

The Royal Observatory of Belgium seeks a collaborator (F/M/X) for its scientific activities related to Reference Frames

Our reference	Activity group	Recruitment category(ies)	Applications open until
Genesis	1. Scientific research and experimental development	SW2	30 September 2026

Job description

Framing of the position

The vacant position is linked to the Operational Directorate (OD) Reference Systems and Planetology. The main tasks of this OD include contributing to the elaboration of reference systems and timescales, and integrating Belgium into the international reference frames for space geodesy and time. To support this research, scientists from this OD investigate geodetic techniques as well as the rotation, gravity field, tides and atmosphere of the Earth. The geodetic data are obtained from ground stations as well as from spacecraft orbit determination. The scientists are involved in several ESA missions, such as Genesis and NovaMoon, and are actively engaged in the development of measurement techniques, operations and data analysis.

Purpose of the position

The objective of the vacant position is to contribute to the definition of terrestrial reference frames in the context of ESA's geodesy mission Genesis. Genesis, an ESA mission approved for launch in 2029, will be the first satellite to co-locate all four space-based geodetic techniques — GNSS, SLR, DORIS and a pioneering VLBI transmitter — on a single platform in a near-polar orbit (~6000 km). This unique configuration will provide well-calibrated space ties to advance the International Terrestrial Reference Frame and to refine the Earth Orientation Parameters.

The successful candidate will contribute to Genesis mission operations and to its scientific exploitation and data analysis. The work focuses on the scientific return of the mission and extends to the preparation of upcoming geodesy missions in close collaboration with an international network of mission teams and researchers.

This position requires proficiency in English, given that documentation, meetings, and international contacts will be conducted primarily in English.

Outcome areas

The function supports the scientific objectives of the Genesis mission. Genesis will, for the first time, co-locate the four space geodetic techniques on a single satellite, providing the space ties needed to improve the accuracy and the long-term stability of the International Terrestrial Reference Frame.

Realising this potential requires dedicated processing tools and analysis strategies, in particular for the novel VLBI transmitter, whose signals have to be correlated and combined with the observations of the other techniques. The challenge for the ROB is to develop and validate these VLBI correlation and data analysis tools and to exploit them scientifically.

1. Scientific Research

The core task of this position is to develop and validate data analysis tools for the Genesis mission, and in particular for the analysis of the VLBI transmitter data. The main challenges are to ensure the compatibility of the transmitted signals with the ground stations, and to adapt the existing VLBI data processing chains to the Genesis mission. The combination of the VLBI data with the other geodetic techniques, and the extraction of the satellite and ground station coordinates and of the Earth Orientation Parameters, are an integral part of the Genesis mission. The tools will be tested with orbital data, simulations and laboratory tests. The position also includes support to the testing, operation and data exploitation of the space instrumentation, including operations concepts and VLBI experiments, in preparation for the operational phase of the mission. The work is carried out in close collaboration with ESA, the international Genesis Science Team and the VLBI community.

2. Transfer of scientific knowledge

The position requires publishing and disseminating results at relevant scientific conferences and in scientific journals. The position also requires the ability to translate scientific results for the general public

Employer

There is 1 position open in the Reference Frames, at the Royal Observatory of Belgium and Planetarium (address: : Ringlaan 3, B1180 Brussels).

The activity group for the position is: I. Scientific research and experimental development

Royal Observatory of Belgium (ROB): The ROB (<http://www.observatory.be>) is a Belgian Federal institute located in the green outskirts of Brussels (Uccle).

Reference Systems and Planetology / Genesis Team: ROB Genesis team is composed of about 8 scientists, within the larger Operational Directorate OD1 Reference Systems and Planetology. The selected candidate will work closely with colleagues from OD1 and interact closely with the International Genesis Science Team and ESA.

Skills

Behavioural skills

- Integrate information: Establish connections between various data points, develop alternatives, and draw appropriate conclusions.
- Work as a team: Foster and strengthen team spirit by sharing opinions and ideas and helping to resolve conflicts among colleagues.
- Achieve objectives: Be committed and demonstrate determination and ambition to produce results and take responsibility for the quality of the actions undertaken.

Technical skills

- Methodologies: good knowledge with data analysis
- In-depth knowledge of the use and publication of scientific data
- In-depth knowledge of space geodetic techniques, particularly VLBI.
- Good knowledge of terrestrial reference systems and frames.
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Assets

- Knowledge of space geodetic techniques other than VLBI: GNSS, DORIS or SLR
- Knowledge of multi-technique combination and space ties.
- Experience with the analysis of large data sets.

Conditions for consideration

Your profile

- You have a PhD in Geosciences, physics, engineering, space sciences or in an equivalent field

Degree must have been conferred by the closing date for applications

The PhD degree must be obtained before the application deadline. The doctorate degree included a public viva on the subject of a thesis linked with the position being applied for

/! Applicants who have a degree or certificate from a foreign institution who apply for a scientific position for which the tasks are not related to the permanent missions of the institution are exempt from the need for an academic equivalence evaluation.

Do you wish to apply but your diploma is not written in Dutch or French?

We invite you to contact the person listed in the 'Contacts' section (selection procedure) to find out if you need to take a language test: Article 7 - Level 1/A.

If necessary, you can register by clicking on the link: www.travaillerpour.be/fr/tests-et-certificats/linguistique/inscription.

Experience required

For this position, at least 4 years of scientific experience is required, demonstrated through publications and active contributions to scientific conferences. Knowledge of space geodesy and of VLBI data analysis is also required, enabling you to conduct independent research and to make a valuable contribution to this project.

Job offer

Contract and category

Recruitment will take place in category SW21.

You will be hired under a **fixed-term contract (12 months)** as an assistant on the SW21 salary scale.

You will be hired under a one-year fixed-term contract on the SW2 salary scale. The contract might be renewed in case of mutual satisfaction and budget availability.

Minimum pay: 69.010 euros (gross annual salary, at the current index, legal benefits not factored in).

For more details, see Article 4, page 18496 of the pdf at:

<https://www.ejustice.just.fgov.be/eli/arrete/2008/02/25/2008021028/moniteur>

Benefits

We offer you an interesting job with a social impact, which comes with a number of benefits:

- A good work-life balance
 - flexible working hours of 38 per week
 - option of taking compensatory leave for overtime worked
 - offices closed between Christmas and New Year's Day
 - 26 days of paid leave (for a year of full time employment)
 - easy commuting using public transport
 - numerous opportunities for self-growth
 - numerous opportunities for training and apprenticeship (during working hours)

Financial benefits

- possibility of receiving a bilingualism bonus
- hospitalisation insurance at reduced rate
- supplementary pension (occupational pension)
- free use of public transport for commuting between your home and the place of work
- meal vouchers
- possibility of receiving a bicycle allowance for travel via bicycle
- Benefits and offers via the Benefits@Work card

- a range of fringe benefits (subject to conditions)

Conditions for employment

If you are selected through this procedure, you must – in order to be hired – fulfil the following requirements on the date of selection:

- Enjoy full civil and political rights
- Have fulfilled military service requirements
- Behave in a manner fitting of the requirements of the position
- Hold the necessary degree(s)
- Have the necessary skills and fulfil the requirements listed in the job profile

Procedure

Step 1 – Verification of the participation conditions

You will be considered in the selection procedure if you fulfil all of the required conditions. Verification will be carried out by the selection board on the basis of the application documents you have submitted. The board will decide whether the qualifications, awards and experiences you have submitted meet the requirements of the position. If they do, you will be invited to continue to the next step of the procedure.

Depending on the number of applications received, the selection board reserves the right to limit the number of applicants eligible for the next step by selecting those applicants it deems most suitable for the position.

Step 2 – Interview

The interview will take place on at the **Royal Observatory of Belgium**. Further details will be sent to you by one of our employees via email.

The selection board assesses whether the qualifications, awards and experience you included in your application documents meet the requirements for the position.

If you fail to attend

If you fail to attend the additional evaluation and/or interview, you will be automatically excluded from the remainder of the selection procedure unless you provide evidence, within three days, that your absence was justified for one of the following reasons:

- illness
- emergency relating to a member of your household (= anyone who lives with the applicant) or family (= spouse or legal cohabitant of the applicant, parents or grandparents of the applicant)
- mandatory presence at your workplace

- disruption or delay to public transport of at least 30 minutes
- force majeure

If applicable, you may request, within 10 days of the interview date, to be interviewed by the board. A new date will then be offered to you.

Notification

If you are not selected in a step, the procedure will end and you will not be invited to any subsequent evaluations in the same selection procedure.

For each step, you will receive a notification of the result.

Equal opportunities and reasonable accommodations

The Federal Administration has an active diversity policy.

Do you live with a disability, with learning difficulties or an illness? If so, you can request accommodations for the selection procedure. Please contact the individual listed under the “Contact persons” section.

Facilities provided for people who are pregnant or breastfeeding

Are you pregnant or breastfeeding your child? If so, you can request access to the relevant facilities. Please contact the individual listed under the “Contact persons” section.

Final result

What happens if you are selected?

Following the selection procedure, an unranked group of applicants will be placed on a short-list. These applicants will be those deemed most suitable to fill the open position in accordance with the conditions for consideration.

The Director general of the Institute will select one or more applicants from this short-list.

How long will this list remain valid?

The short-list of selected applicants will be valid for Select an option.

Apply

Do you want to apply? Send your application documents by email to ozgur.karatekin@oma.be and dir-rob@oma.be, including the selection reference in the subject line.

Your application documents must include:

- an updated CV

- a cover letter
- a copy (or copies) of the degree certificates with all associated annexes; if any of these documents are not written in French, Dutch, German or English, a translation must also be provided
- any other document proving relevant experience, such as:
 - academic activities carried out with attestations as supporting documents (attestations issued by employers, authorities that provided grants, etc.)
 - a list of any scientific papers published

The closing date for sending your application is 30/09/2026 (inclusive).

Applications that do not follow the indicated procedure will not be considered.

Contact persons

Concerning the position:

For more information about the position, please contact:

Dr Karatekin Özgür, Genesis Mission Science Coordinator, 02/3736732, ozgur.karatekin@oma.be

Concerning the selection procedure:

For more information about the selection procedure, please contact:

Dr Ronald Van der Linden, Director General, 02 373 0211, dir-rob@oma.be

If you want to request a reasonable accommodation for the selection procedure or access to facilities for people who are pregnant or breastfeeding, please also contact this person.