



EMPLOYMENT OFFER

**FRISSBE Senior Researcher**

Slovenian National Building and Civil Engineering Institute

[www.zag.si](http://www.zag.si)

[www.frisambe.eu](http://www.frisambe.eu)

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**Note that the detailed requirements for the application, as well as where to submit it, are found under item 7 on the last page of this document. The deadline for the application is on November 15, 2024.**

## **1 SLOVENIAN NATIONAL BUILDING AND CIVIL ENGINEERING INSTITUTE**

The Slovenian National Building and Civil Engineering Institute, ZAG ([www.zag.si/en](http://www.zag.si/en)), is the leading Slovenian Institute in the field of building and civil engineering research. Through high-quality work, it successfully promotes the progress-orientated Slovenian basic and applied science and technical expertise on a global scale. ZAG's headquarters are located in Ljubljana.

The organization is widely recognized both in Slovenia and in other countries by means of its expertise, top-class equipment and multi-disciplinary work, including life-cycle analyses of different construction materials and other pressing research topics.

ZAG is involved in international co-operation in science and technology with institutions from the EU, the USA and other partnering countries. Over the last 10 years ZAG has participated in more than 85 projects funded by the EU (4<sup>th</sup> - 7<sup>th</sup> FP, H2020, Horizon Europe) and is currently coordinating one H2020 project and several other international projects. ZAG's research and testing sector is divided into six departments:

- Department of Materials,
- Department of Building Physics,
- Department of Structures,
- Department of Fire-safe Sustainable Built Environment,
- Department of Geotechnics and Infrastructure,
- Department for Metrology.

In the field of tasks deriving from the CPR (the Construction Products Regulation) it has two independent services: the Certification Service and the Service for Technical Assessments.

ZAG's main activities include:

- basic and applied research in the field of building materials and structures,
- development of new methods of testing and measurement,
- certification and attestation of conformity of products, materials and executed works,
- training of research and technical staff in particular technical fields,
- participation in the preparation of technical codes and standards.

## **2 POSITION OFFERED: Senior Researcher**

Each of the positions offered is for full-time employment until December 31, 2026. Prolongation is possible. Up to three (3) Senior Researchers will be hired. The best qualified candidates will be selected.

The Senior Researcher will be expected to conduct experimental, theoretical and/or numerical research in any area of fire safety. Particular emphasis will be given to areas that

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could have a positive impact in the evolution of fire safety engineering for Slovenia. These areas could include, but are not limited, to material flammability, performance of building systems, fire protection systems and the holistic assessment of infrastructure fire safety.

Some relevant areas of research are:

- numerical methods in fire (multiscale modelling, combustion process modelling, coupled thermal stress analysis),
- hybrid and advanced experimental methods in fire (numerical/experimental coupling, methods for toxicity and ecotoxicity, façade fire),
- emissions, toxicity and ecotoxicity in fire (linking bench-top methods to real scale fires, identifying composition of combustion effluents, biomass burning),
- fire research and structures (timber, geopolymers and composite structural elements in fire, pyrophoric carbonization of structural elements),
- fire research on materials (biobased composites, advanced thermal insulations, geopolymers).

The fire researchers at ZAG have access to brand new research equipment for fire testing purchased through a combination of EU structural, national and own funds. The new lab was opened in 2022. This equipment consists of furnaces for testing fire resistance of various planar and 3D large samples, a test rig for façade testing, an open calorimeter, room corner test, and a full range of reaction to fire testing equipment, including equipment for chemical analysis of fire effluents. The FRISSBE unit also has access to other state-of-the-art research facilities at ZAG.

The workplace is Logatec, a small town about 35 kilometres southwest of Slovenia's capital, Ljubljana. All of ZAG's activities related to fire safety are in the new laboratory and office building (<https://www.frissbe.eu/research/fire-laboratory>).

### 3 EXPECTATIONS

The Senior Researcher applicants for the position **Scientific Associate** have to **fulfill the following conditions**:

- meet the criteria of a level R3 (Established Researcher) according to the descriptors of the European Framework for Research Careers (<https://euraxess.ec.europa.eu/europe/career-development/training-researchers/research-profiles-descriptors>),
- have more than 5 years of experience relevant to the technical content of the FRISSBE project (fire related research as described above),
- proof of having several published papers in SCI indexed journals that have been cited;
- proof of leading a research project at the partner level;
- have excellent written and spoken English;
- have special social skills: leading small groups, teamwork, ability to motivate co-workers, good communication skills;
- have a driving license for cars with classic gears valid in the EU.

## 4 RIGHTS AND DUTIES

The Senior Researcher will have the following rights and duties:

- management of the research projects;
- applying for research projects on national and international level;
- preparation of scientific papers;
- preparation of research programme for PhD and research projects;
- coordination with other research teams within the organization, the FRISSBE interactive ecosystem, and wider on national and international level;
- contribute towards financial stability during and after the end of this project – sustaining the ERA Chair at ZAG;
- cooperation with national authorities and decision makers;
- IP management together with IP and technology transfer expert;
- co-deciding about infrastructure and research equipment investments on the institutional level.

## 5 REMUNERATION PACKAGE

ZAG is offering an attractive remuneration package to the Senior Researcher. A more detailed overview can be provided once the hiring level and the candidate's work experience are known. There are also other financial benefits that depend on performance and company/national regulations. Health and dental insurance, social charges, and pension contributions as well as taxes are included.

ZAG can provide administrative support concerning housing, spouse's employment, legal/immigration issues, and kindergarten/schooling.

## 6 THE FRISSBE PROJECT

The FRISSBE project is implementing new practices at ZAG, by attracting and maintaining high-quality human resources under the direction of the ERA Chair holder ([www.frissbe.eu/people](http://www.frissbe.eu/people)).

The team has a strong interactive ecosystem with the InnoRenew CoE and the University of Primorska, and other supporters of the project. Added-value of the project amplifies the Fire laboratory's capacities co-financed with ERDF funds, ensuring conditions to foster excellent research. The long-term sustainability of the ERA Chair will be achieved by combining national and EU research and innovation funding with industry-funded research and development.

The main objective of the FRISSBE project is to establish an ERA Chair for fire-safe sustainable built environments at ZAG, where cutting edge research infrastructure for fire testing is being established. Combining the new research infrastructure and the ERA Chair will create the appropriate conditions for high-quality outstanding researchers and research managers to move and engage with the beneficiary, aiming to achieve excellence in the scientific field of fire-safe sustainable built environments and modify their research and innovation landscape. With adequate institutional support and by carrying out outstanding research, the ERA Chair team will have a decisive and positive impact on the culture and performance of the beneficiary, which will result in:

1. wide-ranging advancement in the scientific excellence of the beneficiary in the addressed scientific field and in general,
2. creation of an internationally recognised autonomous unit at the beneficiary,
3. making the beneficiary an attractive institution for foreign researchers,
4. capacity building of the beneficiary in the area of competitive funding, project management, utilisation of infrastructure, and scientific performance,
5. creation of a sustainable, interactive inter-institutional ecosystem, consisting of the FRISSBE ERA Chair and partnering with the InnoRenew CoE and University of Primorska (UP) in Koper, Slovenia that will enable the transfer of new knowledge to students, their early engagement in research activities of the ERA Chair team, and creation of partnerships with students' future employers, and
6. increase the innovation activities of the beneficiary in collaboration with regional and international stakeholders.

## 7 APPLICATION

The job offer for the Senior Researcher position will open on October 16<sup>th</sup> 2024 and close on November 15<sup>th</sup> 2024.

Applications should contain (in the same order):

1. Cover letter;
2. Copy of a document which shows the candidate to hold the required qualification;
3. CV that includes
  - a. evidence of fulfilling the expectations;
  - b. research record,
  - c. experiences in research funding activities,
  - d. list of publications, including h-index and citations;
4. Motivation letter (2 pages maximum) that describes the vision of the applicant on how to co-operate with the ERA Chair holder successfully;
5. A research vision that describes two research topics that the applicant envisions leading the research on (2 pages maximum). The projects should align with the FRISSBE project.
6. Other materials considered relevant by the candidate (e.g. recommendation letters are seen as important).

Applicants have to use reference **(PL95775)** and position name »**Scientific Associate (H019007) - M/Ž**« in the title of their application.

Applications should be in English and sent to the following e-mail address: [kadri@zag.si](mailto:kadri@zag.si)

Additional information is available here: [www.frissbe.eu](http://www.frissbe.eu) and from the FRISSBE team and the ERA Chair Holder Grunde Jomaas by email ([grunde.jomaas@zag.si](mailto:grunde.jomaas@zag.si))

The selection will be done in two rounds; a shortlist will be formed and then there will be interviews (conducted online, planned for December 2024).

ZAG is committed to employment equality, in particular, as set in the national legislation and the European Charter for Researchers, and the Code of Conduct for the Recruitment of Researchers. We welcome applications from all qualified candidates, who fulfil the requirements specified in the announcement.