Topic: **HORIZON-CL4-2024-TWIN-TRANSITION-01-41: Breakthroughs to improve process industry resource efficiency (Processes4Planet partnership) (RIA)**

Date: 05th April 2024

Acceptance deadline: 15th April 2024



1. **BACKGROUND**

University of Chemistry and Technology in Prague, hereinafter UCT, is the successor of the chemical department of the Prague Polytechnic established in 1803. It is a natural center of first-class education and research in the fields of chemistry and food industry. It is among the largest domestic institutions focused on technical chemistry, chemical and biochemical technologies, materials and chemical engineering, food and nutrition, environment and economics and management. All the institution's activities are directed towards the goal of profiling UCT as a research and technical university with high-quality basic and applied research and with a good international reputation in the field of education and science and research. UCT is a founding member of the Association of Research Universities of the Czech Republic.

UCT´s Faculty of Chemical Engineering, founded in 1920, has six main areas of research: 1. Chemical engineering; modelling and experimental verification of systems involving hydrodynamics, mass transfer and/or chemical reactions; dynamics of chemical and biological systems; chemical robotics. 2. Measurement, analysis, modelling and control of processes and systems of chemical technology, biotechnology and bioengineering; information engineering; signal and image processing; computer vision and control engineering. 3. Supply systems management of the food and chemical products: design, modelling and simulation; marketing, logistics and financial collaboration

in supply chain management. 4. Molecular modelling and simulation; structural, spectroscopic and thermodynamic properties of environmentally or biologically important substances and their complexes. 5. Physical, physicochemical and chemical measurements and analyses; advanced separation techniques including chromatographic, electromigration and hyphenated techniques; physical and chemical sensors; molecular recognition. 6. Biospectroscopy; atomic spectroscopy together with speciation analysis; molecular spectroscopy, including chiroptical methods; high resolution spectroscopy

CONTACTICA is a technical company that promotes, coordinates and executes Horizon Europe projects having been successful in calls such as Fast Track to Innovation (FTI), SME instrument phase 1 and phase 2 (EIC Accelerator), Research and Innovation Actions (RIAs) and Innovation Actions (IAs) within the Framework of the Horizon 2020/ Horizon Europe and BBI/CBE Programmes. CONTACTICA’s services cover all steps needed to be successful in the mentioned calls, from concept validation to project implementation. Besides, CONTACTICA has recognized experience performing sustainability assessment (LCA, LCC, S-LCA, LCSA) and is a specialist in communication and dissemination and exploitation activities within European projects.

Both entities intend to collaborate to obtain HORIZON EUROPE funds that facilitate the arrival of the proposed innovation within the scope of the project defined above to the market.

More than 520 M tn of plant-derived (“lignocellulosic”) biomass waste is produced yearly in Europe by several industries (e.g., agriculture, forestry), but only 2.9% is currently revalorised, which leaves the potential of this renewable and biodegradable resource to replace fossil resources unexploited. The major limitation for the revalorization of this resource today is a lack of cost-efficient processes to break down the complex structure of lignocellulose into its main components (cellulose, lignin and hemicellulose), so they can be further transformed. In this context, revalorisation routes to high value-added products have been explored to increase the economic sustainability of the lignocellulose revalorisation industry. One of the most promising so far are nanomaterials, since they combine the biocompatibility, biodegradability and sustainability of lignocellulose with the exceptional physicochemical properties of nanomaterials, to produce a wide range of innovative applications.

EBIOMILL is a 48-months project that aims at developing and demonstrating at pilot scale an integrated lignocellulose revalorisation process that produces high value-added nanomaterials (lignin nano/micro spheres, cellulose nano/micro crystals) for pharmaceutical, therapeutical, nutritional and cosmetic applications. The EBIOMILL project will develop environmentally-friendly bio-based solvents to pre-treat lignocellulosic waste, improving the state of the art over the most effective pre-treatments available today, which produce toxic substances. Downstream transformation processes for the resulting lignin and cellulose (Pulsed Electric Field treatment and fine milling with bio-solvents) will be optimized and integrated into a novel bioreactor prototype with a dedicated digital online monitoring system. This prototype will be demonstrated for the production of four types of lignin nanospheres and cellulose nanocrystals, which will be demonstrated to be safe for human use by ecotoxicity and cytotoxicity evaluations.

UCT as partner of the proposal and CONTACTICA as expert in the generation of successful Horizon Europe proposals submitted a new proposal to the call [Breakthroughs to improve process industry resource efficiency (Processes4Planet partnership) (RIA),](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-cl4-2024-twin-transition-01-41) with deadline on 07th February 2024. Besides, CONTACTICA offers expertise within the project for LCA, LCC, eco-design, communication and dissemination activities, exploitation, market uptake activities and support to coordination.

Both entities confirm that the project is coordinated by the institution Luxemburg Institute of Technology and Sciences (LIST), which has selected CONTACTICA to perform the services defined below following a transparent tender procedure. As the project proposal must be submitted on behalf of the entire consortium of entities involved, the selection of CONTACTICA as service provider has been accepted by UCT as project partner.

1. **OBJECTIVE OF THE AGREEMENT**

To define the terms and conditions of UCT’s involvement in the HORIZON EUROPE proposal.

CONTACTICA will provide capacities and expertise to succeed in the proposal and negotiation stages including UCT as partner of the project.

Both entities confirms, that the proposal has been submitted and the further described services have been provided and fulfilled.

1. **EXPECTED BENEFITS**

CONTACTICA has the ability to get funding at European level to develop UCT‘s innovation. Moreover, CONTACTICA delivers services to European partners getting financial support on success.

UCT will have access to CONTACTICA’s international partner network as well as access to European funds for strategic research lines related to the company’s corporate goals.

1. **CONTACTICA’S SERVICES**

CONTACTICA’s services are those related to the maximization of opportunities to access grants and competitive knowledge within HORIZON EUROPE at international level.

Costs related to the elaboration of the proposal and the related negotiations are not covered by HORIZON EUROPE projects.

CONTACTICA delivered in the period from November 2023 to February 2024 the following services to the partners, when needed:

* Concept validation vs topic.
* Patent search, technology watch, preliminary feasibility assessment of the concept.
* Consortium building.
* Partnering activities related to the writing of the proposal:
* Coordination of the proposal’s content.
* Coordination of information inputs provided from partners.
* Elaboration of the Excellence section of the proposal.
* Elaboration of the Impact section of the proposal.
* Elaboration of the Implementation section of the proposal.
* IPR management.
* Management of financial and economic data and elaboration of the Project Budget.
* Global review and design of visual content. Including logo, typography, images, figures, etc.
* Delivering a high-quality proposal submitted to the HORIZON EUROPE call with UCT as partner.
* Achieving inputs from outside the consortium i.e. support letters to the project aimed to reinforce the expected outcomes and impacts of the project.
* Administrative management of the proposal: procedures carried out through the Participant Portal.
* Proposal submission to the HORIZON EUROPE call with UCT as partner.

CONTACTICA hereby confirms that the above listed services provided before submitting the proposal are not covered in the project budget and therefore shall not by financed form the HORIZON EUROPE funding.

1. **TERMS AND CONDITIONS**

UCT will remunerate CONTACTICA’s services under the following conditions:

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| **MILESTONE** | **DESCRIPTION** |
| **PROPOSAL SUBMISSION** |
| Upfront fee | 1,960 € |
| **PROPOSAL FUNDED** |
| Success fee | 4% of the grant requested by UCT |

**Upfront fee invoice**: upon signature this agreement following the submission of the proposal

**Invoicing on grant allocation:** the success fee will be divided up into 3 payments which will be invoiced as follows:

* 50% of the total success fee once the partner has received the 1st payment from the coordinator.
* 25% of the total success fee once the partner has received the 2nd payment from the coordinator.
* 25% of the total success fee once the partner has received the 3th payment from the coordinator.

Note that: 1) the success fee is based on the grant requested by the partner; 2) a new agreement including the final figures resulting from applying the 5% to the grant requested by the partner will be signed after the Grant Agreement signature; 3) the success fee payable to CONTACTICA is not a direct cost reported to the project but is part of the generic overhead of UCT.

\*Invoicing amounts do not include VAT

\*\*Payment will be delivered within 30 days from invoice date.

**All partners** will receive funding for 100% of their costs, with 25% overhead allowed.

CONTACTICA acknowledges that UCT is an obliged entity in relation to Act No. 340/2015 Coll., on the Register of Contracts and is therefore obliged to publish this agreement in the Register of Contracts without undue delay after its conclusion. By signing this agreement, CONTACTICA confirms that no part of this agreement is its trade secret, nor is any part defined as confidential information.

**SIGNATURE OF PARTIES**

The following parties accept the contents of this agreement, formalized by the signature of the following legal representatives:

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|  |  |
| xxxxx Director | Representative’s Name:Representative’s Title: |
| duly authorised to sign for and on behalf of CONTACTICA S.L. | duly authorised to sign for and on behalf of UCT |

Sign and stamp a copy of this agreement and send it by email to xxxxx

The form of signature must be electronic in accordance with the EU e-IDAS Regulation. Copy/scan of the agreement shall not be deemed original.

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| CONTACTICA S.L guarantees the protection and confidentiality of the personal data you provide us with in accordance with the provisions of the General Data Protection Regulations (hereinafter, GDPR) and Organic Law 3/2018. We inform you that your personal data is used to manage communications and business relations. In compliance with the provisions of the GDPR, you may exercise your rights under Articles 15 to 22 GDPR under the terms established therein, by contacting C/ Embajadores nº 187, 4º, 28045 Madrid, or by writing an e-mail to contactica@contactica.es attaching a copy of your ID card. |