

Jobbnorge ID: 266903 Deadline: 9/30/2024 Website: https://www.inn.no/

Scope: Fulltime

Duration: Engagement

Are you our new colleague?

# Ph.D candidate in Animal Nutrition

## About the position

The Faculty of Applied ecology, agricultural sciences and biotechnology at Inland Norway University of Applied Sciences (INN) invites applications for a PhD research fellowship in the field of Animal nutrition.

The duration of the PhD Research Fellow is 4 years, of which 25 per cent of the time each year comprises required duties associated with teaching duties. The final plan of the doctoral education must be approved and agreed upon no later than three months after starting in the position.

The PhD programme in applied ecology and biotechnology (AEB) is transdisciplinary and contributes to increased knowledge about the sustainable production, use and management of biological resources.

https://www.inn.no/english/research/doctoral-degree/applied-ecology-and-biotechnology/

The position will start in 2024. The candidate will be enrolled in INN's PhD program in Applied Ecology and Biotechnology, with workplace at Campus Blæstad.

### About the project

The PhD project is part of a project funded by the Swedish farmers' foundation for agricultural research with short name "MilkClover" and full name "Improving red clover as a protein source for ruminants by optimizing polyphenol oxidase (PPO) protein complexing and supply of amino acids". The project involves both agricultural industry and researchers in Sweden. The overall objective of the project is to unravel how utilization of protein in red clover can be improved; are some varieties more optimal than others, can certain amino acids improve utilization of protein, and will activity of the enzyme polyphenol oxidase and phenolic substrates present in the plant influence utilization.

The new European agricultural policy sets targets and objectives concerning the sustainability and safety of feed, food and non-food production. A particular weakness of the European livestock sector is the heavy dependence on imported proteins for animal feed, requiring the development of sustainable feed solutions. In addition to increasing the supply of sustainable protein feeds, there is also a need to match protein requirements with actual need, increasing efficiency by balanced amino acid supply to the small intestine. Red clover is a sustainable alternative with its N fixation ability (require less N fertilization) and could be further developed to reduce requirements of supplementary protein for dairy cows. The research in this project will include various modern analyses related to ruminant protein feed evaluation in the laboratory of red clover varieties as well as the utilization of red clover in feeding trial with dairy cows by adopting 15N isotope labelling and tracing technique.

The candidate's main supervisor will be Professor Sophie Krizsan at INN. A multidisciplinary supervisory team will contribute to different parts of the project. Co-supervisors will be PhD Merko Vaga at Department of Animal Nutrition and Management, Swedish University of Agricultural Sciences, Professor Michael Lee at Office of the Deputy Vice-Chancellor, Harper Adams University, Professor Aila Vanhatalo, Department of Agricultural Sciences, University of Helsinki and PhD Seppo Ahvenjärvi at Natural Resources Institute Finland (LUKE).

### Qualifications

It is a requirement that the PhD research fellow qualifies for admission to the University's PhD programme in Applied ecolocy. Applicants who already hold a PhD will not be considered.

To be admitted to the doctoral program, the applicant must normally have a minimum master's degree or master's level (120 credits, §3 master's in the Norwegian system) or equivalent education, within animal science, or other relevant subject areas.

Furthermore, you must have a strong academic background from your previous studies, ie. the average grade should normally be B or better from the master's program (120 credits) or equivalent education. Calculation of the average grade is based on the credits for each course and for the master's thesis. Applicants with weaker grades than what is normally required for admission must document that they will be able to complete a doctoral degree. In cases where the education has been approved with the use of the grades passed / failed, the applicant is admitted after an individual assessment. If you have education from abroad, you can contact <a href="NOKUT">NOKUT</a> for approval of your education, alternatively a similar assessment will be made in connection with the application process.

It will be essential for the candidate to participate in fieldwork associated with the planned feeding trial and spend approximately 3-6 months abroad during the study period. We expect the candidate to be able to work within the team of university personnel from multiple institutions and with multiple supervisors internationally, as well as take part in the professional and social life at Campus Blæstad. There will also potentially be a need for the candidate to interact with stakeholders connected to the project.

#### Furthermore, emphasis is placed on the following attributes:

- · Good quantitative skills.
- Documented experience with related laboratory and field work.
- Experience related to protein feed evaluation and metabolism in ruminant nutrition.
- Experience with the software of Microsoft Office and statistical software R (or equivalent).
- A driving license.

#### Language proficiency:

Applicants must be proficient in both written and oral English. Applicants from non-English-speaking countries must document English
competence through an approved test (TOEFL, IELTS, Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of
Proficiency in English (CPE).

Evaluation of candidates for the position will be based on a total assessment of educational background, experience and personal suitability, as well as motivation and other eligibility requirements, as defined in the advertisement. In addition, the following will be emphasized: quality of the project description, documented independent research and development work or experience relevant to the project.

The position and associated tasks must be carried out in accordance with the applicable laws and regulations for government employees, including also the Act on Control of the Export of Strategic Goods, Services and Technology, etc. Candidates who, after assessment of the application and attachments, come into conflict with the criteria in the latter act, will not be able to take up the position at Inland Norway University of Applied Sciences. Necessary approvals must be maintained throughout the employment relationship.

## How to apply

Your application must include:

- · Application letter including a brief account of the applicant's research interests and motivation for applying for the position
- Proposed project description of the study (max 8 pages, including references), outlining its academic relevance, methods, challenges
  and possibilities, and containing a tentative progression plan. The project description must be written in English.
- CV detailing your relevant educational background and experience (registered in Jobbnorge's form).
- Copies of academic diplomas and transcripts (A certified English translation of all educational documents is required unless the
  documents are in Norwegian or other scandinavian language.)
- A list of publications.
- The names and contact information for two referees.
- Any other documentation you would like us to consider.

Attachments must be uploaded as separate files. If the attachments exceed 30 MB, they must be compressed prior to upload. It is the applicant's responsibility to ensure that all attachments are uploaded. Documents submitted after expiry of the deadline will not be considered in the evaluation of your application.

### We offer

- A place in an ambitious and highly international environment.
- · A challenging and exciting project with opportunities for personal and scientific development.
- · An independent and flexible work setting that the successful candidate may to a large extent influence her/himself.
- · Daily contact with inspiring skilled colleagues.
- · A campus setting surrounded by farmland, forests and hills with good opportunities for outdoor recreation all year.
- · An exciting and challenging position at a developing institution
- Position is paid and placed in position code 1017, PhD candidate in the Government Salary Scale
- Membership in the Norwegian Public Service Pension, with among other things, good pension and insurance schemes.

For more information about INN University as an employer, please see here.

Video: https://www.youtube.com/watch?v=sDLiO7TsyCQ

# **General information**

For further information, please contact: Head of Department at the Department of Agricultural Sciences at INN Micael Wendell micael.wendell@inn.no, and Professor Sophie Krizsan sophie.krizsan@inn.no.

HINN believes that there is strength in inclusion and diversity. We desire employees with different competencies, professional combinations, life experiences and perspectives to contribute to an even better way of solving problems. We will facilitate for employees who need assitance to realise their goals. Relevant adaptations can be, for example, technical aids, adapting furniture or adjusting routines, work tasks and working hours.

If there are qualified applicants with disabilities, gaps in the CV or immigrant background, we shall call at least one applicant in each of these categories for an interview. In order to be considered as an applicant in these groups, the applicants must meet certain requirements. You can read more on this here: <a href="https://arbeidsgiver.difi.no/positivsaerbehandling">https://arbeidsgiver.difi.no/positivsaerbehandling</a>.

We encourage applicants to tick in Jobbnorge if they have a disability, a gap in their CV or immigrant background. The ticks in the jobseeker portal form the basis for anonymised statistics that all state-owned enterprises report in their annual reports

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

# **About Inland Norway University of Applied Sciences**

Inland Norway University of Applied Sciences (INN University) is home to over 16,000 students and 1,500 employees, and has campuses in Lillehammer, Hamar, Elverum, Rena, Evenstad and Blæstad.

INN University aspires to build strong and enduring academic and research environments that will spearhead regionally, nationally and internationally. We are developing a new and better institution with high academic and pedagogical quality, aiming at achieving university accreditation by 2025.

Our vision is "Stronger Together".

At the department, we have research and development projects on soil, fertilisation, grazing, animal husbandry, plant cultivation and mechanisation. We are organised in one research group at the department with a wide professional expertise and with good knowledge of Norwegian agricultural conditions. We work cross-functionally and are also involved in other research groups at the faculty. We see new technology and circular solutions as part of the future. Our institute is located at campus Blæstad.

## Additional information

### **Contact persons:**

• Micael Wendell, Instituttleder

Phone: | E-mail: micael.wendell@inn.no

Sophie Krizan, Professor

Phone: | E-mail: sophie.krizsan@inn.no

#### Place of service:

Høyvangveien 40 2322 Ridabu (Hamar Municipality)