



NTNU

Kunnskap for en bedre verden

Jobbnorge ID: 183154
Deadline: 3/9/2020
Website: <http://www.ntnu.no>
Scope: Fulltime
Duration: Project

The NTNU Challenge: Call for Postdoc/Experienced Researcher candidate interested in applying for a Marie Skłodowska-Curie Actions Individual Fellowship (MSCA-IF) in seismic signatures of fractured media - IV/09

Call for postdoc/experienced researcher - Seismic signatures of fractured media IV/09

This is NTNU

At NTNU, creating knowledge for a better world is the vision that unites our 7 000 employees and 40 000 students.

We are looking for dedicated employees to join us.

Video: <https://www.youtube.com/watch?v=clgKd1SwGLI>

About Marie Skłodowska-Curie Action Individual Fellowships (MSC-IF)

The Marie Skłodowska-Curie Actions (MSCA) aim to support the career development and training of researchers in all scientific disciplines through international and inter-sectoral mobility. By funding excellent research and providing attractive working conditions, the MSCA offer high quality professional opportunities open to researchers of any age, nationality or discipline.

The goal of the Individual Fellowships is to enhance the creative and innovative potential of experienced researchers wishing to diversify their individual competence in terms of skill acquisition through advanced training, international and inter-sectoral mobility. Individual Fellowships provide opportunities to acquire and transfer new knowledge and to work on research and innovation in Europe (EU Member States and Associated Countries) and beyond.

About the call

The NTNU Challenge invites experienced researchers across eight disciplines of all nationality and age to work in tandem with a supervisor in order to submit successful applications to MSCA-IF. If chosen, you will be invited to participate together with a supervisor on a two-day symposium (and an additional working day with your supervisor) on MSCA-IF at NTNU Trondheim from 13-15th of May 2020. Together, you will write and prepare an application towards the MSCA-IF Call with deadline 9 September 2020. Travel and accommodation costs related to the events 13-15th of May will be covered by NTNU.

For additional information regarding the NTNU Challenge, see <https://www.ntnu.edu/horizon/msca>

Project proposal

Seismic signatures of fractured media

The Norwegian University of Science and Technology (NTNU) in Trondheim represents academic eminence in technology and the natural sciences as well as in other academic disciplines ranging from the social sciences, the arts, medicine, teacher education, architecture to fine art. Cross-disciplinary cooperation results in innovative breakthroughs and creative solutions with far-reaching social and economic impact.

We are looking for a postdoc/experienced researcher candidate interested in applying for an MSCA Individual Fellowship at the Department of GeoScience and Petroleum. The NTNU is interested to work on the project 'seismic signatures of fractured media'. The research is focused on fractures of rocks that provide permeability for fluid movement such as water and hydrocarbons. The aim of the project is to define seismic-based parameterization for monoclinic medium with a horizontal symmetry plane and to develop a method of inverting monoclinic parameters into fracture orientation and fracture weaknesses. This involves challenging tasks within fundamental and applied questions in seismic anisotropy.

The position reports to professor Alexey Stovas.

Main duties and responsibilities

- To develop the model for fractured rock based on anisotropic model of monoclinic symmetry with a horizontal symmetry plane

- To derive the seismic signatures of monoclinic model and establish the inversion method to estimate the fracture properties
- Assistance in teaching of seismic related course

Qualification requirements

Eligibility criteria

- The researcher must, at the date of the MSCA-IF call deadline, possess a PhD Degree and/or an equivalent on minimum four years' full-time research experience.
- The researcher must, at the date of the MSCA-IF call deadline not have conducted his/her main activity in the country of the beneficiary (Norway) for more than 12 of the last 36 months.
- Excellent oral and written communication skills in English language.

Other requirements

The position requires expertise in applied mathematics, wave propagation and programming. The candidate's ability to work in a team is important.

In the evaluation of which candidate is best qualified, selection will be conducted by the supervisor. Emphasis will be placed upon the academic accordance with the supervisor and the project proposal.

Personal characteristics

The applicant is supposed to work in an efficient international team, and the applicant's abilities to suite the teamwork are greatly appreciated.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability, as well as motivation, in terms of the qualification requirements specified in the advertisement

We offer

- A designated supervisor with whom to prepare an application for the MSCA-IF call
- A two-day symposium with showcasing of expertise and best practices on how to apply to MSCA-IF
- A follow-up day with the supervisor and possible individual guidance by experts on MSCA-IF
- Administrative support up to the call deadline
- Travel and accommodation from the 13-15th of May 2020 will be covered by NTNU

Conditions

Appointment as post doc up to a maximum of 24 months at NTNU rests on the prerequisite of an approved application to the MSCA-IF call with deadline 9 September 2020. Feedback on said applications is expected early 2021.

General information

[Working at NTNU](#)

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background. Under the Freedom of Information Act (Offentleglova), information about the applicant may be made public even if the applicant has requested not to have their name entered on the list of applicants.

Questions about the call can be directed to: msca@horizon.ntnu.no or andreas.mollerlokken@ntnu.no

Questions about the position can be directed to Alexey Stovas, e-mail: alexey.stovas@ntnu.no

About the application:

Please submit your application electronically via jobbnorge.no with your CV, cover letter, diplomas and certificates that highlight the alignment of your application. In addition, the applicant must describe a research project that will strengthen and complement the presented research (max 2 pages). Please refer to the application number IV/09 when applying.

Publications and other academic works that the applicant would like to be considered in the evaluation must accompany the application. Joint works will be considered. If it is difficult to identify the individual applicant's contribution to joint works, the applicant must include a brief description of his or her contribution.

Application deadline: 09.03.2020

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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

Department of Geoscience and Petroleum

We conduct teaching and research related to management of Earth's geological resources. Norway's rich resources of wind, water, oil, gas and minerals have been and are essential to the country's prosperity, and will continue to be in the future. The Department plays a key role in the development of technology and the education of graduates who enable value creation based on our natural resources. [The Department of Geoscience and Petroleum](#) is one of eight departments in the [Faculty of Engineering](#).

Additional information

Place of service:

NTNU Trondheim 7419 Trondheim (Trondheim Municipality)