

Call for applications : CNRS Tenure Track Position 2024

Lead institution/organisation : French National Centre for Scientific Research (CNRS)

Head of the institution/organisation : Antoine PETIT

Relevant sites : [Alliance Sorbonne Université, Rennes](#)

Academic région : [Paris, Rennes](#)

Partner Institutions :

- Université de Rennes
- Université Rennes 2
- Sorbonne Université
- Univ Paris Cité

Project name: [Observing global changes and their consequences: an interdisciplinary and territorialized approach.](#)

Éventuellement acronyme : [OBAIS](#)

Keywords : sustainability, habitability, environment, observatories, society

Corresponding CNU/CoNRS/CSS section(s):: [CNU 19, 23, 24, 35, 36/CoNRS : 29, 30, 36, 39, CID 52](#)

Requirement :

[PhD or equivalent degree, or proof of scientific qualifications and work judged equivalent by the institution's competent body.](#)

[The successful candidate will be an expert in dynamics or biogeochemistry, but may propose an approach combining the two disciplines.](#)

[There are no age or nationality requirements to apply. However, candidates must have at least 6 years' experience in high-level scientific research. All CNRS jobs are accessible to people with disabilities, with special arrangements for tests made necessary by the nature of the disability.](#)

Duration : [5 years](#)

Scientific Theme : [Interdisciplinary observation of global changes](#)

Parmi la liste des thématiques ERC :

- [Earth and universe sciences](#)
- [Environment, agronomy, ecology](#)
- [Human and social sciences](#)

Establishment strategy:

[Global changes include climate change, as well as the intensification of anthropogenic pressures, such as intensive agriculture or urbanization and land artificialization. These changes lead, among other impacts, to an increase in pollution and the scarcity of resources critical to life \(water, soil and biodiversity\). These changes threaten the sustainability of our socio-ecosystems and the habitability of our planet Earth. These impacts are different depending on the territories and ecosystems.](#)

Understanding the processes governing these changes in the habitability of the Earth is a preliminary to the development of transition policies (adaptation, mitigation). They require us to conduct interdisciplinary research on the environmental and societal impacts of these intense and rapid changes. The human, social, political and environmental impacts of these policies will not be similar depending on the social and environmental context of each territory. Thus, responses to these impacts must be made in concert with the stakeholders in a participatory science approach by crossing disciplines, methodologies and approaches. The CNRS, through three of its institutes and relying on its research infrastructures, must be the leader in this interdisciplinary and fundamental research in the service of a sustainable society and a habitable Earth.

Strategy of the host laboratory:

Potential host laboratories were identified by the intensity of their contribution to observing the impacts of global changes, in order to objectify these impacts, understand their processes, and analyze the intersection of social dynamics and the recomposition of spaces, in order to relate the state and quality of environments, territorial dynamics and social changes. Two sites are envisaged: Paris (METIS and LADYSS) and Rennes (ECOBIO, ESO and Géosciences Rennes). The laboratories identified on these two sites have already proven their capacity to carry out territorial and interdisciplinary research. This post aims to support one or the other of these two sites on this theme.

RNSR of the host laboratory:

200012191F	-	Géosciences Rennes
199712664H	METIS	Milieux Environnementaux, Transferts et Interactions dans les hydrosystèmes et les Sols
199612367P	ESO	Espaces et sociétés
199612339J	ECOBIO	Ecosystèmes, biodiversité, évolution
199712591D	LADYSS	Laboratoire dynamiques sociales et recomposition des espaces

Strategy in terms of international attractiveness:

The Chairholder will be required to implement actions and partnerships in the thematic field, and in particular to submit a project in response to European calls for proposals (ERC, Horizon Europe Consortium, etc.) during the 5 years of his/her contract.

Summary of the scientific project:

Global changes (climate change, loss of biodiversity, pollution, loss of arable soil, water crisis in both quality and quantity) and growing inequalities are the main drivers of a global crisis that affects ecosystems and habitability of the planet. The relationship between humans and the planet is going through the deepest crisis ever documented. This crisis threatens the quality of our living environment and our societies. Observatories currently exist set up by different CNRS institutes (SOSI for CNRS-Human & Social Sciences, SNO for CNRS-Terre & Univers, ZA and OHM for CNRS-Ecology & environment,) which aim to understand the interactions at within human societies in interaction with their physical environment and the entire living world. To cope with the scale and speed of changes, observe and understand the modifications and responses of environments and socio-ecosystems, observe transition policies (adaptation and/or mitigation), as well as the human consequences, social, political, environmental, it is necessary to cross disciplines, methodologies and approaches. This strategy will shed light on making it possible to prioritize the physical, biogeochemical and social mechanisms at work and then be a source of suggestions for decision-makers. The proposed project must address a question linked to the habitability and/or sustainability of a well-identified socio-ecosystem, on a given territory (urban, rural, or rural) attached to an existing observatory with a bank of data as complete as possible in terms of variables explored and temporal depth. The issues raised must be human, social and political, as well as environmental (biodiversity and bio-geo-physical cycles). The project must involve stakeholders in the broad sense in a participatory science approach, for example, or propose other innovative methods of co-constructing the investigation methodology and

sharing of knowledge. This methodology may include, in addition to observation, modeling and experimentation approaches (in situ, in silico or in the laboratory). Its aim will be to define how such monitoring can be built and implemented, their limitations, and present a range of efficient solutions for deploying this strategy. It will draw on existing research infrastructures, and research programs (co-)led by the CNRS on the challenges of environmental transition. Interdisciplinarity, risk-taking, breakthrough and exploratory character are the key criteria considered in project selection.

Summary of the teaching/observation project:

Teaching will be discussed according to the site where the successful candidate is assigned. He/she will be involved in existing courses at each site.

Financial overview : *to be carried out on the basis of the attached financial form, describe the financial needs and their distribution to carry out the scientific project (doctoral student, post-doctoral student, IT, equipment, etc.)*

Total financé sur CPJ (dont package ANR)	200 000€
Co-financement	€
Total du projet	€

Scientific diffusion:

Results will be disseminated through world-class scientific productions (publications, software, patents, etc.). In addition, the project will communicate with a wide range of target audiences, including the scientific community, the media, decision-makers, the general public and schoolchildren. Specific tools will be developed, such as websites, newsletters, meetings, international symposia, summer schools and conferences.

Open Science :

CNRS is developing a strong policy in favor of open science. Open science means making research results "as accessible as possible and as closed as necessary". To this end, the CNRS aims to make 100% of the texts of publications resulting from the work of its units accessible, in particular through the HAL repository. The data produced must also be made available and reusable, unless there are specific restrictions. In addition, the guidelines for individual evaluation have been revised in line with the DORA declaration, to be more qualitative and consider all facets of the researcher's activity.

Science and Society :

The relationship between science and society is now fully recognised as a dimension of scientific activity. The project will develop this dimension in synergy with all the partners. The resulting research work will help to inform public decision-making. Participatory science initiatives may be launched with stakeholders from the project's socio-economic and cultural ecosystem.

Indicators :

Activity will be assessed on the basis of scientific output (publications, software, etc.), institutional and private partnerships formalised by contracts, international influence, the promotion of work to multidisciplinary scientific communities, innovation and its transfer to society, and scientific dissemination to non-specialist audiences.