

Partnering Opportunity

Profile status : Published

Research Development Request

H2020-EIC-FTI-2018-2020 - Companies interested in a high efficiency fermentation technology demonstration are sought by an Italian biotech&engineering company

Summary

An Italian biotech&engineering company specializing in fermentation systems and scale-up for biotech production, has developed a new fermentation bioreactor and technology allowing a large number of biotech products manufacturing. To carry out the prototype demonstration and complete and qualify the technology, the company is looking for producers and/or users of fermentation plants/processes working in the food, feed, pharma sectors, interested in research cooperation within a FTI project.

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Expiration Date	30 September 2020
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Public Link	https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/93592bc9-0b0b-427a-9e37-02b774ce24bf

Details

Description

An Italian company with a deep expertise in fermentation systems, equipment and process technologies for biotech production, has developed a highly advanced fermentation technology that can allow for a very large number of products manufacturing.

The innovative technology is suitable to operate dynamic solid state fermentation and downstream operations under sterile conditions as well: downstream operations can be performed in the same bioreactor upon completion

of the fermentation processes, so avoiding additional transfer to other equipment with the related contamination risks. Furthermore the solid state process does not cause wastewater to be treated, so saving treatment plant and its operation costs.

The dynamic solid state fermentation bioreactor and technology can be a solution fitting for many manufacturing sectors, such as food, feed, biotech, pharma, agro-active ingredient (AI) or final products as well. The technology can be particularly useful to get fungi viable spores in large quantity, yeast viable cells, probiotics and prebiotics and secondary metabolites or enzymes ready fixed on solid dry granules or powders, etc.

Process steps, production cycle time and contamination risk can be drastically reduced in the bioreactor unit.

The proprietary hardware and software of the solid state fermentation bioreactor can allow full control of the key process conditions. It includes Wi-Fi for mobile parts connectivity to PLC. All process data can be accurately tracked and recorded for full product traceability.

The new technology equipment and process is protected by an international patent.

The Italian biotech&engineering company is interested in the prototype demonstration within operational environment in many possible different fields, to get a complete and qualified technology in each one. With this aim, the company intends to set up a consortium of partners which, in addition to the same company, should also include:

- producers of manufacturing plants in the food, feed, pharma, agro-active ingredient sectors, interested in checking the possibilities of adapting the innovative solid state fermentation bioreactor and technology to their own requirements and integrating it in their process equipment,
- manufacturers of food, feed, pharma, agro-active ingredients and/or finished products, interested in experimenting with the use of new technology and finalizing experimentation to their specific needs.

Within the FTI project, the engineering company will make available its pilot prototype built in its laboratory and the technical skills acquired in the field of solid state fermentation technologies and industrial plant design. The Italian company will give its contribute to the preparation of the project, but it's not interested in managing the project as coordinator.

The planned project duration is assumed to be 18 months, but the engineering company is available to adapt to any different needs of the partners.

The EOI deadline is on the 30th September, since the Italian company intends to apply the call H2020-EIC-FTI-2018-2020 with deadline on the 27th October 2020.

Advantages and innovations

The main advantages and innovations of the solid state fermentation bioreactor and technology are the following:

- wide range of application;
- minimum manpower requirement;
- high yields;
- no transfer to other equipment for recovery and formulation required;
- no wastewater to be treated;
- most biotech processes can be performed.

The innovative bioreactor is featured by:

- easy loading and un-loading;
- possibility of local and remote control;
- easy to use software;
- easy operation and maintenance in any geography.

Stage of development

Prototype available for demonstration

IPR Status

Patents granted

Keywords

Technology

03002	Process Plant Engineering
03004007	Pharmaceutics
06002001	Biochemistry / Biophysics
08001004	Food Processing

Market

04005	Biochemistry / Biophysics
04007	Enzymology/Protein Engineering/Fermentation
08003007	Other industrial equipment and machinery

NACE

M.71.2.0	Technical testing and analysis
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Network Contact

Issuing Partner

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Open for EOI: **Yes**

Dissemination

Relevant sector groups

Agrofood
Bio Chem Tech
Healthcare

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2017

Turnover

<1M

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
Italian

Client Country

Italy

Partner Sought

Type and Role of Partner Sought

The Italian company aim is to demonstrate the fermentation prototype within operational environment and obtain the technology completion and qualification within a FTI project.

The sought project partners are:

- producers of manufacturing plants in the food, feed, pharma, agro-active ingredients sectors: they will have the opportunity to adapt the innovative fermentation technology to their own requirements, and integrate it in their process equipment;
- manufacturers of food, feed, pharma, agro-active ingredient products: they'll be able to experiment the new technology use and finalize experimentation to their specific needs.

One of the sought partner should be the coordinator of the project: for this role, a previous experience in coordinating European projects is requested.

Type and Size of Partner Sought

SME 11-50,SME <10,251-500,SME 51-250

Type of Partnership Considered

Research cooperation agreement

Program - Call

Framework Program

H2020

Call title and identifier

FAST TRACK TO INNOVATION (FTI) |
Call ID: H2020-EIC-FTI-2018-2020

Submission and evaluation scheme

one-stage

Coordinator required

Yes

Duration

78 days

Deadline for EOI

30 Sep 2020

Deadline of the Call

27 Oct 2020

Weblink to the call

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/eic-fti-2018-2020>

Attachments
