Università Ca'Foscari Venezia
Dipartimento di Scienze Molecolari e Nanosistemi

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Università Ca' Foscari Venezia
Campus Scientifico – Via Torino 155, 30170 Mestre (VE)
P.IVA 00816350276 - CF 80007720271
www.unive.it/dsmn

Research fellowship on "Chemical valorization of bio-based molecules from biowaste" - Università Ca' Foscari Venezia
(Italian law 30 December 2010, n.240, art. 22 and subsequent amendments and additions)

The present document in English is to be considered as a mere summary of the main provisions of the notice of competition which is available in Italian at the following (link) The text in Italian is the official text of the notice of competition for all legal intents and purposes and, in the event of non-conformity with the present document, it shall prevail.

Description

The Department of Molecular Sciences and Nanosystems at Università Ca' Foscari Venezia invites applications for a fellowship lasting 12 months titled "Chemical valorization of bio-based molecules from biowaste", SSD: CHEM-05/A, GSD: 03/CHEM-05, project PRIN 2022 titled REWIND - Re-Evaulating Waste to INcrease Development: Catalytic upgrading of bio-based building blocks for a new chemical circular economy", COD. 20223ARWAY -, CUP H53C24000700006, tutor and principal investigator: prof. Maurizio Selva.

The fellowship is intended to provide the successful candidate with the opportunity to pursue his/her own research while benefiting from the range of expertise at Università Ca' Foscari Venezia.

Abstract:

The design of innovative chemical processes is crucial for the conversion of natural raw materials into chemicals in alternative to those of fossil origin. Basic research is therefore necessary to conceive novel synthetic transformations of simple bio-based feedstocks (primary building blocks, PBBs).
The present project will not involve fractionation or manipulation of biomass to obtain PPBs but will focus on the use of PPB that are already available on a large scale through established processing methods of biomass, especially from residual biomass/biowaste. Among bio-based molecules, the following will be mostly investigated: i) glycerol and its derivatives to achieve either cyclic carbonates and allyl esters, via multiple sequences of dehydration, insertion and transesterification; ii) ferulic acid (or related caffeic acid) to achieve C–H functionalized derivatives via CO_2 insertion; iii) bio-based phenols or vanillin to achieve the corresponding nitroaromatics and their hydrogenated products (amines) via sustainable protocols including unconventional media (CO_2, ionic liquids, micellar environments); iv) terpenes or (poly)unsaturated fatty acids to obtain cyclic organic carbonates

The research may be carried out in English.
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Who can apply

Prospective candidates are expected to hold a master's degree in **Master Degree in Chemistry or industrial Chemistry**, or related disciplines.

Preferred fields of specialization are:

a. PhD graduation;

b. the completion of attendance of a PhD course pending the awarding of the title;

c. specialization diplomas and certificates of attendance of post-graduate specialization courses, obtained both in Italy and abroad, the carrying out of documented research activities at public and private entities with contracts, scholarships or assignments both in Italy and abroad;

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Ca' Foscari encourages applications from researchers with positive evaluation in all the criteria in individual proposals such as Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar.
Researchers having successfully completed Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar funded projects are warmly encouraged to apply.

Duration of contract: 12 months (approximately starting: in April 2025

Stipend: The research fellowship amounts to 24.320,38 Euros per year, including taxes and social charges.

Deadline for submission of applications: March 10th 2025, 12.00 noon.

Please note that the University is closed for Christmas holidays from 24/12/2024 to 06/01/2025.

How to apply:

Candidates should submit:
1. The application form;
2. A motivation letter (max 1 page) along with their CV in European format, duly dated and signed, both to enclosed as a one single.pdf file. (link)
3. A copy of a valid identity document (either Identity Card or Passport);
4. (If available) Evaluation Summary Reports of Marie Skłodowska Curie Actions - Individual Fellowships/ ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) individual proposals having passed all the evaluation thresholds;
5. (If available) Details of Marie Skłodowska Curie Actions - Individual Fellowships, ERC Starting Grants, FIRB (Italian Fund for basic research investments)/ SIR Scientific Young Independence Research funded projects;
6. Declaration on availability to held the interview in remote (Link) to be send via email at the following address: ricercar.dsmn@unive.it;
7. All documents, qualifications and publications relevant for the selection procedure (please, see the notice link).

All the schemes of the quoted documentation are available on the website (link).

How to submit your application

Applications should be submitted by the online procedure, available on the notice webpage (link)
Or submit here:

https://apps.unive.it/domandeconcorso-en/accesso/dsmn-ar-prin-selva

By inserting their Italian Tax Code.
Foreign citizens not yet in possesion of the Italian Tax Code can use the following link https://apps.unive.it/utils/cf to obtain a temporary one and be able to proceed with the request.

The candidate, after the uploading, will receive a submission number and an e-mail acknowledging receipt of his/her application.
The candidate if necessary could access the procedures for updating any data and materials by the link provided by the e-mail, in any case any updates must be made no later than the deadline March 10th 2025.
Please note that the University can be contacted for any support needs by the candidate until 24 hours prior to the deadline.
Please note that in case of an high number of applications and / or weight of the materials loaded by the candidates the system might become slower, Therefore it is suggested not to start the process close to the deadline.

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NB: the University does not take on responsibility for wrong or late communication of addresses, nor for any communication problem not depending on the University.

Evaluation

Up to 100 points, specifically:
For qualifications, publications and possible tests, from 0 to 60;
For interview, from 0 to 40.

Selection procedure

Short-listed candidates will be invited for interview on

March 20th 2025 at 10:00 a.m.

by remote at the link:

meet.google.com/eba-ussm-gap

The short-list of the candidates admitted to the interview, or any postponement, will be published on the University's webpage on March 17th 2025 (link).The interview will be held in remote only.

Information and contacts

Candidates may find further details about the application process and the research project in the official call published on the following (link)
For further information please contact the Research Office, email: ricerca.dsmn@unive.it,
Ph: 0412348633/8514.

The Head of Department of
Molecular Sciences and Nanosystems
Prof. Maurizio Selva

Firmato digitalmente da Maurizio Selva
Data: 23.12.2024 12:55:16 CET
Organizzazione: UNIVERSITA' DEGLI STUDI DI VENEZIA/00816350276

Responsible for administrative procedure
The Secretary of Department
Mrs. Sonia Barizza