

Postdoctoral researcher, Life Cycle Assessment (LCA) of
bio-based processes and products
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=258262>

Downloaded On: Jul. 12, 2025 5:43pm

Posted Jun. 13, 2025, set to expire Dec. 31, 2025

Job Title	Postdoctoral researcher, Life Cycle Assessment (LCA) of bio-based processes and products
Department	T107 Bioproducts and Biosystems
Institution	Aalto University , , Finland
Date Posted	Jun. 13, 2025
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Ecological and Environmental Chemical/Petroleum
Job Website	https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/Postdoctoral-researcher--Life-Cycle-Assessment--LCA--of-bio-based-processes-and-products_R43552

Apply By Email

Job Description

Aalto University is where science and art meet technology and business. We shape a sustainable future by making research breakthroughs in and across our disciplines, sparking the game changers of tomorrow and creating novel solutions to major global challenges. Our community is made up of 13 000 students, 400 professors, and more than 4 500 other faculty and staff working on our dynamic campus in Espoo, Greater Helsinki, Finland. Diversity is part of who we are, and we actively work to ensure our community's diversity and inclusiveness. This is why we warmly encourage qualified candidates from all backgrounds to join our community.

The School of Chemical Engineering is one of the six schools of Aalto University. It combines natural

Postdoctoral researcher, Life Cycle Assessment (LCA) of
bio-based processes and products
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=258262>

Downloaded On: Jul. 12, 2025 5:43pm

Posted Jun. 13, 2025, set to expire Dec. 31, 2025

sciences and engineering in a unique way.

We are now looking for a

Postdoctoral researcher in the field of the Life Cycle Assessment (LCA) of bio-based processes and products

The postdoctoral researcher will work as expert in LCA for bio-based processes and products from wood and agriculture feedstocks for textiles and packaging applications supporting tow large EU funded projects. The portfolio of projects under the Sustainable Bioproducts Innovation research group provides opportunity for supporting several high impact publications.

Your responsibility and goals *

Conduct advanced research on LCA methodologies specific to bio-based products and processes. *

Develop and refine LCA models to assess the environmental impacts of bio-based products and systems using software tools such as OpenLCA. *

Analyze complex datasets to identify key areas for improvement in environmental sustainability performance. *

Build mentoring skills by helping and supervising younger researchers. *

Lead and write peer-reviewed articles for high impact journals. *

Participate in events, give expert talks, support in teaching and workshops. *

Network with scientists and industry to support your research as well as the development of new research proposals. *

Grant reporting, managing and monitoring. *

Work with researchers, and industry partners to gather data and align simulations with practical needs.

The postdoctoral researcher will be helping the PI and experts in managing projects, supervising students, funding reporting, gathering data coming from literatures and the industry partners to assess the sustainability of proposed concepts. The position is available immediately.

Your network, project and team

The position is open to the [[url=https://research.aalto.fi/en/persons/luana-dessbesell](https://research.aalto.fi/en/persons/luana-dessbesell)]Sustainable Bioproduct Innovations group headed by Prof. Luana Dessbesell, a highly multidisciplinary team seeking to support the development of truly sustainable bioproducts innovations. If you see yourself wondering what is and what isn't sustainable, please apply and join us. We are working with hard-science evidence to help speed up the development of solutions that can mitigate climate change. The research group is about 16 researchers, we care about each other and are people centered. We

Postdoctoral researcher, Life Cycle Assessment (LCA) of
bio-based processes and products
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=258262>

Downloaded On: Jul. 12, 2025 5:43pm

Posted Jun. 13, 2025, set to expire Dec. 31, 2025

believe that we can only deliver excellence if we are doing well.

The [url=https://www.aalto.fi/en/department-of-bioproducts-and-biosystems]Department of Bioproducts and Biosystems (Bio2) is one of the three departments in the School of Chemical Engineering at Aalto University, has an internationally leading reputation in basic and applied research for the development of advanced materials from natural resources. It is one of the leading European research and higher education institutions in the field of sustainable chemistry and engineering based on the utilization of renewable resources. Bio2 aims to contribute to the development of novel solutions to move towards sustainable primary production and processing systems that can produce materials with fewer inputs, less environmental impact and reduced greenhouse gas emissions. Within bioscience, the department has research in bioprocess technology, molecular biotechnology, enzyme technology, metabolic engineering, synthetic biology, biomolecular, and biohybrid materials. Other strengths of the department include sustainable materials and products based on lignocellulose, ranging from nanomaterials to novel cellulose-based textiles.

Your experience and ambitions

The candidate is expected to have: *

Ph.D. in Environmental Science, Chemical Engineering, Biotechnology, or a related field, with a focus on life cycle assessment and bio-based products and processes (completed within past five years). *

Experience in LCA of bio-based products or processes. *

Proficiency with LCA software tools. *

Proven experience with ex-ante or prospective LCAs. *

Ability to perform mass/energy balances bio-based processes. *

A solid track record of publishing research in peer-reviewed scientific journals. *

Exceptional analytical and critical thinking skills with the ability to work independently and collaboratively. *

Effective communication skills for presenting complex information to academic and industry audiences.

Nice to have: *

Experience in performing LCAs in the forest and food sectors. *

Experience with advanced LCA methodologies (e.g., consequential LCA, dynamic LCA, absolute sustainability assessments). *

Evidence of working in interdisciplinary research projects and collaboration with diverse teams.

What we offer

The postdoctoral researcher position will be filled for two years. The expected starting salary of a

Postdoctoral researcher, Life Cycle Assessment (LCA) of
bio-based processes and products
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=258262>

Downloaded On: Jul. 12, 2025 5:43pm

Posted Jun. 13, 2025, set to expire Dec. 31, 2025

postdoctoral researcher is approximately 3960-4110 EUR/month depending on experience.

We work in Otaniemi, Espoo. The Otaniemi campus is a thriving and connected community of 100 nationalities, 13 000 students and 4 500 employees. Life at the transformed campus is vibrant and filled with amazing architecture, calming nature, and a variety of cafes, restaurants, services and good connections along the metro line.

Ready to apply?

If you want to join our community, please submit your application through our online recruitment system no later than 30.07.2025 using the link on Aalto University's webpage ("Apply now"). If you are an Aalto employee, please apply via Workday system (internal jobs). The submissions will be checked as they arrive.

To apply, please include the following documents in English and as a single pdf document: *

- 1-page maximum motivation letter specific to this project with the description of previous relevant research experience *

- CV with a list of publications and the title and date of your doctoral/PhD thesis *

- List of references that we may contact.

The position will be filled when a suitable candidate is found.

Want to know more about us and your future colleagues? You can watch these videos:

[url=https://www.youtube.com/watch?v==5k_og_6zUJQ]Aalto University - Towards a better world,

[url=https://www.youtube.com/watch?v==dUfEGVM-ZP8&feature==youtu.be]Aalto People, and

[url=https://www.youtube.com/watch?v==ZK6pDWm1_CE]Shaping a Sustainable Future.

Read more about working at Aalto: [url=https://www.aalto.fi/en/careers-at-aalto]https://www.aalto.fi/en/careers-at-aalto

Check out our new virtual campus experience: [url=https://virtualtour.aalto.fi/]https://virtualtour.aalto.fi

For further information about this position, please contact Prof. Luana Dessbesell
luana.dessbesell(at)aalto.fi.

About Finland

Finland is a great place for living with or without family - it is a safe, politically stable, and well-

Postdoctoral researcher, Life Cycle Assessment (LCA) of
bio-based processes and products
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=258262>

Downloaded On: Jul. 12, 2025 5:43pm

Posted Jun. 13, 2025, set to expire Dec. 31, 2025

organized Nordic society. Finland is consistently ranked high in quality of life and was just listed again as the happiest country in the world: [url=https://worldhappiness.report/news/its-a-three-peat-finland-keeps-top-spot-as-happiest-country-in-world/]https://worldhappiness.report/news/its-a-three-peat-finland-keeps-top-spot-as-happiest-country-in-world/. For more information about living in Finland: [url=https://www.aalto.fi/en/careers-at-aalto/for-international-staff]For international staff | Aalto University

Aalto University reserves the right for justified reasons to leave the position open, to extend the application period, and to consider candidates who have not submitted applications during the application period.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Finland