



# PhD scholarship / Postdoctoral position in analysis of airborne hyperspectral images of cities

## About the position

The Faculty of Science and Technology ([REALTEK](#)) at the Norwegian University of Life Sciences ([NMBU](#)) has a vacant 3-year PhD or 2-year Postdoctoral position related to the use of airborne hyperspectral imaging of urban areas.

The aim of the project is to develop mapping products of urban areas automatically extracted by machine learning from aerial survey containing detailed geometric information from laser data and spectral information from hyperspectral images.

The candidate will be involved in several parts of the project and, in particular, developing a spectral library for urban materials and vegetation for input to advanced machine learning algorithms.

The project is a true teamwork with partners from the municipality (Bærum kommune), industry (Terratec) and research institutions (Norsk Regnesentral, NIBIO).

## Qualifications and skills

The successful applicant must either meet the conditions defined for admission to a PhD programme at NMBU, or have a PhD in a relevant field. The PhD programme applicant must have an academically relevant education corresponding to a five-year Norwegian degree programme, where 120 credits are at master's degree level. The applicant must have a documented strong academic background from previous studies, and be able to document proficiency in both written and oral English. For more detailed information on the admission criteria for PhD please see the [PhD Regulations](#) and the relevant [PhD programme](#) description.

The applicant must document expertise and interest in the research subject.

### Required academic qualifications

- MSc degree for PhD scholarship or PhD for Postdoctoral position in physics, data science, geomatics, material science
- Experience with image analysis and hyperspectral imaging
- Knowledge of machine learning and deep learning algorithms
- Good scientific writing skills
- Good knowledge of English language - both written and oral

### Desired academic qualifications

- Experience in analyzing large multi-dimensional data sets
- Experience from analysis of Remote Sensing data
- Advanced computer programming skills

### Required personal skills

- Excellent interpersonal and communication skills
- The ability to focus and work independently as well as being a reliable team member

### Desired personal skills

- Flexible, social, and open-minded
- Positive attitude towards challenges

## Remuneration and information

The position is placed in government pay scale position.

- For PhD: code 1017 PhD. Fellow, wage framework 20, salary grade 54-62. PhD. Fellows are normally placed in pay grade 54 (NOK 479 600) on the Norwegian Government salary scale upon employment and follow ordinary meriting regulations.
- For Postdoctoral Fellow: code 1352 Postdoctoral Fellow, wage framework 24, salary grade 59-67 (NOK 523 200 - 605 500), depending on qualifications. Seniority Promotion in position

Employment is conducted according to national guidelines for University and Technical College PhD scholars.

For further information, please contact Associate Professor Ingunn Burud by email: [ingunn.burud@nmbu.no](mailto:ingunn.burud@nmbu.no) or by phone: +47 402 19 286; or Professor Thomas Thisis by email: [thomas.thisis@nmbu.no](mailto:thomas.thisis@nmbu.no)

## Application

To apply online for this vacancy, please click on the 'Apply for this job' button above. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

**Application deadline: September 1st 2019**

Applications should include (electronically) a letter of intent, curriculum vitae, full publication list, copies of degree certificates and transcripts of academic records (all certified), and a list of two persons who may act as references (with phone numbers and e-mail addresses). Publications should be included electronically within the application deadline.

For the **postdoctoral position**: up to ten publications selected by the applicant as most relevant must be attached to the application.

If it is difficult to judge the applicant's contribution for publications with multiple authors, a short description of the applicant's contribution must be included.

The relevant NMBU department may require further documentation, e.g. proof of English proficiency.

Printed material which cannot be sent electronically should be sent by surface mail to Norwegian University of Life Sciences, Faculty of Science and Technology, P.O. Box 5003, NO-1432 Ås, within **September 1st 2019**. Please quote reference number **19/02961**.

## The Norwegian University of Life Sciences

NMBU has a special responsibility for research and education that ensures the basis of life for future generations.

Sustainability is rooted in everything we do and we provide knowledge for life.

NMBU has 1700 employees and 5200 students and is organized in seven faculties. NMBU has a campus in Ås and in Oslo. In the autumn of 2020 we are co-located on Ås.

Further information on NMBU is available at [www.nmbu.no](http://www.nmbu.no)

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