

Jobbnorge ID: 286701
Deadline: 9/29/2025
Website: <http://www.ntnu.no>
Scope: Fulltime
Duration: Temporary

The Department of Mechanical and Industrial Engineering has a vacancy for a

Postdoctoral Fellow in Advanced Product Development and Supply Chain Management

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 43,000 students work to create knowledge for a better world.

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

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

About the position

Are you ready to take your research career to the next level? We offer an exciting 3-year postdoctoral position that gives you the opportunity to develop a strong profile as researcher. You will also gain valuable experience that might be relevant for your further career. The purpose of a postdoctoral position is to build up a researcher profile that qualifies for a position as associate professor. The position may also offer additional skills that are relevant to the postdoctoral fellow's future career. Apply for this position to become part of our research environment and take the next step in your career with us.

Your immediate leader will be the Head of Department.

About the project

The successful candidate for this position will be working on projects on the integration of product development, materials science, product design and operations and supply chain management with sustainable, viable and circular economy perspectives. The research will be carried out within the Production Management research group, in collaboration with Materials and Manufacturing research group.

The main goal of these projects is to increase the knowledge about circular economy and how products and supply chain can be designed: first investigating which methodologies and approaches in supply chain management should be implemented, then which digital technologies should be used to transform today's linear business models into future business models with the principles of a circular economy, and finally to investigate how such technologies can be integrated in product development and supply chain design and planning in order to establish circular business models for businesses with specific products/services.

The research will be focused on how supply chains will change and will support the evolution of concepts like from product provider to product-service provider, re-manufacturing, re-use and use of by-products, development of new business models and so development of new supply chains from green-field or adaptation of existing ones.

Methodologies like simulation and life-cycle analysis, AI and data-driven design, will support the modelling and the development of decision support systems from the case studies involved in the projects with the final goal to create conceptual framework and digital tools to guide managers and engineers towards a circular economy transformation.

The research will be in strong relation to several Norwegian clusters of companies, covering different sectors, from shipbuilding sector to aluminium one, from traditional manufacturing sector to energy one. Moreover the research will extensively use the **Logistics 4.0 laboratory**, the Norway's first logistics laboratory that merges digital technologies with traditional production and logistics systems, enabling researchers, practitioners, engineers, pioneers, students, and other enthusiasts to come together and collaborate on common ground.

The position offers an opportunity to work on the interface between science and industrial applications, develop and test empirically motivated models and methods and produce knowledge that is both academically rigorous and practically relevant.

Duties of the position

- Contribute to the research and the education in how to develop new products and supply chain in an integrated way with focus on sustainability and viability
- Contribute to ongoing and future projects in the field, with a particular look at application of industry 4.0 and industry 5.0 concepts in supply chain management
- Contribute to the supervision of doctoral candidates and master students
- Contribute to research activities in collaboration with industry and the Logistics 4.0 Lab
- Contribute to some courses provided by Production Management group, in particular with lectures, seminars and developing new educational materials for smart logistics, circular economy, closed-loop supply chains
- Publish research in peer-reviewed journals
- Starting date 1st December 2025

Required selection criteria

- You must have completed a doctoral degree in Industrial and Systems Engineering, Production Management, or Supply Chain Management
- If you are in the final phase of your doctorate and can document that the thesis has been submitted or that the defense date has been confirmed, your application can be considered even if you have not defended. NOTE: Documentation of the obtained doctorate must be presented before you can take up the position
- You must be able to document a strong background and knowledge on qualitative and quantitative methodologies and their combination, like among the others supply chain design and planning, product development, industrial and systems engineering and operational research, AI and data-driven modelling, mathematical modelling, simulation and design science methodology.
- You must submit a 3-5 pages research plan in line with the description of the position (objective, scope and methodologies) with high relevance, rigorousness and impact
- You must demonstrate previous experience in similar projects with collaboration with companies, both in preparation of proposals and in carrying on research activities
- Good oral and written presentation skills in English equivalent level

PLEASE NOTE: For detailed information about what the application must contain, see paragraph "About the application".

If you do not already have educational competence that meets the requirements for a position as associate professor in Norway, NTNU will arrange for you to acquire such competence during the employment period. In such cases, you will also be assigned relevant teaching as part of the career-promoting work.

The appointment is to be made in accordance with [NTNUs guidelines for recruitment positions](#) and [Regulations concerning the degrees of philosophiae doctor \(ph.d.\) in artistic development work at the Norwegian University of Science and Technology \(NTNU\)](#) for general criteria for the position.

As a result of the new Act relating to universities and university colleges with associated regulations of 01/08/2024, NTNU has, during a transitional period (for decisions on employment in recruitment positions before 1 August 2025), chosen to use the terms of employment in the old [regulations of 31 January 2006 no. 102 on terms of employment for positions such as postdoctoral fellow, research fellow, scientific assistant and specialist candidate](#)

Preferred selection criteria

- Motivation and willingness for interdisciplinary research and teaching
- Proven capabilities and skills in writing and publishing scientific articles in renowned journals and shall have disseminated her/his work at scientific conferences
- Good knowledge in design and development of experimental research in collaboration with companies and in laboratory settings
- Experience in teaching and supervision in higher education at least on MSc level

Personal characteristics

Working as a Postdoctoral fellow requires that you

- Work independently
- Work structured, set goals and make plans to achieve them
- Present and discuss your research with other professionals
- Engage and contribute constructively with feedback
- Work constructively under pressure or in the face of adversity
- Show curiosity and a strong motivation for the subject
- Analyze data, assess different perspectives and draw well-founded conclusions
- Are flexible and open to adjusting the plan for the project as needed

Emphasis will be placed on personal qualities.

We offer

- An exciting job with an important [social mission](#)
- Developing tasks in a strong and international professional environment
- Career guidance throughout the postdoctoral program and together with you we will prepare a career plan, which contains the skills and knowledge you will acquire
- Open and inclusive working environment with committed colleagues
- [Mentor programme](#) as a [new employee at NTNU](#)
- Favorable terms in the [Norwegian Public Service Pension Fund](#)
- Free Norwegian language training at a basic level ([A2](#)).

As a Postdoctoral Fellow at NTNU, you will have access to [employee benefits](#).

Diversity

Diversity is a strength, and at NTNU we aim to be an employer that reflects the diversity in society and that makes use of the potential of the population's collective skills. Our vision is [Knowledge for a better world](#) and [our values are creative, critical, constructive and respectful](#). We believe that an organization that is equal, diverse and gender-balanced is essential for us to achieve our goals.

We strive to attract employees with different skills, life experiences and perspectives to contribute to even better problem solving of our societal mission in research and education.

If you think this position is relevant and interesting, we encourage you to apply, regardless of gender, functional ability and cultural background, or whether you have been out of work for a period of time.

At NTNU we want to increase the proportion of women in scientific positions. We have a number of [measures](#) to promote equality.

Salary and conditions

As a Postdoctoral Fellow (code 1352) you are normally paid from gross NOK 633 420,- 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.

As an employee at NTNU, it is important to keep yourself up to date with academic and organizational changes and to adapt to them.

For the necessary professional and social interaction, it is a prerequisite that you are physically present and available to the institution on a daily basis.

The appointment is carried out in accordance with the principles of the [State Employees Act](#), and [Export control](#) (legislation that regulates the export of knowledge, technology and services). Candidates who, after assessment of the application and attachments, are considered to be in conflict with the criteria in the latter act, will not be able to be employed

About the application

The attachments (including a description of your scientific work) must accompany the application as these documents form the basis of the application assessment. The documents must be in English.

Please note: the application will only be assessed on the basis of the information we have received by the application deadline. Therefore, make sure that your application clearly shows how your skills and experience meet the criteria described above.

The application and all attachments must be sent electronically via [Jobbnorge.no](#). If you are invited to an interview, you must bring certified copies of certificates and diplomas upon request.

The application must include:

- Transcripts and diplomas for Bachelor's-, Master's- and PhD degrees. If you have not yet completed your PhD, you must provide confirmation on your estimated date for the doctoral dissertation, or confirmation that your PhD thesis has been submitted. Documentation of a completed doctoral degree must be presented before taking up the position.
- CV
- A copy of the doctoral thesis. If you are close to submitting, you can attach a draft of the thesis.
- Research plan on 3-5 pages in line with the description of the position (objective, scope and methodologies) with high relevance, rigorousness and impact
- Up to 10 Academic works - published or unpublished
- Possible recommendation letters
- Name and contact information of three referees

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. Description of the documentation required can be found [here](#). If you already have a statement from [Norwegian Directorate for Higher Education and Skills \(HK-dir\)](#), 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.

If you have had leave or another break in your career, it is important that this is stated in your application so that the selection committee can take this into account and that the amount of your research may be reduced as a result.

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

NTNU recognizes a wide range of academic contributions and is committed to follow evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment DORA](#) and the obligations in [CoARA](#) (responsible assessment of research and recognition of a greater breadth of academic contributions in accordance with NTNU's social mission).

General information

A public list of applicants with name, age, job title and municipality of residence is prepared after the application deadline. If you wish to be exempt from entry on the public list of applicants, this must be justified. Assessment will be made in accordance with [current legislation](#). You will

be notified if the exemption is not granted.

If you have any questions about the position, please contact Professor Fabio Sgarbossa, phone: 90768098, e-mail: fabio.sgarbossa@ntnu.no.

If you have any questions about the recruitment process, please contact HR Consultant Hedda Winnberg, e-mail: hedda.winnberg@ntnu.no.

If you find this position interesting, and in accordance with your qualifications, please submit your application electronically via jobbnorge.no with your CV, diplomas and certificates attached. Applications submitted elsewhere will not be considered. Upon request, you must be able to obtain certified copies of your documentation.

Application deadline: 29.09.2025

For practical information about [working at NTNU](#), please visit [this webpage](#).

[The city of Trondheim](#) is a modern European city with a rich cultural scene. [Trondheim is the tech 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.

NTNU

NTNU - knowledge for a better world

The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

Department of Mechanical and Industrial Engineering

We educate graduates who can create new products, operate and maintain products, and manage projects. The Department has a variety of bachelor's and master's degree programmes. We conduct wide-ranging research in fields such as technology, energy, product quality and development, and productivity. [The Department of Mechanical and Industrial Engineering](#) is one of eight departments in [the Faculty of Engineering](#).

Additional information

Place of service:

Richard Birkelands vei 2B 7034 Trondheim (Trondheim Municipality)