion
<p><b>Additional documents</b> General Recommendations and conclusions of the event Consolidated attendance</p>	Recommendations and conclusions  Consolidated attendance	Before 10 working days after course completion

All request documents should be provided to the UNIDO Project Management Unit (PMU) in electronic copy, consisting of the following electronic files:

- PDF file
- Original work files (Word, Power point, Excel, etc.)

Requested reports should be provided in Spanish.

#### 4. Language requirements

The course as well as all communication with UNIDO PMU, will be in Spanish.

#### 5. Payment terms

Payment will be subject to compliance per the concept of UNIDO

Deliverable	Documents required for a payment to be processed	Payment
✓ Launch meeting report ✓ Training documentation ✓ Successful technical test	✓ Purchase Order countersigned ✓ Topics and methodology agreed ✓ Training documentation ✓ Relevant invoice	30%
✓ Online course ✓ Attendees certificates ✓ Final report	✓ Memories of the event ✓ Attendees certificates ✓ Recommendations and conclusions ✓ Relevant invoice	70%
<b>Total</b>		<b>100%</b>

Payments will be payable within 30 days upon receipt and acceptance of deliverable and invoice (electronic version) indicating the contract number and instalment requested.

Any suggestion from the bidder or consultant over the payment terms must be reviewed and accepted by UNIDO/ GQSP team

#### 6. Qualification Requirements

Following are qualification requirements for bidder's technical offer to be considered:

- **Corporate registration:** The bidder should provide a certified copy of their Certificate of Incorporation or other documents setting forth the legal basis of the company and therefore proving a legal capacity to enter into a contract. For Colombian companies: Commercial Registration and current legal representation (no more than 30 days) and RUT.
- **Technical Proposal:** Taking as a reference the main activities described in scope of the service, the bidder must clearly **specify the methodology** to be implemented including details or descriptions of each activity as well as execution dates.
- **Facilitator:** The bidder must present the facilitator assigned for the activity, attaching his/her resume.
- **Commercial proposal:** It must include the total course value including all the expenses incurred to fulfill and carry out the necessary activities to comply with the final deliverables. It also must specify the number maxim of attendees.

## 7. Evaluation Criteria

Proposals will be evaluated according to the following criteria:

Evaluation Criteria	Description
Technical proposal	The bidder should submit a technical proposal in compliance with the Terms of Reference
Facilitator(s) experience	The instructors/facilitators designated to deliver the course must demonstrate experience of at least 6 years in QSAR Toolbox and prediction of Physicochemical, Toxicological and Ecotoxicological properties in chemical products or related.
Commercial proposal	The bidder should submit a commercial proposal that includes the total course value specifying the number maximum of attendees.

Evaluation of technical criteria, and therefore a decision whether an offer is considered technically compliant, will be done according to the compliance or non-compliance against the stated requirements in this TOR

## 8. Submission of offers

Bidder's offer should be submitted per e-mail addressed to [info@gqspcolombia.org](mailto:info@gqspcolombia.org) with copy to [f.hernandezperez@unido.org](mailto:f.hernandezperez@unido.org), together with the documentation above, indicating in the subject of the email "Course on Computational chemistry-QSAR methods according to GHS" by 6 October 2021 at 23:59 Colombian Time.

- All questions about this bid should be sent to [info@gqspcolombia.org](mailto:info@gqspcolombia.org) with copy to [f.hernandezperez@unido.org](mailto:f.hernandezperez@unido.org) no later than closure deadline.

### UNIDO General Terms and Conditions of Contract (Annex A).

The contract shall be awarded to the qualified bidder whose Technical Proposal has been found substantively responsive and whose Commercial Proposal is the lowest cost to UNIDO.