Call for applicants

1 PhD position in the EU Horizon 2020 Marie Skłodowska-Curie Project

C-PlaNeT:

ESR 07: Development and evaluation of future collection and logistics system for eco-designed plastics (prof. Pomberger, Montanuniversität Leoben, Austria)

GENERAL INFORMATION

Applications are invited for 1 PhD position (“Early Stage Researchers”) to be funded by the Marie-Skłodowska-Curie Innovative Training Network “C-PlaNeT – Circular Plastics Network for Training” within the Horizon 2020 Programme of the European Commission. C-PlaNeT is a consortium of high-profile universities, research institutions and companies located in Belgium, Germany, the Netherlands, Austria, United Kingdom, Switzerland, Denmark and Greece.

Europe needs this training network. Bringing plastics into the circular economy is one of the great challenges of our age. C-PlaNeT lays the foundations for a New Plastics Economy through a European Joint Doctoral Programme that trains 15 Early Stage Researchers (ESRs) to become part of a new generation of scientists, engineers and policy makers for the EU’s circular economy, including the design, processing, use and reuse of plastics. Each ESR, developing his/her research skills together with a supervisor and co-promoter, represents a piece of the jigsaw, at the same time benefiting from being part of a project team with 14 other ESRs and their supervisors covering other parts of the life cycle, challenging each other in terms of lifecycle thinking and a much more sustainable future for plastics.

The main C-PlaNeT objectives are:

OBJ 1. To decouple plastics from fossil resources
OBJ 2. To design for circularity, in terms of both materials and products
OBJ 3. To involve the consumer as a stakeholder in a circular-economy future for plastics
OBJ 4. To develop efficient waste-to-resource recycling technologies
OBJ 5. To develop overarching strategies for circular plastics.

Key dates
• 15-10-2019: Start date for on-line application
• 31-12-2019: Deadline for on-line application
• 07-02-2020 until 12-03-2020: Skype interviews with preselected candidates
• 12-03-2020: Notification of non/pre-selected candidates
• 30-04-2020: Extended deadline for application ESR 08, ESR 12 and ESR 15
• 01-06-2020: Targeted starting date for ESR contracts

THE APPLICATION

All information can be found on the website: www.c-planet.eu

Applicants need to apply via e-mail (c-planet@ugent.be) including:

• A detailed CV listing education, work experience, publications, relevant other activities, ... (Europass format obliged, https://europass.cedefop.europa.eu/documents/curriculum-vitae)
• Motivation: a) why you want to do a Ph.D.; b) why are you applying for this specific topic (ESR 7)?
• A language certificate (IELTS min. 7, TOEFL internet-based min. 90 or similar level as proven by other tests), if available
• At least one recommendation letters (academic reference)
• Transcript(s) of previous academic records

Recruitment

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<tr>
<td>Master of Science in Chemical Engineering</td>
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In total 15 ESRs will be recruited that will work at the 8 beneficiaries across Europe.

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<th>BENEFICIARIES</th>
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<td>GHENT UNIVERSITY (UG)</td>
<td>Belgium</td>
<td>Centre for Sustainable Development; Faculty of Bioscience Engineering- Department of Green Chemistry and Technology; Faculty of Engineering and Architecture Department of Materials, Textiles and Chemical Engineering; Centre for Polymer and Material Technologies;</td>
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<tr>
<td>MONTANUNIVERSITÄT LEOBEN (MUL)</td>
<td>Austria</td>
<td>Institute of Waste Processing Technology and Waste Management</td>
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Early Stage Researcher in H2020 Marie-Skłodowska-Curie Action- Innovative Training Networks (MSCA-ITN)

ITNs support competitively selected joint research training and/or doctoral programmes, implemented by European partnerships of universities, research institutions, and non-academic organisations. The research training programmes provide experience outside academia, hence developing innovation and employability skills. ITNs include industrial doctorates, in which non-academic organisations have an equal role to universities in respect of the researcher’s time and supervision, and joint doctoral degrees delivered by several universities. Furthermore, non-European organisations can participate as additional partners in ITNs, enabling doctoral-level candidates to gain experience outside Europe during their training.

A guide for applicants for the MSCA-ITN project is developed by the European Commission and can be found here:


Applicants need to fully respect three eligibility criteria (to be demonstrated in application form):

- **Early-stage researchers (ESR)** are those who are, at the time of recruitment by the host, in the first four years (full-time equivalent) of their research careers. This is measured from the date when they obtained the degree which formally entitles them to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the research training is provided, irrespective of whether or not a doctorate was envisaged. Part-time research experience will be counted pro-rata.

- **Conditions of international mobility of researchers**: Researchers are required to undertake trans-national mobility (i.e. move from one country to another) when taking up the appointment. At the time of selection by the host organisation, researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12 months in the 3 years immediately prior to their recruitment. Short stays, such as holidays, are not taken into account.

- **English language**: The applicants (ESRs) must demonstrate that their ability to understand and express themselves in both written and spoken English is sufficiently high for them to derive the full benefit from the network training.
**Secondment and internship**

Each ESR must participate in:

- an academic secondment (min. 6 months) to one of the partner universities, wherein they will acquire complimentary skills such as a specific scientific expertise, the use of unique equipment or the exploration of a different scientific discipline entirely and
- at least one training internship (min. 2 months) at one of the non-academic partners, wherein they will be able to taste the industrial perspective, consider upscaling of technology or frame their research against existing business models.

**Selection procedure**

The selection and recruitment processes of the ESRs will be in accordance with the European Charter and Code of Conduct for the Recruitment of Researchers. The recruitment process will be open, transparent, impartial, equitable, and merit-based. There will be no discrimination based on race, gender, sexual orientation, religion or belief, disability or age. The applications will be analyzed after the application deadline by the Central Secretariat for basic admission requirements. Afterwards, a Selection Panel composed of 4 members of the Selection Committee will evaluate the eligible applicants (the weighted average of scores given to individual aspects, such as academic background, previous study results, motivation, etc.). Subsequently, the applicants are ranked based on their scores and the upper 5 positions per Selection Panel member are grouped into a new subgroup. All of the applicants in this group are evaluated by all the Selection Panel members, leading to an average score per applicant and a new ranking of the applicants. The applicants ranked in the upper 5 positions will be invited to give an oral presentation, a Skype interview. All the members of the Selection Panel will be involved in the final selection, taking into account the preferences of the candidate and balancing them with the requirements of the project (in terms of, e.g., excellence, required expertise and gender) and the priorities of the supervisors. All the candidates will be ranked on a list that will be forwarded to the Supervisory Board for final approval. In the event that applicants decide not to take up the offer after selection, the option will pass to the next applicant on the reserve list using the same selection procedure.

When you apply for this position, your application may be circulated within the consortium members as part of the hiring process.

**Application deadline: 30.04.2020**

**Benefits and salary**

The successful candidates will receive an attractive salary in accordance with the Marie-Sklodowska-Curie Action regulations for Early Stage Researchers. The exact (net) salary will be confirmed upon appointment and is dependent on local tax regulations and on the country correction factor (to allow for the difference in cost of living in different EU Member States). The salary includes a living allowance, a mobility allowance and a family allowance (if married). The guaranteed PhD funding is for 36 months (i.e. EC funding, additional funding is possible, depending on the local Supervisor, and in accordance with the regular PhD time in the country of origin). In addition to their individual scientific projects, all fellows will benefit from further continuing education, which includes internships and secondments, a variety of training modules as well as transferable skills courses and active participation in workshops and conferences.

For further information, please contact the central office (c-planet@ugent.be)
ESR 7

**TITLE:** Development and evaluation of future collection and logistics system for eco-designed plastics

**HOST:** Montanuniversität Leoben (Austria)

**POSTAL OFFICE HOST:** Franz-Josef-Strasse 18, 8700 Leoben, Austria

**MAIN SUPERVISOR:** Prof. dr. R. Pomberger (MUL)

**CO-SUPERVISOR:** Prof. dr. T. Astrup (DTU)

**START DATE:** 01.04.2020

**DURATION:** 36 months

**REQUIRED DEGREE:** Master of Science in Environmental Engineering

Master of Science in Chemical Engineering

Master of Science in Mechanical Engineering

Master of Science degree in related fields

**REQUIRED SKILLS/QUALIFICATIONS:**

- No stay of more than 12 months within the last 3 years in Austria
- Profound knowledge in mechanical process engineering
- Basic knowledge (preferably practical experience) with respect to sensor-based sorting technologies
- Manual skillfulness, team and communication skills, own initiative and responsibility, reliability
- Willingness to run trials for sensor-based sorting
German language skills corresponding to the level B2 of the Common European Reference Framework of Languages

DESCRIPTION:
To enable high recycling rates for eco-designed plastics and biobased plastics the potential of (established) sensor-based sorting technology for the distinction and separation of such materials must be assessed through research and experiments. Based on these considerations the need for adapting existing collection systems enabling high recycling rates for eco-designed plastics and biobased plastics is studied.

OBJECTIVES:
New environmental challenges will change the “fossile” material plastic by development of eco-designed new materials and products (e.g. bioplastics). The objective is to investigate product-oriented collecting and sorting systems for plastic waste of new materials. First aim is to develop new source separation concepts and to evaluate their impact on logistic and sorting efficiency. Second aim is to investigate the dependence between collection system and sorting technology focused on sensor based sorting and material impurities.

PLANNED SECONDMENTS:
DTU for eco-design methods and assessment methods (M36-M42); Saubermacher Dienstleistungs AG (collection and sorting plant) for practical evaluation on collection and sorting systems (M19-M20); Kruschitz for practical testing of eco-designed plastics and special materials for recycling (regranulation process) (M31-M32)