

DELIVERABLE D2.2 – Report on international recruitment

Project Acronym	COLOSSE
Project Full Name	Central European Platform for Plasma-Enabled Surface Engineering
Grant Agreement No.	101158464
Call	HORIZON-WIDERA-2023-ACCESS-04
Type of action	HORIZON Coordination and Support Actions
Project starting date	1 April 2024
Project duration	36 months
Deliverable number	D2.2
Deliverable name	Report on international recruitment
Work Package	WP2
Type	R – Document, report
Main author	E. Skalická
Lead beneficiary	Masaryk University
Dissemination Level	PU – Public
Due Date	June 2025
Date	28. 06. 2025
Version	1.0



Funded by
the European Union

Funded by the European Union under Grant Agreement No. 101158464. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

Table of contents

Abbreviations.....	4
List of charts and tables	4
Executive summary	5
Key words.....	5
1 Introduction	6
2 Advertising and application process.....	6
3 Selection Committee	8
4 Selection procedure	8
5 Onboarding.....	10
6 Challenges and recommendations	12
7 Future possibilities for recruited postdocs.....	13
8 Annexes.....	14
8.1. Annex 1: Informational Leaflet.....	14

Abbreviations

CDP	– Career Development Plan
CU	– Comenius University
EU	– European Union
HE	– Horizon Europe
HR	– Human resources
MSCA-PF	– Marie Skłodowska-Curie Postdoctoral Fellowship
MUNI	– Masaryk University
OTM-R	– Open, transparent and merit-based recruitment
RMA	– Research manager and administrator
UWB	– University of West Bohemia in Pilsen
WP	– Work package

List of figures, charts and tables

Figure 1 Advertisement on the project website	7
Figure 2 LinkedIn posts.....	8
Chart 1 Geographical distribution of received applications.....	9
Chart 2 Overall geographical distribution of received applications.....	10
Table 1 List of recruited postdocs.....	11

Executive summary

The document builds on the guidance of the deliverable D2.1 “COLOSSE HR Strategy” that provided an extra layer of detail to the institutional strategies to specifically address research in plasma-enhanced surface engineering. The report describes the process, outcomes and challenges of international selection procedure of the postdoctoral researchers supported by COLOSSE.

Key words

Human resources, onboarding, postdoc, recruitment, selection procedure, strategy

1 Introduction

During the recruitment and onboarding processes, we built on our Human Resources Strategy (D2.1) designed at the beginning of the project to address the specific needs and opportunities relevant to the field of plasma-enabled surface engineering.

To provide a practical testing ground for recruitment and onboarding of international staff, we opened six new positions of postdoctoral researchers with a requirement of international mobility. We have run a joint recruitment in line with the OTM-R best practice identified in the HR Strategy to integrate the postdocs in the host centres using upgraded onboarding approach and to be in line with the three specific sub-goals:

- Ensure a professional, effective and transparent recruitment and selection process to find the most suitable candidates for open positions.
- Recruit highly talented Early-Stage Researchers from around the world.
- Promote international collaboration and knowledge exchange.

The initial postdoc duration provided with funding allocated in COLOSSE is 18 months for each postdoc. The recruited postdocs will be motivated to apply for MSCA-PF. It will provide a multiplication effect to the project funding, raise the profile of the host institutions, and improve the career development potential of the postdoctoral fellows.

2 Advertising and application process

In order to identify potential candidates, we prepared an informational leaflet (Annex 1) before the official opening of the positions. We distributed it to our partners to ensure they were informed in advance and could help raise awareness among students/graduates regarding the forthcoming application opportunity. Additionally, we presented it during our visits to strategic partner institutions.

Based on the template for advertising open positions (see D2.1, Attachment 1), COLOSSE centres advertised open postdoctoral positions in the following sourcing channels:

- University official noticeboards, university (or faculty) career websites
- Euraxess profile of the advertising COLOSSE centre equipped with the HR Excellence in Research Award logo

- Dedicated webpages of the individual COLOSSE centres and the [COLOSSE website](#) with detailed information about the position and the application.



The screenshot shows the 'Positions' page of the COLOSSE website. The header includes the COLOSSE logo and navigation links: Consortium, Activities, Technology, Research, Events, Positions (highlighted), News, and Contacts. The main heading is 'Positions'. Below it, a section titled 'Postdoctoral (PostDoc) position in the area of Applied Physics within the project COLOSSE' contains a paragraph about the call for applications, which is now closed. It mentions that suitable candidates have been selected for all open positions and that the project appreciates the high level of interest from around the world. It also lists research topics of interest: thin film deposition, plasma-assisted processing, material characterization, or first-principles modelling. A red link for 'project leaders' is provided. Below this, a section titled 'Closed PostDoc positions' lists two positions:

- **University of West Bohemia (CZ)**
 - 1. Computer simulations of low-temperature plasmas**
The research aims to develop, validate and apply computer simulation tools (models) for studying low-temperature plasma discharges used for materials processing or plasma chemistry (magnetron sputtering discharges, DC, RF or microwave discharges). The applicant is expected to use available simulation software as well as to develop in-house simulation codes. Requirements: Good background in low-temperature plasma physics, programming and data processing skills, experience with low-level programming languages (C++, Fortran) and Python.
Supervisor: Assoc.Prof. Tomáš Kozák
Euraxess: <https://euraxess.ec.europa.eu/jobs/277632>
 - 2. Atomic Scale Modelling of Thin Film Materials and Surfaces**
The main aim of the candidate will be to complement and support the parallel experimental preparation of functional thin films, in most cases utilizing (often reactive) magnetron sputtering. There are numerous directions of future research (nanoparticles, thermochromic materials, novel catalytic materials, atom-by-atom growth of multielement materials, etc.). The applicant is expected to have an experience with atomic-scale simulations, in the first place ab-initio, but ideally also classical molecular dynamics and good knowledge of some of the corresponding software (Quantum Espresso, VASP, CPMD, etc.).
Supervisor: Prof. Jiří Houška
Euraxess: <https://euraxess.ec.europa.eu/jobs/277624>
- + **Comenius University Bratislava (SK)**
- + **Masaryk University (CZ)**

Figure 1 Advertisement on the project website

- COLOSSE LinkedIn – [UWB](#), [MUNI](#), [CU](#)



Figure 2 LinkedIn posts

The advertising template contained all the necessary information for candidates and selection committee members and reflected the principles of the European Charter and the Code. As agreed between the partners, the positions were opened and published in the same time (1st October 2024).

3 Selection Committee

Each institution established its own selection committee. The committee consisted of a chairperson from the respective institution and committee members. Based on an agreement between the partner organizations, representatives from partner institutions also participated as members of the committees. This approach ensured consistency in the evaluation process and allowed the exchange of expertise and best practices.

4 Selection procedure

The selection procedure was conducted in accordance with the OTM-R principles and the institutional rules for hiring. The process consisted of the following stages:

- 1) Pre-screening of received applications – formal check of applications received by the deadline for submission, creation of the list of candidates
- 2) Shortlisting – candidates were shortlisted for interviews based on their qualifications and experience
- 3) Interviews – online meetings with selected candidates (key objective criteria aligned with the goals and expectations of the position – academic credentials, research experience, publications, potential contributions to the field)

- 4) Evaluation and Decision – following the interviews, the selection committee discussed the performance of each candidate. Based on the assessment, the committee decided their ranking and recommended to open negotiations with the successful candidates. As a conclusion, the selection procedure report was prepared (internal document).
- 5) Informing unsuccessful candidates
- 6) Deleting candidate's personal data

The total number of applications was 124. Chart 1 shows the geographical distribution of received applications, with the highest numbers associated with Masaryk University. This is due to a repeated selection process in January 2025, following the withdrawal of initially selected candidates.

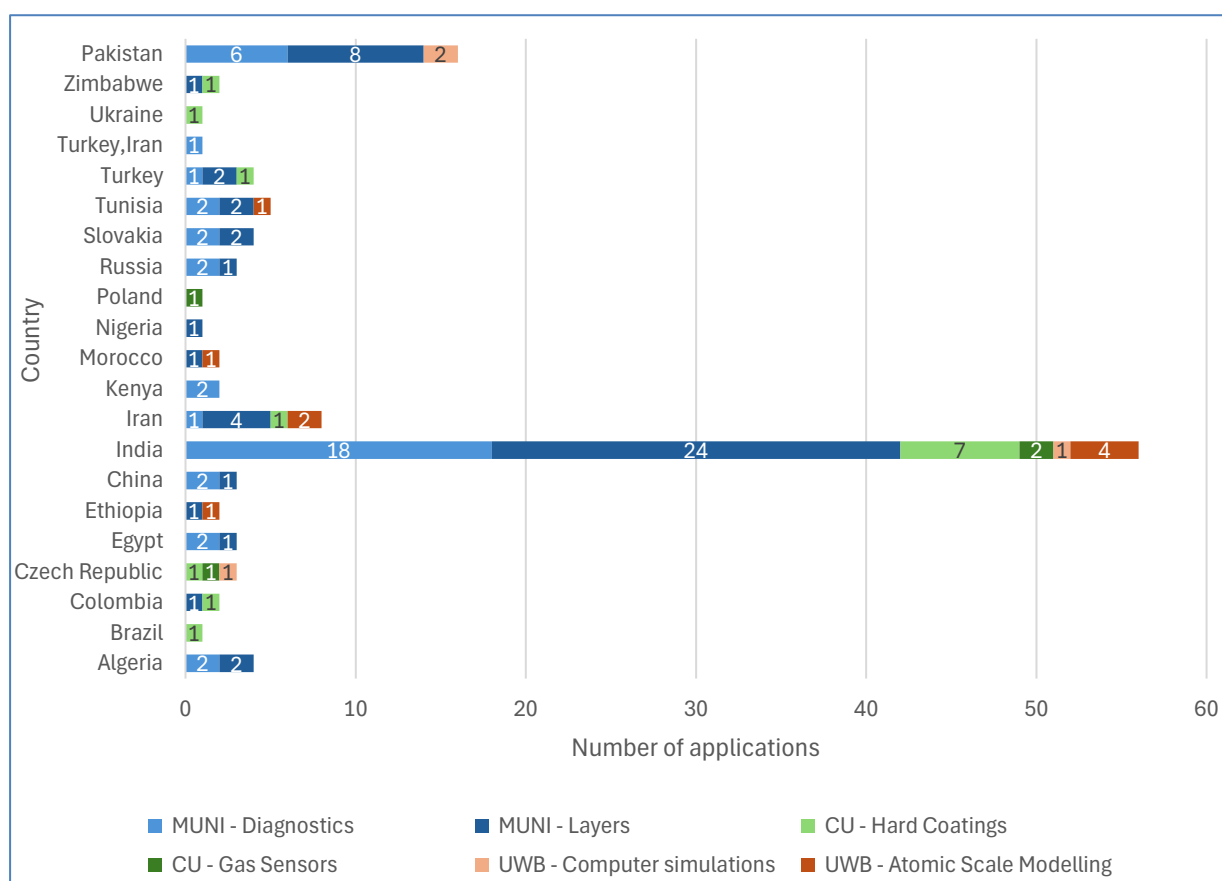


Chart 1 Geographical distribution of received applications

World map showing the number of applications per country. The map uses a color scale from light blue (1) to dark blue (56). The number of applications for each country is indicated by a number on the map.

Country	Number of applications
India	56
China	3
Russia	3
Iran	3
Algeria	2
Brazil	2
South Africa	2
Libya	2
Yemen	2
Ukraine	2
Spain	2
Iran	8
Other countries	1

Number of applications

1 56

Používá technologii Bing.

© Australian Bureau of Statistics, GeoNames, Geospatial Data Edit, Microsoft, Microsoft Crowdsourced Enrichments, Navinfo, Open Places, OpenStreetMap, Overture Maps Foundation, TomTom, Wikipedia, Zenlin

5 Onboarding

- Pay sufficient attention to onboarding of new employees, choose the appropriate mentor and provide feedback during the onboarding process.
- Encourage networking and collaboration among postdocs with each other and with other researchers at the institution.
- Retain highly talented Early-Stage Researchers from around the world.

- Preboarding administration and logistics – contract and employment related documents, Visa and Immigration assistance and relocation support, preparing the workplace
- First day at work – welcome email, onboarding plan, familiarization with workplace, general workplace safety training, help with residence and practicalities
- Adaptation – orientation in work tasks, training, familiarization with the internal information and regulations

- The end of onboarding - interview with the employee, evaluation of adaptation

The onboarding and adaptation process is carried out according to established procedures at each institution. It is supported by a dedicated system where all steps are listed, including responsible persons, forms, and checklists or the process is monitored using a paper-based checklist. A mentor is assigned to supervise and support the new employee throughout the onboarding period.

	Host Institution	Previous institution/country	Home Country	Onboarding phase (Preboarding / First days/ Evaluation of adaptation)
Postdoc 1	CU	Sumy State University/Ukraine	Ukraine	First days
Postdoc 2	CU	Instituto Tecnológico y de Estudios Superiores de Monterrey/Mexico	Mexico	First days
Postdoc 3	MUNI	Saveetha Institute of Medical and Technical Sciences (SIMATS)/India	India	Preboarding
Postdoc 4	MUNI	University of Mons/Belgium	Slovakia	Preboarding
Postdoc 5	UWB	UWB/Czech Republic	Ethiopia	Evaluation of adaptation
Postdoc 6	UWB	Montanuniversität Leoben/Austria	Czech Republic	Preboarding

Table 11 List of recruited postdocs

As shown in Table 1, the researchers are at a different stage of the onboarding process. Further details about their onboarding at each institution are provided below.

- Masaryk University - due to the repeated selection process, both postdoctoral researchers are currently in the preparatory phase of preboarding. Their fellowship will start in October 2025 including the development of their CDPs in collaboration with their supervisors.

- Comenius University – both postdoctoral researchers joined the project in May 2025. Based on a comprehensive Training Needs Identification process and initial interviews, colleagues at CU developed personalized Career Development Plans (CDPs) for each researcher using the COLOSSE HR strategy template.
They have completed the structured goal-setting process following the Brain-Based Coaching methodology and are now implementing regular progress reviews. These sessions focus on tracking action steps, ensuring accountability, and making adjustments to strategies as needed.
The researchers appreciate having dedicated time to reflect on their professional development while conducting their technical research work, and the initial feedback has been positive.
- University of West Bohemia – the first researcher joined the project in March, and he and his mentor developed a CDP using the template of the COLOSSE HR strategy within the first month of joining. The second postdoctoral researcher is set to join in October and is currently in the preparatory phase of preboarding.

6 Challenges and recommendations

The main challenge encountered during the selection process was the need to repeat the recruitment procedure at Masaryk University. This was due to the withdrawal of selected candidates after the first round. As a result, the start of the fellowship had to be postponed. We recommend taking potential delays into account in the planning phase and allowing for flexibility in timelines.

It was interesting to note that some applicants applied for more than one position and across several institutions. This highlighted the advantage of a joint selection committee, which ensured transparency and coordination. The committee was aware of candidates applying for more than one position and could take this into account during interviews. This provided a more comprehensive view of each candidate's interests and motivations.

7 Future possibilities for recruited postdocs

Recruited postdoctoral researchers will benefit from enhanced career development planning framework. This guidance will be implemented across the COLOSSE centres to strengthen the ability of their researchers to navigate across disciplines and sectors. Individual ambitions of researchers will be supported by their supervisors and further by providing them with the funding to undergo training of scientific and technical skills at international workshops and schools of their choice. They will also have the opportunity to participate in trainings on development soft and transferable skills that we will organize at each COLOSSE centre.

Further on, we are planning two young researchers' retreats that will bring together especially doctoral candidates and postdocs from the COLOSSE centres. The programme will include both scientific discussions on research topics brought in by the participants and training sessions.

We will also encourage the postdoctoral researchers to submit an application for MSCA-PF during their fellowship. Local support teams for MSCA-PF will cooperate to guide COLOSSE candidates, which will give the RMAs at partner institutions chance to learn from each other.

Additionally, In response to growing interest, we organized a workshop entitled "Mastering the MSCA Postdoctoral Fellowship Application" in June 2025. The goal was to provide fellows, supervisors and RMAs with a comprehensive understanding of the MSCA Postdoctoral Fellowship scheme, its evaluation criteria, and equip them with practical skills to develop compelling and high-quality proposals.

8 Annexes

8.1. Annex 1: Informational Leaflet



**CAREER GROWTH OPPORTUNITY
FOR INTERNATIONAL CANDIDATES**

**Heads Up: Postdoctoral Positions in the
Area of Applied Physics in the Czech
and Slovak Republics**

Masaryk University in Brno, University of West Bohemia in Pilsen, and Comenius University in Bratislava will be soon seeking for talented international candidates for Postdoctoral positions in the field of plasma-enabled surface engineering. This unique opportunity will be funded through Horizon Europe project and we already collect interested potential candidates.

**6 NEW OPEN POSTDOCTORAL
POSITIONS FOCUSED ON
CUTTING-EDGE TOPICS WILL
BE OPEN:**

2 AT THE MASARYK UNIVERSITY IN BRNO:

- PVD synthesis of high entropy materials for future sustainable energy applications
- Diagnostics of PVD processes in laboratory and industrial conditions

2 AT THE UNIVERSITY OF WEST BOHEMIA IN PILSEN:

- Magnetron sputtering (HiPIMS) of a high-performance thermochromic / gas-sensing / water splitting coatings
- Design, characterization and growth conditions of thin film materials by atomistic-scale simulations

2 AT THE COMENIUS UNIVERSITY IN BRATISLAVA:

- Advanced nanostructured / porous PVD coatings for hydrogen economy
- Microstructural design of hard transition metal diboride coatings

What we offer

- Complex initial training including business trips to cooperating universities.
- Stimulating research environment with access to worldwide contacts with specialised measuring equipment.
- Collaboration with international partners and opportunities to publish in renowned journals.
- Financial support for conferences and workshops on scientific and technical skills and international workshops.
- Help with your relocation.



TYPE OF EMPLOYMENT

- Temporary position for 1.5 years (18 months) with the possibility of prolongation.

WORKING HOURS

- 10 FTE (full-time employment of 40 hours a week).

EXPECTED START DATE

- 10/2024 or negotiable with respect to eventual immigration timelines for non EU candidates.

Did you find this interesting?

Please send a short email to one of the following email addresses:

vasina@physics.muni.cz for Brno, Czech Republic

pbaroch@kfy.zcu.cz for Pilsen, Czech Republic

marian.mikula@fmph.uniba.sk for Bratislava, Slovak Republic.

We will contact you as soon as the selection procedure is officially open.

**JOIN US IN PUSHING THE
BOUNDARIES OF RESEARCH
AND ITS APPLICATION.
WE ARE LOOKING FORWARD
TO HEARING FROM YOU!**