

**Description of the appointment process of a tenure track position
(assistant/associate professor)****Material science of functional materials in smart material structures**

Location: School of Engineering Sciences, Department of Physics, Lahti or Lappeenranta campus

The rector has approved the description and initiated the appointment process on 9 October 2026.

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Applied statutes

Universities Act (558/2009)

Government Decree on Universities (770/2009)

Regulations of LUT University (8 December 2022, amended 7 April 2026)

Rector's decision: Academic career tracks of the Lappeenranta–Lahti University of Technology LUT (16 January 2025)

Additional information

Further information on the duties of the professor is provided by Panja Luukka, professor and head of the Department of Physics, tel. +358 50 428 8290, e-mail: panja.luukka@lut.fi.

1 Background

LUT University is a globally connected research university and a member of the EULiST European University Alliance. With strong performance in international university rankings and extensive global partnerships, LUT offers an excellent environment for conducting impactful research and collaborating across borders to address some of the world's most pressing challenges.

LUT seeks solutions to global issues with its expertise in technology, business, and social sciences. LUT is a trailblazer in promoting the energy transition and the regenerative use of natural resources and helps build resilient communities, industry, and businesses through data, research, and education. LUT's campuses are in Lappeenranta and Lahti, Finland, but its impact is global.

In our schools – the LUT School of Energy Systems, the LUT School of Engineering Sciences, and LUT Business School – we conduct research and provide education that are internationally recognised and relevant to both society and business.

LUT School of Engineering Sciences (LENS)

Our mission is to train problem-solvers in engineering and contribute to a wider understanding of our world through research in technology. Our research and education are characterised by an entrepreneurial, global and sustainable mindset. The LUT School of Engineering Sciences serves industry and society with its international expertise in separation, process technologies, computer vision and pattern recognition, industrial mathematics and physics, industrial engineering and management, and software engineering. Our strength lies in our close collaboration with companies combined with strong theoretical and methodological expertise. Our unit pursues a sustainable future in a world where climate change, diminishing natural resources, the availability of clean water, the use of materials, and environmental issues pose significant challenges. By specialising in our strengths, we create sustainable technologies and business for the future.

Department of Physics

The position is located at the Department of Physics of the LUT School of Engineering Sciences (LENS). The mission of the Department of Physics at LUT is to provide expertise in the areas of material physics, measurement technologies, nanotechnology, experimental physics instrumentation and data analysis.

2 Vacant professorship

We are looking for an assistant or associate professor of material science of functional materials in smart material structures. In this position, you will conduct groundbreaking research in materials science, especially in functional materials.

You will work in an interdisciplinary, diverse research environment that encourages collaboration across disciplines. You will benefit from LUT's international community and networks, which enable global partnerships and offer exposure to different cultures and perspectives. You will have strong opportunities for career development.

As a professor, you are expected to demonstrate outstanding academic expertise in materials science, particularly functional materials. You will establish and lead an independent research

group, provide scientific leadership in your field, and contribute to the strategic development of research and education at LUT University.

The professorship covers areas such as

- materials science of functional materials, particularly magnetic shape memory alloys;
- magnetocaloric materials;
- smart material structures, especially micro-scale devices;
- additive manufacturing of metallic materials;
- laser ablation micromachining of metallic materials.

You should have strong expertise in the design, fabrication, and characterisation of devices based on functional materials. Broad competence in the above areas is an advantage.

You will be responsible for conducting high-impact international research and publishing in leading scientific forums. You are expected to secure competitive research funding, initiate and lead national and international research projects, and develop long-term research collaborations with academic institutions and industry partners. Proven experience in research project management, multidisciplinary collaboration, and international networking is essential. Experience in leading a research group is a significant asset.

You will contribute to teaching at the bachelor's, master's, and doctoral levels, including the planning and delivery. Your teaching responsibilities will be agreed upon with the head of the degree programme. You will also supervise master's theses and doctoral dissertations.

Success in this role requires strong collaboration and communication skills, both within LUT University and with national and international stakeholders. You are expected to contribute to interdisciplinary initiatives across LUT and participate as an expert in projects conducted by other university units.

In addition to research and teaching, you will engage with industry and society, promoting the societal impact of research and strengthening collaboration between academia and external stakeholders. Involvement in academic and professional organisations, scientific networks, and activities supporting the visibility and impact of science is considered an advantage.

The duties of the position include the following:

- conducting and publishing high-impact international research
- establishing and leading a research group
- acquiring and managing competitive research funding
- planning and delivering bachelor's, master's, and doctoral education
- supervising master's theses and doctoral dissertations
- preparing and leading national and international research and education projects
- collaborating closely with industry and other external stakeholders
- contributing to interdisciplinary research initiatives within LUT University
- promoting the societal impact and visibility of research
- providing cost-conscious leadership and managing projects effectively
- participating in academic, professional, and international networks
- undertaking administrative responsibilities related to university operations
- working effectively in research teams and collaborative environments

The position is situated at the assistant or associate professor level of the tenure track. It will be filled through an open call for a fixed term of four years. The tenure track offers researchers a possibility to advance to a full professorship. LUT is committed to providing tenure track researchers the possibility to progress to the next level, provided they meet the requirements

in the promotion reviews, are suitable for the position, and conduct research that fits LUT's strategy and operation.

More information on the LUT tenure track system:

<https://www.lut.fi/en/research/research-career-lut/tenure-track>

The position starts with a six-month trial period. The position is based in Lappeenranta or Lahti and may require travel to the university's other locations as needed.

3 Qualifications

According to the administrative regulations of LUT University, adopted on 8 December 2022 (amended 7 April 2026), assistant and associate professors are required to have a doctorate, high-level scientific qualifications, experience in heading scientific research, the ability to acquire funding, the ability to provide high-level instruction based on research, the ability to supervise final theses, proof of international cooperation in their field of research, and when relevant to the duties of the position, practical experience in the field of the professorship.

Practical experience in the field is not a requirement in this position, but it is considered an advantage. Applicants should demonstrate their willingness to collaborate with industry in their application.

Applicants must have research and teaching merits, proof of effective research and the acquisition of external research funding, and international experience. The successful applicant is expected to establish their own research group. They may also be required to perform other demanding management duties assigned by the university. Therefore, related skills will be taken into consideration in the appointment, and attention will be paid to the applicant's merits as defined in LUT's tenure track system (Annex).

According to the university regulations, section 28, professors are required to have the language skills needed for the successful completion of their duties. In this position, oral and written fluency in English is required. If the appointed person is not fluent in Finnish, acquiring Finnish skills during the employment relationship is encouraged. For that purpose, LUT offers in-house Finnish language courses to staff members.

4 Applying for the position

Application

The application must specify the tenure track level applied to. The deadline for applications is indicated in the vacancy announcement. The application and material for expert assessors should be submitted through the online recruitment system mentioned in the vacancy announcement.

All application documents must be in English and in PDF format. The application must include the following:

- a curriculum vitae (max. 10 pages)
- a copy of the applicant's doctoral diploma
- a full list of publications, including the total number of publications in the Scopus database, the total number of citations, the h-index and Scopus ID, and equivalent information from the applicant's Google Scholar profile
- a separate list of maximum of 10 publications selected for expert evaluation

- the 10 publications mentioned above
- a teaching portfolio or an equivalent account of the applicant's teaching qualifications, presenting courses taught by the applicant, related feedback, the applicant's pedagogical training and teaching philosophy, and courses that the applicant can or prefers to teach
- an account of the applicant's merits and activities of significance to the vacancy (max. 3 pages)
- an account of the applicant's vision on the development of education, research and projects in the field of the professorship at LUT University (max. 3 pages).

Contact information

Applicants must give the university an email address and phone number at which they can be reached. Applicants who do not wish to be contacted by email must give a postal address at which they can be reached during the appointment process. The university prefers email.

5 Expert evaluators

Selection of experts

The experts must be impartial. Before the selection of expert evaluators, the applicants must be provided the possibility to comment on their possible disqualification.

Based on the proposal of the selection committee, the dean invites at least three experts of an international level to submit a statement on the qualifications of the applicants. The university's staff members may not be invited as expert evaluators. To the extent possible, the experts should be chosen with the applicants' fields of specialisation in mind and with a view to impartiality.

Sections 27–29 of the Administrative Procedure Act (434/2003) apply to the disqualification of an expert evaluator.

Applications forwarded to expert evaluators

The provost may limit the number of applications forwarded to expert evaluators if there are four applicants or more. At least three applications must be forwarded to the experts. The applications may be limited to the most suitable candidates for the position in the view of the person making the decision. The provost must present grounds for the decision. The applicants will be informed if any applications are excluded from the evaluation.

Expert statements

The expert evaluators must give their statements in writing within the agreed timeframe. More specific dates will be sent to the evaluators along with instructions. In their statement, the experts must evaluate especially the scientific qualification of the applicant, and if possible, also other merits related to the professorship, and rank the applicants in order of preference.

Expert evaluators may not take part in the appointment process at a later stage.

The statement must be submitted to the university (separate instructions issued) by the deadline.

6 Interview and trial lecture

Applicants deemed qualified for the position by the experts will be invited to an interview. The selection committee may ask the applicants to give a public trial lecture.

7 Appointment

The selection committee makes an appointment proposal to the tenure track committee, which then makes its own proposal to the dean and provost. The dean and provost then make a joint proposal to the rector on filling the position or leaving it vacant. The proposal shall be based on the merits presented by the applicants, expert statements, possible trial lectures and other related matters.

The evaluation of the applicant's qualifications considers scientific publications and other research results with scientific value, pedagogical expertise, teaching experience, teaching-related merits, a trial lecture if needed, the number of supervised dissertations, and management and leadership skills. In addition, the applicant's activity in the scientific community, success in raising research funding, scientific work abroad and international positions of trust are considered.

The rector decides either to appoint an applicant or to leave the position vacant.

The appointment proposal may be made or let lapse even if all the experts have not submitted their statements, provided that the time limit for the statements has expired, at least three experts have submitted their statements, and the impartial treatment of the applicants is not compromised by doing so.

After the rector has made the appointment decision, an employment contract is concluded with the appointed person. If no employment contract is concluded, the rector may, based on the dean's and provost's joint proposal, make a new decision and appoint another applicant. The rector may also leave the position vacant. When the employment contract is concluded with the person appointed, the final decision is made known to all applicants.

Tenure track appointment criteria

The positions below require a doctorate in an applicable field, a research field that fits the LUT strategy (see LUT Strategy 2030), a goal-oriented plan for the work in question, teaching experience and an up-to-date account of teaching merits (teaching portfolio).

LUT has joined the international CoARA Agreement on Reforming Research Assessment (<https://coara.eu/agreement/the-agreement-full-text>), which emphasises qualitative assessment in recruitments and promotions to specialist positions. This is highlighted especially in the assessment of peer-reviewed scientific publications. We require high-level publications. The quality of publications is evaluated based on their content, such as novelty and impact. High-level publications have also passed a high-level peer review, where only the best manuscripts are accepted for publication.

In the tenure track criteria below, we apply the classification of the Finnish Publication Forum (JUFO) as a guiding indicator of high-level publications (ratings 2 and 3), but applicants always select their best publications for a qualitative evaluation by experts. The applicant's work will be evaluated in light of LUT's high ethical standards for research.

In international recruitments, the evaluation must consider that applicants from beyond Finland and Europe may not have been involved in Finnish or European research projects and may not have taken into consideration the Finnish Publication Forum classification. Such applicants are evaluated in terms of their success in acquiring competitive funding through their own national channels or through international ones, and in terms of impact factors of scientific journals in their own field. Only in promotion and tenure reviews are the same criteria be applied to them as to Finnish persons.

The following qualifications are to be considered in the recruitment of researchers for different levels.

Assistant professor:

- o peer-reviewed scientific publications
- o contacts with the international scientific community in the field
- o the ability to take part in applying for external funding in the research group and for fellowships of the Research Council of Finland
- o the ability to participate in teaching and final thesis supervision

Associate professor:

- o successful publication history after the doctoral defence, target of three high-level publications a year
- o proof on international cooperation
- o successful acquisition of external funding and acting as, e.g., a project manager in externally funded projects
- o applying for the Research Council of Finland's research fellow positions
- o participation in the supervision of doctoral students
- o participation in the commercialisation of research results
- o participation in teaching, the development of teaching and the supervision of final theses