Post-Doctoral position in geophysics for research project employing Self Potential and Electrical methods

Application Deadline:
17 December 2020

Institute/Faculty:
Department of Geoscience

Faculty:
Faculty of Natural Sciences

Academic contact person:
Anders Vest Christiansen
Professor
anders.vest@geo.au.dk
+4529454305

Vacant positions:
1

Number of months:
24

Hours per week:
37

Expected date of accession:
15/04/2021

The HydroGeophysics Group (HGG) at Department of Geoscience at Aarhus University advertises a postdoc position within electrical and self-potential geophysical methods. The position is anchored in an on-going research project, BIOMAP (microbiologically assisted Mapping of soil Pollution), where the self-potential methods are used to detect electrical responses from bacteria associated with contamination in the subsurface.

The starting date will be as soon as possible and the position has a duration of 2 years.

The applicant will be part of a group of scientists, engineers, software developers, postdocs, and PhD students from all over the world. The HGG group focus is on research broadly within geophysical methods, building instruments and software, and applying the methods in projects with focus on mapping and monitoring of groundwater, (hydro)-geology, raw materials, and contaminations.

We are aware of the gender balance at the department of Geoscience, and we encourage female researchers in particular to apply for the position.

Job assignments

The successful applicant will be required to contribute to on-going research projects. The applicant will be expected to lead data acquisition, processing, and inversion of self-potential and ERT data collected within HGG projects, mainly focusing on the BIOMAP project.

The applicant will be contributing to the further development and testing of processing and inversion software used for ERT and self-potential data. This also includes handling the entire workflow from data acquisition to final inversion model.

Furthermore, together with other scientists in the group, the applicant will be required to write scientific papers to be submitted to international peer reviewed journals. The applicant will co-supervise PhDs, master students, and bachelor students and will also be expected to contribute to undergraduate/graduate courses taught by members of the HGG.

Qualifications

Education:

PhD degree in Geophysics /HydroGeophysics from a renowned institution/university.

Experience:

1. In-depth experience and proven expertise in surface-based geophysical field data acquisition, processing, imaging, and inversion within the fields of near surface geophysical methods.
2. Expertise in using industry standard inversion codes like AarhusInv, Res2DInv.
3. Experience in programming and modeling of geophysical data in Fortran and/or Matlab.
4. The applicant is expected to have written several scientific papers and have significant experience presenting scientific results at conferences and meetings.
5. Previous experience in supervising/teaching bachelor and master students is a benefit.

Contacts

Applicants seeking further information are invited to contact, Associate Professor Anders Vest Christiansen, mail: anders.vest@geo.au.dk.
For more information about the HydroGeophysics Group, see www.hgg.au.dk.
For more information about Department of Geoscience, see www.geo.au.dk.

Place of work

The place of work is C.F. Møllers Alle 4, 8000 Aarhus C, Department of Geoscience, Aarhus University. Aarhus University offers a broad variety of services for international researchers and accompanying families, including relocation service and career counselling for expat partners. Read more here and find more information about entering and working in Denmark here.

The beautiful Aarhus University campus is located close to downtown Aarhus, the second largest city in Denmark with 400 000 inhabitants. It has a lively and charming

downtown close to Aarhus Bay. In Denmark, schools, higher education, and health care are free.

Application deadline

All applications must be made online and received by December 17, 2020. The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.

Application procedure

Shortlisting is used. This means that after the deadline for applications – and with the assistance from the assessment committee chairman, and the appointment committee if necessary, – the head of department selects the candidates to be evaluated. All applicants will be notified whether or not their applications have been sent to an expert assessment committee for evaluation. The selected applicants will be informed about the composition of the committee, and each applicant is given the opportunity to comment on the part of the assessment that concerns him/her self. Once the recruitment process is completed a final letter of rejection is sent to the deselected applicants.

Letter of reference

If you want a referee to upload a letter of reference on your behalf, please state the referee's contact information when you submit your application. We strongly recommend that you make an agreement with the person in question before you enter the referee's contact information, and that you ensure that the referee has enough time to write the letter of reference before the application deadline. Unfortunately, it is not possible to ensure that letters of reference received after the application deadline will be taken into consideration.

Formalities and salary range

Natural Sciences refers to the Ministerial Order on the Appointment of Academic Staff at Danish Universities under the Danish Ministry of Science, Technology and Innovation.

The application must be in English and include a curriculum vitae, degree certificate, a complete list of publications, a statement of future research plans and information about research activities, teaching portfolio and verified information on previous teaching experience (if any). Guidelines for applicants can be found here.

Appointment shall be in accordance with the collective labour agreement between the Danish Ministry of Finance and the Danish Confederation of Professional Associations. Further information on qualification requirements and job content may be found in the Memorandum on Job Structure for Academic Staff at Danish Universities.

Salary depends on seniority as agreed between the Danish Ministry of Finance and the Confederation of Professional Associations.

All interested candidates are encouraged to apply, regardless of their personal background. No one will be given priority, and all applicants will be assessed in accordance with the requirement profile for the position.

Research activities will be evaluated in relation to actual research time. Thus, we encourage applicants to specify periods of leave without research activities, in order to be able to subtract these periods from the span of the scientific career during the evaluation of scientific productivity.

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Aarhus University also offers a Junior Researcher Development Programme targeted at career development for postdocs at AU. You can read more about it here.

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Aarhus University

Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 38,000 students (FTEs) and 8,000 employees, and has an annual revenues of EUR 885 million. Learn more at www.international.au.dk/