

Jobbnorge ID: 215634
Deadline: 1/7/2022
Website: <http://www.ntnu.no>
Scope: Fulltime
Duration: Temporary

The Department of Civil and Environmental Engineering has a vacancy for a PhD Candidate

PhD - Sustainable Built Environment - co-creating solutions for smart and sustainable transformation

This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 42,000 students work to create knowledge for a better world.

You will find more information about working at NTNU and the application process [here](#).

Video: <https://youtu.be/Xt-yHCN5QS0>

Research Collaboration in Sustainability/Tverrfaglige bærekraftsprosjekter

Research Collaboration in Sustainability

In 2015, the 2030 agenda with the 17 sustainability goals was adopted by all UN member states. The sustainability goals see the environment, economy and social development in context. The time horizon for necessary changes is short, and it is challenging to combine different considerations without conflicts of objectives and unintended consequences of measures.

NTNU is now announcing 43 individual PhD positions that will contribute to a greater understanding of system effects, societal changes and conflicts of interest related to the sustainability challenges. These positions are divided into 9 interdisciplinary projects with mainly 4-7 PhD positions in each project (www.ntnu.no/sustainability/calls).

In this position, the candidate is expected to cooperate with the other PhD students in the project Swell (www.ntnu.no/sustainability/calls/built-environments-by-swell).

About the position

At the Department of Civil and Environmental Engineering, ntnu.no/ibm, there is a PhD fellowship available. The appointment has a duration of 3 years, or 4 years (including 1 year teaching duties). The candidate will be a member of the research project SWELL, and the theme is Urban Facility Management oriented. The research project is designed in collaboration with Trondheim municipality and other faculties in NTNU.

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.

The project proposal addresses the principles of the built environment that enable maximizing the economic, social and environmental opportunities of inhabitants, thereby laying the foundations for a prosperity and health. The objective is to better understand the relation between urban elements and design to individual / community scale and how these affect health and well-being. Research will pay particular attention to citizen participation, stakeholder engagement and integrated planning/designing approaches, with a focus on sustainable transformation of the BE. Nature Based Solutions as multipurpose infrastructure will also be investigated as elements that serve important urban functions. The implementation and transformation challenges from a neighborhood management context and investigate how Smart Urban Hubs and Urban Living Lab could play a transformative role from a social engagement and transformation perspectives.

.The main objective is to create an urban value ecosystem, which has people and environment as the main driving forces, to empower citizens to develop and support the development of user-friendly environments and having urban facility manager as the one of the enabler and implementer. The main research question is How can we empower citizens to co-create and co-design various solutions for the smart and sustainable transformation of spaces at different urban environment scales to increase HWB parameters. In order to meet this, we focus on innovative processes, services and products to empower citizens to actively participating in co-management of sustainable transformation. Innovation processes should be examined within: i/ urban economics to regenerate the environment (PPPP), ii/ socio-economic aspects with value orientation, iv/ individual/social aspect to inspire people to change their behavior toward sustainable lifestyle, iv/ community engagement with digital and analogue techniques, v) develop user-centred inclusive design in environments and communities, vi) support the creation and implementation of smart, healthy environments for present and future generations in collaboration with the other SWELL PhDs.

The position reports to Professor Alenka Temeljotov-Salaj.

Duties of the position

- Quantitative and Qualitative research
- Reporting and Scientific publishing
- Contribute to study design, collection of data and interdisciplinary collaboration
- Produce a high quality PhD thesis, comprising manuscripts written for publication
- Produce presentations for further research dissemination
- Contribute to building a collaborative and interactive local and international research team

Required selection criteria

- You must have a professionally relevant background in scientific researching or equivalent education
- Your education must correspond to a five-year Norwegian degree programme, where 120 credits are obtained at master's level
- You must have a strong academic background from your previous studies and an average grade from the master's degree program, or equivalent education, which is equal to B or better compared with NTNU's grading scale. If you do not have letter grades from previous studies, you must have an equally good academic basis. If you have a weaker grade background, you may be assessed if you can document that you are particularly suitable for a PhD education.
- You must meet the requirements for admission to the faculty's doctoral program (www.ntnu.edu/iv/doctoral-programme)
- Good knowledge of Urban Facility Management field
- Good knowledge of sustainable principles
- Good knowledge of technologies for health and wellbeing in smart environments
- Good knowledge in users and citizen engagement in development of health and wellbeing in connection with smart and sustainable transformation
- Good oral and written presentation ability in both, English and one of the Scandinavian languages (future learn of the Norwegian language will be supported if the candidate has a beginner level)

The appointment is to be made in accordance with the regulations in force concerning [State Employees and Civil Servants](#) and [Regulations concerning the degrees of Philosophiae Doctor \(PhD\) and Philosodophiae Doctor \(PhD\) in artistic research national guidelines for appointment as PhD, post doctor and research assistant](#)

Preferred selection criteria

- Good digital solutions skills
- Good knowledge of the connection between technology, process and human interaction
- Good knowledge and previous work in health and wellbeing solutions, co-creation and user engagement activities
- Good knowledge of the Norwegian BAE industry in general. It is positive if you have knowledge of municipal and / or public administration and industry innovation

Personal characteristics

You should:

- Be a team Worker
- Have the ability to work independently
- Be creative
- Have focus and goal oriented
- Have good communication skills
- Have the ability to critical thinking

We offer

- exciting and stimulating tasks in a strong international academic environment
- an open and [inclusive work environment](#) with dedicated colleagues
- favourable terms in the [Norwegian Public Service Pension Fund](#)
- [employee benefits](#)

Salary and conditions

PhD candidates are remunerated in code 1017, and are normally remunerated at gross from NOK 491 200 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

The period of employment is 3 years, or 4 years with 25 % of compulsory work (a decision of 3 or 4 years is made in connection with the recruitment process, recommendation and offer, after assessment of whether compulsory work is suitable for the relevant candidate).

Appointment to a PhD position requires that you are admitted to the PhD programme in Civil Engineering (www.ntnu.edu/ibm/phd) within three months of employment, and that you participate in an organized PhD programme during the employment period.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants, and the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment to NTNU. After the appointment you must assume that there may be changes in the area of work.

The position is subject to external funding.

It is a prerequisite you can be present at and accessible to the institution daily.

About the application

The application and supporting documentation to be used as the basis for the assessment must be in English.

Publications and other scientific work must follow the application. Please note that applications are only evaluated based on the information available on the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above.

The application must include:

- CV, certificates and diplomas
- transcripts and diplomas for bachelor's and master's degrees. If you have not completed the master's degree, you must submit a confirmation that the master's thesis has been submitted.
- A copy of the master's thesis. If you recently have submitted your master's thesis, you can attach a draft of the thesis. Documentation of a completed master's degree must be presented before taking up the position.
- Project proposal
- Research plan
- Name and address of three referees
- If you have publications or other relevant research work

If all, or parts, of your education has been taken abroad, we also ask you to attach documentation of the scope and quality of your entire education, both bachelor's and master's education, in addition to other higher education. Description of the documentation required can be found [here](#). If you already have a statement from NOKUT, please attach this as well.

Joint works will be considered. If it is difficult to identify your contribution to joint works, you must attach a brief description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal and interpersonal qualities. Motivation, ambitions, and potential will also count in the assessment of the candidates.

NTNU is committed to following evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment - DORA](#).

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.

The city of Trondheim is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

In accordance with The Public Information Act (Offentleglova), your name, age, position and municipality may be made public even if you have requested not to have your name entered on the list of applicants.

If you have any questions about the position, please contact Professor Alenka Temeljotov-Salaj, phone number +47 464 45 072, e-mail alenka.temeljotov-salaj@ntnu.no. If you have any questions about the recruitment process, please contact Senior Executive Officer HR Hege Johansen, e-mail: hege.johansen@ntnu.no.

Please submit your application electronically via jobb norge.no with your CV, diplomas and certificates. Applications submitted elsewhere will not be considered. Diploma Supplement is required to attach for European Master Diplomas outside Norway. Chinese applicants are required to provide confirmation of Master Diploma from [China Credentials Verification \(CHSI\)](#).

If you are invited for interview you must include certified copies of transcripts and reference letters. Please refer to the application number IV-253 when applying.

Application deadline: 07.01.2022

NTNU - knowledge for a better world

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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 Civil and Environmental Engineering

We conduct research and teaching in civil and transportation engineering, technical planning, structural engineering, water and wastewater engineering and hydraulic engineering. Graduates from our programmes become employees - in both the public and private sectors - with a sustainability mindset combined with competitive knowledge and skills. [The Department of Civil and Environmental Engineering](#) is one of eight departments in the [Faculty of Engineering](#).

Additional information

Place of service:

Høgskoleringen 7a 7491 Trondheim (Trondheim Municipality)