NEWSLETTER

CIRCULAR CIRCUITS

Edition: April 2025

CONFERENCES

Sjoerd de Jong at EuroSimE conference on April 7th, 8th and 9th of April 2025
Sjoed de Jong gave a presentation for the EuroSimE conference in Utrecht on his simulation work. The title is “Meshless Simulation with the Material Point Method: A Micropump for Nerve Injury Treatment.”

Nils Pauliks at the NAC NWO conference March 20th and 21st 2025
Nils Pauliks presented the findings from his research at the NAC NWO conference in Noordwijkerhout in an oral presentation, with the title “The loss of valuable materials in the Dutch electronic sector”. The presentation covered unrecovered chemical elements in the Dutch electronic sector, based on groups of relevance (bulk metals, precious metals and critical raw materials).

ONLINE PRESENTATIONS

Pablo Ilgemann at the International Society for Industrial Ecology’s IE Day, 21st November 2024
Pablo Ilgemann presented a case study which examines the Dutch WEEE monitoring efforts at the International Society for Industrial Ecology’s IE Day 2024. In his presentation he showed what we know about the WEEE flows in the Netherlands and why WEEE monitoring is so successful there. A recording of the presentation available online here (minute 0:00 to 14:45).

RESEARCHERS ON THEIR PROGRESS

Dorien van Dolderden on the design for recycling of electronics
Ms. Van Dolderen is a PhD candidate with a background in industrial design engineering, working in work package 3. The focus of this work package is design for recycling of electronics, considering complexities both in both evolving recycling technologies as well as in design practice. Over the past two years, she has examined current Design for Recycling methods and established criteria for future method development. She also conducted recycling tests on various product types to understand how material choices and product architecture affect recycling yields. These findings are compared with research on Design for Repair to explore trade-offs with other recovery strategies. So far, many design aspects that affect recyclability were identified, which will later be turned into a design method. The goal is to make circular economy principles practical by turning complex end-of-life processes into clear, actionable design guidelines.

Max van Beek on the mechanical sorting of the components from discarded printed circuit boards
Klokhuis-TV-program, or the AD or NRC newspaper? You might have seen him before. Max is a PhD candidate at the Resources & Recycling section of TUD working on the recycling of PCBs who is not only an active researcher but also aims to spread the generated knowledge to the world. Max his research has continued on the mechanical sorting of the components from discarded printed circuit boards. With the principle proven, the research has shifted to more a more in-depth investigation of the machines’ parameters and the exploration of new ones. Here a strong focus has been placed on the roll sorter investigating its accuracy, consistency and throughput. Preliminary results have shown good results that will be published later this year.

MEDIA

Circular Circuits in Dutch TV-program "Doe maar duurzaam" in May 2025
The TV-program "Doe maar duurzaam" ("Just do it sustainably") will present the Circular Circuits project to a broad audience. The TV-program will be broadcasted on Saturday May 10th at 16.00 hours, and Sunday May 11th at 10.00 hours.

Dutch newspaper on recycling technology
In the article "What will we do with all the discarded solar panels in the future?" Max van Beek is interviewed on the recycling of electronics in solar panels.

OTHER

Annual meeting with users of the Circular Circuits project took place on 14th March 2025
Already two-years running 'Circular Circuits' project has reached an intense collaboration stage. During the Annual meeting on 14 March 2025, more than 50 participants discussed the future of the e-waste. Read more.

M2i thematic meeting "Towards the Circular Economy in Metals" took place on April 8th 2025
On April 8, 2025, M2i thematic meeting "Towards the Circular Economy in Metals" took place in Delft. This event had both academic and industrial speakers on how to approach the circularity goals. A policymakers contributed as well on how the government incentivises the progress. Many researchers from the Circular Circuits project attended the event, some of them presented their work as a poster.

Aluminium Thematic Meeting, 18 June 2025
Issues such as decarbonization, energy constraints, material scarcity, and rising costs are a challenge for promising aluminium applications. These issues could hinder the development and implementation of innovative, cost-effective aluminum alloy solutions. They will be discussed at this Thematic Meeting with workshop.

M2i Conference & Materialen NL Conference December 8th and 9th 2025
Save the date!

Please check for frequent updates the project website www.circularcircuits.nl