

Jobbnorge-ID: 137670

Søknadsfrist: Avsluttet

Nettside:

Omfang:

Varighet:

Doctoral Research Fellow (PhD) in Ecology: “Impact of lichens on local climatic conditions”

The Faculty of Technology, Natural Sciences and Maritime Sciences has a vacancy for a position as Doctoral Research Fellow (PhD) in Ecology with major focus on “Impact of lichens on local climatic conditions”, from 01.10.2017.

The position is attached to the Department of Natural Sciences and Environmental Health and reports to the Head of Department. The place of employment is Bø i Telemark.

Qualifications

Applicants to the PhD position must have a Master's degree or equivalent higher education qualifications in plant ecology, physical geography or a related discipline. Knowledge of microclimatology and soil physics would be an advantage. To qualify, the candidate must have a B or better on her/his MSc thesis. The applicant must have gained the degree within the application deadline.

It is a requirement that the successful applicant is granted admission to the university's doctoral programme in Ecology.

The candidate should master both spoken and written English, and should be familiar and experienced with the use of statistical analyses in ecology. The candidate should also be in good physical condition, because much of the field work requires substantial walking with altitude differences up to 1000m. Candidates with relevant field experience will be preferred. A driving license is required. The ability to work both independently and within a team of scientists and students will be emphasized.

Information about the position

Lichens form an important component of alpine vegetation. Research has shown that in many areas in the circum-arctic lichen abundance has recently decreased, while shrub-dominated vegetation has increased. Various studies have linked this shift to global climate change. However, vegetation is not only responding to climate, it can also directly modify climatic conditions at a local scale. Recent measurements on mountain summits in Norway have revealed that thermal and moisture conditions in the soil vary substantially under different vegetation types. In particular, high lichen abundance has been shown to be associated with much lower soil temperatures compared to other vegetation types such as shrubs or bare soil. It has been proposed that these temperature conditions are related to the relatively high surface albedo of lichens, implying that a high fraction of incoming solar radiation is being reflected due to the lighter color of the lichens. In other words, this suggests that lichens keep their immediate environment cool and humid. Potentially, this could imply that the decline of lichens could impose a positive feedback on the local effect of global warming, meaning a relatively large temperature increase at sites where lichens are replaced by shrubs. It is thus important to make a detailed quantitative analysis of this proposed relationship between lichen-albedo and local climatic conditions.

The PhD Fellow will be part of a research project to examine the impact of lichens on local climatic conditions, with particular focus on albedo and soil temperature. This project will be carried out at selected mountain summits in Norway. Direct measurements of the radiation budget of different vegetation types will be carried out, together with measurements of local climatic conditions such as temperature and humidity in the air, at the surface and at different depths in the soil. The candidate will work in collaboration with several researchers, master and bachelor students. The candidate is expected to assist with supervision of master and bachelor students. Opportunities and funding for research visits to other institutions within and outside Norway are available.

Appointment is for a period of three years. The position does not include teaching duties.

For further information concerning the position please contact Professor Hans Renssen, Project Coordinator (Phone+4735952952, email: hans.rensen@usn.no), or Live Semb Vestgarden, Head of Department (Phone +4735952797, email: Live.S.Vestgarden@usn.no) at the Faculty of Technology, Natural Sciences and Maritime Sciences, Department of Natural Sciences and Environmental Health.

We offer

- A professionally stimulating working environment.
- Good opportunities to develop your career and your academic skills
- A good social environment
- Attractive welfare benefits in the State Pension Plan
- Opportunity for physical activities within working hours

Salary

The position is placed in the state salary scale 50 (code 1017, LR 20.8). Further promotion will be based on service in the position. In special cases, employment in code 1378 may be considered. Code 1378 is placed in the state salary scale at levels 50-68. A statutory contribution will be made from the employee's salary to the state pension plan.

Additional information

The Academic Appointments Board is responsible for appointments to academic positions at University College of Southeast Norway. An expert assessment of applicants will be carried out.

The successful applicant must comply with the laws, regulations and agreements that apply to the position.

It is an aim of personnel policy that the academic staff of University College of Southeast Norway should reflect the composition of the general population. It is therefore a personnel policy objective to achieve a balanced age and gender composition on the faculty and to recruit people from ethnic minority backgrounds. People from ethnic minority backgrounds are encouraged to apply for the position.

According to the Norwegian Freedom of Information act § 25 2 paragraph, information about the applicant may be included in the public applicant list, even though the applicant has requested non-disclosure. The applicant will be informed if his/her request has been declined.

How to apply

University College of Southeast Norway uses online applications. We therefore ask applicants to register their application and CV online by clicking on the "Send application" link to the right. The application must include the following documents:

1. Certified diplomas and certificates from university college/university
2. A copy of the Master's thesis
3. Any scientific publications and a list of these
4. The contact details of three references

Please note that all documents must be translated into English or a Scandinavian language by an authorized translator.

Tilleggsinformasjon

Arbeidssted: