

# RE-Fibre

**11 DC positions within the program Horizon Europe (HORIZON)**

Marie Skłodowska-Curie Actions Doctoral Networks (DN)

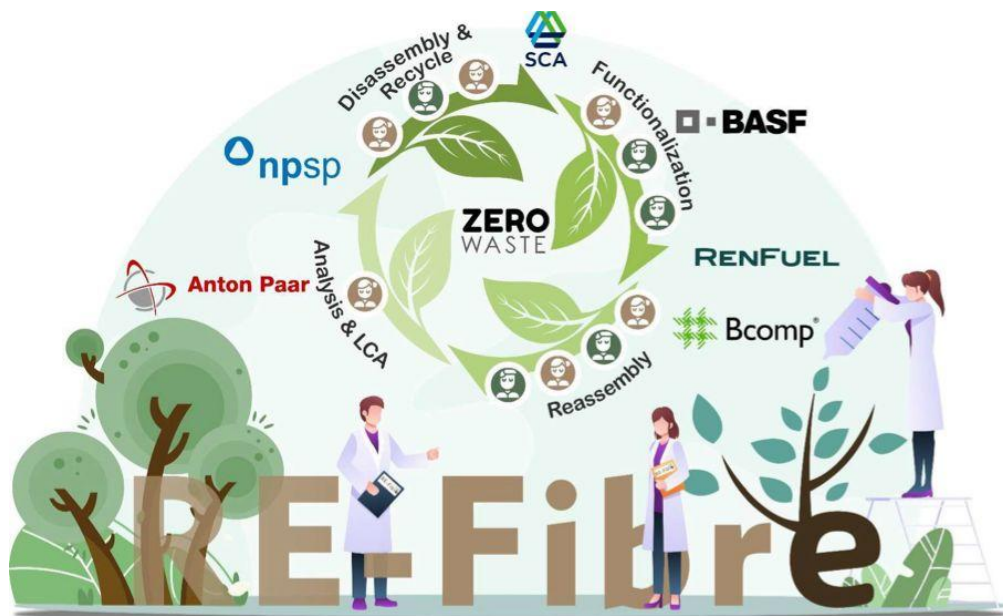
## “RE-Fibre”

***Smart disassembly, functionalisation and reassembly of plant fibres for fully recyclable bio-based composites”***

(HORIZON-MSCA-2023-DN-01, project number 101168684)



**OPEN CALL: 1st February 2025 - 28th February 2025\***



\*The application deadline may be extended if not enough applications are received. Information about a possible extension will be published on the project website and other communication channels.

This project has received funding from the European Union's Horizon Europe Marie Skłodowska-Curie-2023-DN-01, Project: 101168684





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## General Description

**RE-Fibre** is a Doctoral Network (DN) funded by Marie Skłodowska-Curie Actions (MSCA) operated by a Consortium of academic institutions (beneficiaries) and industry representatives (associated partners\*). RE-Fibre will train **11 Doctoral Candidates (DCs)** with an **entrepreneurial and sustainability-mindset** in the disciplines of **green/lignin chemistry, new biobased materials, and environmental systems science**. RE-Fibre aims to revolutionize the bio-fibre landscape by **designing high-performance, fully renewable, and recyclable wood and plant fibre materials**.

The DCs will build on ground-breaking findings being generated at the RE-Fibre consortium, to enable the development of fully recyclable functional biobased composites with properties on par with fossil-based counterparts. They will gain competencies, not only in a breakthrough scientific field but also in interdisciplinary and interpersonal skills. Additionally, **they will expand their network and gain experience through participating in secondments (research stays at a site of an academic or industrial partner)**. Finally, they will learn the best practices by developing online research and training tools, enabling them to work and collaborate across academic and industrial sectors. RE-Fibre training will contribute to DCs employability as future leaders, while supporting the green transition and a sustainable circular economy in Europe.

\*ETH Zurich is an academic institution listed among associated partners because of a different funding scheme for the DCs at ETHZ compared to the other academic institutions in the Consortium.

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## 1. RE-Fibre Scope

The main drivers of the RE-Fibre are **smart, high-performance, 100% renewable and recyclable wood and plant fibre materials with high durability and excellent structural modularity that close the carbon cycle in material design**. By integrating innovative approaches in green chemistry and material science, RE-Fibre seeks to address challenges in disassembly, functionalization, and reassembly of plant biomass. This holistic strategy maximizes renewable carbon retention, introduces recyclability on demand, and meets industrial performance standards.

Within the **RE-Fibre** DN, applicants can choose among **11 different PhD projects**. The field of research of the RE-Fibre project include (but are not limited to):

- Lignin chemistry
- Green Chemistry
- Reactor/process engineering
- Flow Chemistry
- Homogeneous/Heterogenous Catalysis
- Bio-based surfactant formulations
- Biopolymers
- Nanoparticles and microcapsule
- Life Cycle Assessment
- Plant-fiber based composite materials
- Wood materials science

## 2. Beneficiaries

- **UG** - Universität Graz, Institute for Chemistry, Institute of Systems Sciences, Innovation and Sustainability Research, AUSTRIA, **Coordinator**
- **RUG** - Rijksuniversiteit Groningen, Engineering and Technology Institute Groningen, NETHERLANDS
- **TNO** - Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek, Energy

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Transition – Biobased and Circular Technologies, NETHERLANDS

- **UNIVE** - Università Ca' Foscari Venezia, Department of Molecular Sciences and Nanosystems, ITALY
- **UMLP** - Université Marie-et-Louis-Pasteur, FEMTO-ST/Department of Applied Mechanics, FRANCE (formerly known as UBFC - University Bourgogne Franche-Comté)

## 3. Associated Partners

- **ETHZ** - ETH Zürich, Dept. of Civil, Environmental and Geomatic Engineering, Institute for Building Materials, SWITZERLAND
- **NPSP** - NPSP B.V., NETHERLANDS
- **RenFuel** - Ren Fuel K2B AB, SWEDEN
- **BASF** - BASF SE, Chemicals Research, DEUTSCHLAND
- **Anton Paar** - Anton Paar GmbH, Particle Analysis & Surface Charge, AUSTRIA
- **SCA** - SCA Forest Products AB, SCA R&D Centre / Fibre and Biomass Technology, SWEDEN
- **Bcomp** - Bcomp Ltd., SWITZERLAND
- **JRC ISPRA** - Joint Research Centre ISPRA, ITALY

## 4. Doctoral schools & Training

Each PhD project within **RE-Fibre** will be carried out at one of the partner institutions. DCs will be enrolled at the local Doctoral schools (Table 1).

Table 1: Recruiting institutions and Doctoral Schools

Doctoral Candidate #	Recruiting Participant	PhD Awarding Entity	Doctoral School
DC1	RUG	RUG	<a href="#">Graduate School of Science and Engineering</a>
DC2	TNO	RUG	<a href="#">Graduate School of Science and Engineering</a>
DC3, DC4	UG	UG	<a href="#">Doctoral School Chemistry</a>
DC5, DC6	UNIVE	UNIVE	<a href="#">Sustainable Chemistry</a>
DC7	UG	UG	<a href="#">Doctoral School Environmental Systems Sciences</a>

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DC8, DC9	UMLP	UMLP	<a href="#">Physical Sciences for Engineering and Microtechnologies</a>
DC10, DC11	ETHZ	ETHZ	<a href="#">Doctorate – Dept. of Civil, Environmental and Geomatic Engineering   ETH Zurich</a>

In addition to **conducting research** at the host institution, each DC will participate at the following **training activities**:

- Advanced courses/seminars and training of **soft and transferable skills** provided by the local doctoral schools
- **RE-Fibre network-wide training activities** at the *Network Meetings, Training Schools, and Workshops* together with other DCs in the consortium
- **Intersectoral secondments** (typically two or three, 3-8 months each) hosted by the academic institutions and associated partners in industry from the RE-Fibre network

## 5. RE-Fibre DN Conditions

All researchers will be recruited under an **employment contract** that includes **social security coverage**. Each position includes the following\*:

**Monthly living allowance:** 3,400 euro/month; this amount is then adjusted through the application of a country correction coefficient to the living allowance of the country in which the researcher is recruited.

**Monthly mobility allowance:** 600 euro/month.

**Monthly family allowance,** if applicable and depending on the family situation: 660 euro/month.

\*The living allowance indicated above is the total EU contribution to the salary costs of the researcher. The estimated gross salary (result of deducting employer's social contributions when applicable) is indicated under each advertised position. The net salary is obtained after deducting the employee's contributions and direct taxes (e.g. income tax) from the gross salary.

The allowances for the individual DC positions in EUR are listed in Table 2.



The cost of the PhD educational activities, as well as all expenses related to travels performed to attend schools, workshops, and network-organized events, will be paid by the network through the HORIZON EUROPE MSCA-DOCTORAL NETWORK grant. DCs will be provided with office space and all facilities for their research project.

Table 2: Living, Mobility, and Family (Gross) allowance in EUR

DC#	Recruiting Institution	Country	Living allowance <sup>1</sup>	Mobility allowance	Family allowance <sup>2</sup>	Total maximum GROSS amount (36 months) <sup>3</sup>
DC1	RUG	NL	3726.4	600	660	173570.4
DC2	TNO	NL	3726.4	600	660	173570.4
DC3	UG	AT	3614.2	600	660	169531.2
DC4	UG	AT	3614.2	600	660	169531.2
DC5	UNIVE	IT	TBD	TBD	TBD	TBD
DC6	UNIVE	IT	TBD	TBD	TBD	TBD
DC7	UG	AT	3614.2	600	660	169531.2
DC8	UMLP	FR	3957.6	600	660	181893.6
DC9	UMLP	FR	3957.6	600	660	181893.6
DC10	ETHZ	CH	4372.4	600	660	196826.4
DC11	ETHZ	CH	4372.4	600	660	196826.4

<sup>1</sup>The amount depends on the country correction coefficient which takes into account the cost of living in the country of the recruiting institution

<sup>2</sup>Amount corresponded to the DCs having or acquiring family obligations (i.e. persons linked to them by (i) marriage, or (ii) a relationship with equivalent status to a marriage recognized by the legislation of the country or region where this relationship was formalized; or (iii) dependent children who are being maintained by them) during the action duration. On average it is calculated that 75% of the DCs will be eligible for the Family allowance.

<sup>3</sup>These are the maximum GROSS amounts paid by the European Research Executive Agency (REA). Net salaries will depend on the national taxation applied by the recruiting institution's country and on possible extra-benefits granted by the employing institution.

## 6. Eligibility Criteria

There are **strict eligibility requirements** for the DC positions in MSCA-Doctoral Networks (DNs). Please ensure to be qualified before applying, as ineligible candidates cannot be considered.

- Admission to the program is open to applicants who hold a **2<sup>nd</sup> Level master's degree** (120 ECTS + 180 ECTS in a bachelor's degree) or a **Single Cycle Degree** (minimum 300 ECTS), or a **comparable university degree** (Second Cycle qualification), as required by the partner universities for admission to doctoral studies. Applicants must submit a certified copy of any degree achieved.

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- At the time of application, applicants **must not have been awarded a doctoral degree**
- Applicants must fulfill the “**Mobility rule**”. Mobility rule states: At the time of recruitment applicants must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organization for more than 12 months in the 3 years immediately before their recruitment date. Compulsory national service and/or short stays such as holidays and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account. Applicant must submit a Declaration of Mobility rule.
- Be able to communicate fluently in English (at least B2-level speaking and writing).
- The detailed requirements for Applicants background are listed along the description of individual projects on the RE-Fibre website (<https://refibre-dn.eu/>).

The Recruitment committees will pay special attention to respect gender balance.

## 7. Selection Criteria

The DCs will be selected on the basis of the following criteria (in random order):

- scientific skills and research experience
- teamwork attitude and communication skills
- career profile and potential for excellence
- expected impact of the proposed training on their career

## 8. How to Apply

Applicants can apply for up to **3 PhD projects**, indicating the order of preference. All applications will have to be written in English and will be checked for eligibility. Ineligible or incomplete applications will not be considered. **Applications must be submitted through the RE-Fibre website**

(<https://refibre-dn.eu/>) from **01.02.2025 at 17:00 Central European Time** to **28.02.2025 at 17:00**

**Central European Time.** Applications coming through different channels than the project website (e.g. sent by email) will not be considered.





Applicants are required to fill in the **Application form** on the website and submit the following documents by **uploading them as PDF files**:

- Detailed *Curriculum Vitae* ([Europass format](#) – with added List of publications, participation in funded research projects, other qualifications, if any, must be included)
- Certified copy of Academic Degree/s in original language along with a certified translation into English, and/or Diploma Supplement (if applicable)
- Certified copies of official Academic Transcripts relating to all academic courses taken to earn every degree (bachelor/master or equivalent), translated into English, and corresponding grade point average
- Copy of passport (or, for EU citizens, equivalent ID document)

Additionally, to complete your application, please send the filled **Mobility Rule** template to [applications@refibre-dn.eu](mailto:applications@refibre-dn.eu). Finally, **two recommendation letters** (prepared using a template) must be sent directly by the referees to [applications@refibre-dn.eu](mailto:applications@refibre-dn.eu), with the name of the applicant in the subject line. **Recommendation letter template** and **Mobility Rule template** can be downloaded on the confirmation page **after submitting the application** form and are included in the conformation mail.

Failure to submit any of the above documents or lack of any of the required reference letters implies exclusion from the RE-Fibre recruitment procedure. For more information, please contact us through the Contact form on the RE-Fibre website. Data of the applicants will be shared within the Consortium for recruitment purposes only. All data provided by the applicants are processed solely for the purpose of the RE-Fibre call for applicants.

## 9. Selection Procedure

RE-Fibre will adopt the principles of the **European Charter for Researchers and Code of Conduct for the Recruitment of Researchers** promoting open, merit-based, and transparent recruitment and attractive working and employment conditions. The two-step procedure for the selection of the applicants is based on assessment of the application form, documents attached to the application

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(step 1) and on an interview (videoconference, step2) to those applicants who have passed the step 1 of the selection.

Shortlisted applicants will be informed of the interview process **within three weeks from the deadline for applications. Anticipated starting date for the DCs: 1/6/2025 (earlier start possible).**

## WHY TO PARTICIPATE IN RE-FIBRE PROGRAM?

- ❖ Top research Institutions in Europe
- ❖ Cutting-edge research on a high-impact topic related to sustainability
- ❖ Exposure to globally established industrial research and processes in sustainability
- ❖ International mobility plan
- ❖ Personalized career development plan for leadership positions in academia and industry
- ❖ Network-wide trainings, workshops, seminars, events, teambuilding activities