Proposal Evaluation Form



EUROPEAN COMMISSION

Horizon 2020 - Research and Innovation Framework Programme

Evaluation
Summary Report Research and
innovation actions

Call: H2020-INFRAIA-2017-1-two-stage

Funding scheme: RIA
Proposal number: 731010-1
Proposal acronym: Sumo-Chem

Duration (months): 36

Proposal title: Supporting Research in Computational and Experimental Chemistry via Research Infrastructure

Activity: INFRAIA-02-2017

| ACTIVIT | y. INITIAIA 02 2017 | | | | | |
|---------|---|---------|-------------------|---------|--------------------|---------|
| N. | Proposer name | Country | Total Cost | % | Grant Requested | % |
| 1 | THE UNIVERSITY OF WESTMINSTER LBG | UK | 3,811,000 | 100.00% | 3,811,000 | 100.00% |
| 2 | EBERHARD KARLS UNIVERSITAET TUEBINGEN | DE | 0 | 0.00% | 0 | 0.00% |
| 3 | MAGYAR TUDOMANYOS AKADEMIA SZAMITASTECHNIKAI ES AUTOMATIZALASI KUTATOINTEZET | HU | 0 | 0.00% | 0 | 0.00% |
| 4 | TECHNISCHE UNIVERSITAET DRESDEN | DE | 0 | 0.00% | 0 | 0.00% |
| 5 | CONSORZIO INTERUNIVERSITARIO CINECA | IT | 0 | 0.00% | 0 | 0.00% |
| 6 | ELETTRA - SINCROTRONE TRIESTE SCPA | IT | 0 | 0.00% | 0 | 0.00% |
| 7 | UNIVERSITA DEGLI STUDI DI FIRENZE | IT | 0 | 0.00% | 0 | 0.00% |
| 8 | CONSIGLIO NAZIONALE DELLE RICERCHE | IT | 0 | 0.00% | 0 | 0.00% |
| 9 | UNIVERSITA DEGLI STUDI DI PERUGIA | IT | 0 | 0.00% | 0 | 0.00% |
| 10 | UNIVERSIDAD COMPLUTENSE DE MADRID | ES | 0 | 0.00% | 0 | 0.00% |
| 11 | UNIVERSIDAD DEL PAIS VASCO/ EUSKAL HERRIKO UNIBERTSITATEA | ES | 0 | 0.00% | 0 | 0.00% |
| 12 | RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN | DE | 0 | 0.00% | 0 | 0.00% |
| 13 | CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE | FR | 0 | 0.00% | 0 | 0.00% |
| 14 | AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE | IT | 0 | 0.00% | 0 | 0.00% |
| 15 | KEMIJSKI INSTITUT | SI | 0 | 0.00% | 0 | 0.00% |
| 16 | RUDER BOSKOVIC INSTITUTE | HR | 0 | 0.00% | 0 | 0.00% |
| 17 | Polymechanon | EL | 0 | 0.00% | 0 | 0.00% |
| 18 | master-up | IT | 0 | 0.00% | 0 | 0.00% |
| 19 | Blurock Consulting AB | SE | 0 | 0.00% | 0 | 0.00% |
| 20 | ECTN Association | BE | 0 | 0.00% | 0 | 0.00% |
| | Total: | | 3,811,000 | | 3,811,000 | |

Abstract:

The Chemistry community is one of the oldest research communities but it is a starting community with respect to this call because first, it has never had an EU e-infrastructure project as a community; second, it does not have its own ESFRI initiative. Currently there are isolated "islands" of research facilities and e-infrastructure resources that are not available for the whole community. This project will integrate research facilities and infrastructures with computing and data resources into the Sumo-Chem RI to enable joint research involving Computational and Experimental Chemistry and other research communities. This RI will have an open architecture to allow its extension with further research facilities and resources to be used by the Chemistry and other communities. The Sumo-Chem RI will allow researchers and developers to run industrial simulations and scientific experiments using European, regional and national research facilities and e-infrastructure resources through an intuitive and seamless virtual access considering different levels of their expertise and skills. The major innovation of the project will be in management of scientific data covering the whole lifecycle of data using metadata, ontologies and provenance based on advanced data and computing services. Sumo-Chem will enable and support multi-disciplinary research in cooperation with ESFRI and other major research initiatives to address climate and energy societal challenges. The project consortium identified eight scientifically excellent use cases as first users of the Sumo-Chem RI. These use cases well represent the heterogeneity of the Chemistry community.

Evaluation Summary Report

Evaluation Result

Total score: 8.50

Form information

SCORING

Scores must be in the range 0-5.

Interpretation of the score:

- **0** The **proposal fails to address the criterion** or cannot be assessed due to missing or incomplete information.
- 1 Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.
- 2 Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.
- 3 Good. The proposal addresses the criterion well, but a number of shortcomings are present.

- 4 Very good. The proposal addresses the criterion very well, but a small number of shortcomings are present.
- 5 Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

Criterion 1 - Excellence

Score: 4.00 (Threshold: 4/5.00, Weight: 100.00%)

The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the work programme:

Clarity and pertinence of the objectives

Soundness of the concept, and credibility of the proposed methodology

Extent that proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models)

Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge

The extent to which the Networking Activities will foster a culture of co-operation between the participants and other relevant stakeholders

The extent to which the Access Activities (Trans-national Access and/or Virtual activities) will offer access to state-of-the-art infrastructures, high quality services, and will enable users to conduct excellent research

The extent to which the Joint Research Activities will contribute to quantitative and qualitative improvements of the services provided by the infrastructures

The objectives of the project are described clearly and concisely, and the methodology proposed to address them is very convincing.

The overall concept of connecting experimental and computational chemistry communities and infrastructures is sound.

The project is innovative and ambitious in its aims with a clear potential to go beyond state of the art.

Due to the described selection of different use cases, multi-disciplinarity of the whole project is inherent. Networking activities are well developed and convincingly described

On a less positive note, while the Joint Research Activities are mentioned in the proposal, their nature is unclear including the capacity to improve the services throughout the JRAs.

In addition, the description of Trans-National Access is limited, in particular that of the physical access to experimental research facilities, where the access procedures and quantity are not depicted in detail.

Criterion 2 - Impact

Score: 4.50 (Threshold: 4/5.00, Weight: 100.00%)

The following aspects have been taken into account:

The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic

The proposal has a high potential for addressing the expected impact criteria, as well as having the potential for positive impact outside of the immediate chemistry community.

The involvement of SMEs in the consortium has the potential for enhanced innovation and exploitation impact. However, it is less clear how readily the infrastructure would be accessed by the wider industrial community during the project.

The training and development of young researchers is forseen via the summer schools, and particularly through virtual access for the wider community.

Cross-disciplinary fertilisation of concepts and ideas can also be expected in the proposed project.

Together with a strong focus on standardisation of procedures, which will enable better offer of services to a wide community, an improved transparency of research data (via the use of metadata) is an important point of the proposal with positive impact.

A minor negative aspect is the possible complementarity / duplication with services already provided outside of the context of the project, a point that is not clearly addressed in the proposal.

Scope of the proposal

Status: Yes

Comments (in case the proposal is out of scope)

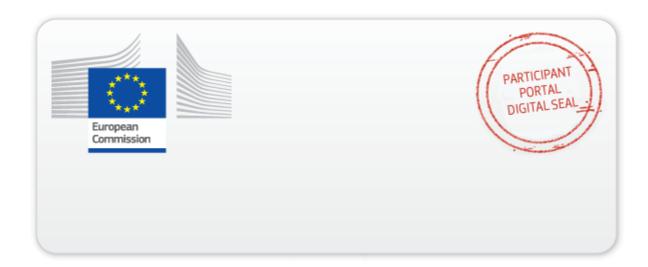
Not provided

Use of human embryonic stem cells (hESC)

Status: No

If yes, please state whether the use of hESC is, or is not, in your opinion, necessary to achieve the scientific objectives of the proposal and the reasons why. Alternatively, please also state if it cannot be assessed whether the use of hESC is necessary or not because of a lack of information.

Not provided



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