Postdoctoral Researcher in electrocatalytic upcycling of plastic waste
Aalto University

Job Title	Postdoctoral Researcher in electrocatalytic upcycling of plastic waste
Department	T105 Chemistry and Materials
Institution	Aalto University , , Finland
Date Posted	Nov. 14, 2025
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Chemical/Petroleum
Job Website	https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/Postdoctoral-Researcher-in-electrocatalytic-upcycling-of-plastic-waste_R44757
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 120 nationalities, 14 000 students, 400 professors and close to 5000 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 Department of Chemistry and Materials Science is at the forefront of research in micro-, nano-, and atomic-scale engineering of materials. Our focus areas include advanced and functional materials, chemical synthesis, energy storage and conversion, as well as molecular and materials modeling.

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Within this department, the Electrochemical Materials and Applications (EMA) research group ([url=https://www.aalto.fi/en/department-of-chemistry-and-materials-science/electrochemical-materials-and-applications]https://www.aalto.fi/en/department-of-chemistry-and-materials-science/electrochemical-materials-and-applications), led by Prof. Daniel Martin-Yerga, is seeking a highly motivated

Postdoctoral Researcher to join our team

We are developing innovative electrochemical technologies for the sustainable production of renewable chemicals. In this project, our goal is to integrate the electro-oxidation of chemicals derived from plastic waste into processes that yield value-added molecules, while simultaneously co-generating green hydrogen. As a Postdoctoral Researcher, you will conduct cutting-edge research in experimental electrocatalysis and materials science, contributing to a high-impact project within a dynamic, collaborative, and supportive team environment.

Your responsibilities will include:
Your primary task will be to carry out research on the electrocatalytic upcycling of plastic waste. This involves: (a) Developing novel electrocatalysts based on multi-metallic structures for the conversion of plastic-derived monomers; (b) Characterizing these electrocatalysts using a range of techniques, including electron microscopy, diffraction, and other complementary methods; (c) Developing and applying analytical techniques, such as liquid chromatography, to identify and quantify reaction products.

You will also have opportunities to: *
Present your research findings at meetings with collaborators and at international conferences. *
Publish your results in high-impact scientific journals. *
Contribute to the supervision and guidance of early-career researchers and students within the group.

To succeed in this role, you should have: *
A recently obtained PhD (max 5 years) in Electrochemistry, Chemistry, Materials Science, or a closely related field. *
A strong background in electrochemistry, particularly electrocatalysis. *
Experience in materials synthesis and characterization. *
(An advantage) Experience with chromatography-based analytical techniques. *
A collaborative mindset and the ability to work effectively in diverse, interdisciplinary teams. *
Excellent English communication skills, both written and spoken.

What we offer / key employment details

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The School of Chemical Engineering at Aalto University provides an outstanding research environment for electrochemistry, materials science, and chemical engineering.

The starting salary for a postdoctoral researcher is approximately 4000 EUR/month. The appointment will be made by a fixed-term contract, initially for one year, with the possibility of extension depending on available funding. The role also includes occupational health benefits and access to Finland's comprehensive social security system. The starting date for the position is early 2026, as soon as possible.

How to apply
Please submit your application through our online system no later than 30.11.2025, using the "Apply Now!" button below. Include the following documents in English (PDF format):

Please note: Aalto University's employees should apply for the position via our internal HR system Workday (Internal Jobs) by using their existing Workday user account (not via the external webpage for open positions). *
Curriculum vitae, including contact details for two referees. *
A letter of motivation specifically prepared for this role, explaining how your background and expertise align with the position. Copy of your degree certificates and a transcript of studies. *
Applications will be reviewed on a rolling basis, and suitable candidates may be invited for an online interview before the deadline.

For more information, contact Prof. Daniel Martin-Yerga (daniel.martinyerga(a)aalto.fi). Applications sent via email will not be considered; only submissions through the recruitment system are accepted.

Aalto University is committed to equality and diversity in our work community. We encourage qualified applicants from all backgrounds to apply and join our innovative research team.

About Finland
Finland is a great place for living with or without family - it is a safe, politically stable and well-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://www.worldhappiness.report/news/world-happiness-report-2025-people-are-much-kinder-than-we-expect-research-shows/]https://www.worldhappiness.report/news/world-happiness-report-2025-people-are-much-kinder-than-we-expect-research-shows/. For more information about living in Finland: [url=https://www.aalto.fi/en/careers-at-aalto/for-international-staff]https://www.aalto.fi/en/careers-at-aalto/for-international-staff.

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Contact Information

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

Contact

Finland