

# Hosting offer for Marie Sklodowska-Curie Postdoctoral Fellowships (PF) 2022 at University of Antwerp/research group InViLab

<u>MSCA Postdoctoral Fellowships</u> are individual research grants offering excellent <u>postdoctoral researchers</u> the chance to develop their skills by means of international mobility. Through the implementation of an original and personalised research project, MSCA Postdoctoral Fellowships aim to foster excellence through training and mobility and to equip researchers with new skills and competences in order to identify solutions to current and future challenges.

University of Antwerp/research group InViLab invites motivated postdoctoral researchers to jointly prepare an application for the MSCA-PF-2022 call Marie Skłodowska-Curie Postdoctoral Fellowships call (MSCA-PF-2022) with them as host organisation.

## Description of Hosting organisation/group

The InViLab (formerly Op3Mech) research group, links state-of-the-art industrial knowledge related to industrial and medical 3D vision technology. The InViLab team members share expertise in combining IR thermography inspection with numerical modeling for NDT purposes. The InViLab group consists of 26 members: 4 professors, 4 postdocs, and 18 researchers. The group has relevant expertise in performing 3D measurements and mapping thermal and visual data onto 3D models through several PhDs and fundamental and industrial research projects. The most relevant research projects of InViLab are related to improving quality inspection in the industry using vision technology. Also, biomedical and biomechanical measurements and material identification by means of vision technology are within the scope of the group. Within these themes, a link has been achieved between temperature measurements, depth measurements, visual and multispectral measurements. The InViLab lab has several test installations and measurement setups that are very relevant in the context of this project proposal. The group also has multiple IR and hyperspectral cameras, time-of-flight cameras, a sheet-of-light setup, 2D and stereo cameras, 2 fringe projection systems, structured light projection system, infrared cameras in combination with various excitation sources.

# Website link: www.invilab.be

# **Topics/expertise**

- Optimized skin tissue identification by combined thermal and hyperspectral imaging methodology.
- Biomedical inspection and tissue identification by means of Al.
- Improving quality inspection in the textile industry using vision technology
- Depth-selective chemical imaging of cultural heritage objects
- Quantitative industrial inspection through non-invasive imaging

Link to current and past projects: <a href="https://www.uantwerpen.be/en/staff/qunther-steenackers/research/">https://www.uantwerpen.be/en/staff/qunther-steenackers/research/</a>

#### Your profile

- Expected qualifications/expertise of the candidate: programming skills, numerical modelling skills.
- You must have a completed PhD at the time of the call deadline (14 September 2022).
- Candidates must have a maximum of 8 years full-time research experience from the PhD award date until September 14, 2022. Periods of inactivity in research (e.g. unemployment, periods of employment outside research, parental or sick leave) do not count towards the time of research experience.
- For European fellowships, candidates can be of any nationality and must not have resided or carried out their main activity (work, studies, etc.) in Belgium for more than 12 months in the 36 months immediately before September 14, 2022.
- Highly motivated candidate with an excellent research track record appropriate to career stage, as evidenced by academic publications and other scientific output.

#### What we offer

- Support and guidance for the preparation of your MSCA PF proposal
- A stimulating, interdisciplinary environment for high-level research.

## How to apply?

Indicate your interest by contacting the host institution as follows:

Please contact <u>gunther.steenackers@uantwerpen.be</u> by e-mail with a short CV and motivation to indicate your interest to prepare a MSCA-PF application.

After the supervisor agrees to support you as a MSCA-PF candidate, you can start preparation of MSCA PF project proposal and will be supported further by the supervisor and the Research Support Office of the host university.

For more information on the MSCA PF scheme or the host institution, you can contact the MSCA coordinator of the University of Antwerp: Dr. Liesbet Cockx (Research, Innovation & Valorisation Antwerp, Grants Office): Liesbet.cockx@uantwerpen.be

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