

Solon Oikonomopoulos, associate professor of chemistry, talks about a new facility for Gel Permeation chromatography (GPC), partially funded by the NTNU Nano Impact Fund

Describe in two or three sentences the nature of the project

We've set up a GPC system for measuring the size of polymer chains. (Technically, we're measuring their molecular weight distribution). GPC is a standard tool in polymer chemistry, but there wasn't a suitable system on campus, so we had to purchase a new one. We've been using it for a range of different projects involving semiconducting polymers, membranes for CO₂-capture, healable polymers and carbon nanostructures.



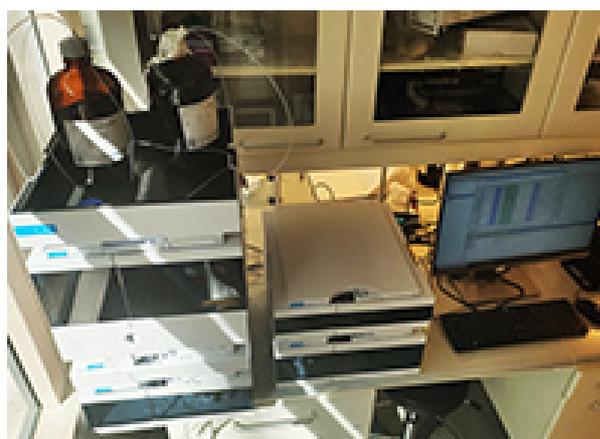
Solon Oikonomopoulos, photo: David Moe Almenningen

Why did you apply for funding from the Impact Fund?

The GPC was a joint purchase with the "Particle Engineering Group" from the Chemical Engineering Department (IKP). Between us, we had around 500k of the 600k purchase price, and we needed the Impact Fund to cover the shortfall.

Where would you have applied if the Impact Fund didn't exist?

There are periodic equipment calls from the Faculty and Rectorate that in principle might have been able to cover the cost. However, we were working to a very short deadline, so there weren't really any other options available to us at the time.



How would you describe application process?

Straightforward and easy to follow. It's a concise, well-designed application form and, importantly, there aren't any over-lapping questions. It took me an hour or two to complete the form as I already had most of the scientific/justification parts written in advance. We had a positive answer in less than two weeks, which is remarkable.

What has the funding allowed you to do?

To buy the equipment! Without the Impact Fund, we couldn't have gone ahead with the purchase. As a condition of the Impact Funding, we were required to make the GPC available for general use to NTNU researchers, and this is something we have been very happy to do.

Where can people find out more about your group and the GPC?

You can learn more about my group's research here:
<https://www.ntnu.edu/chemistry/research/organic/adon#/view/about>.

The first publication featuring results from the GPC is due out soon. If you would like to use the GPC, then feel free to get in contact with me at: solon.oikonomopoulos@ntnu.no.

Would you apply to the Impact Fund again?

Definitely!

If you have any questions about the Impact Fund or Gel Permeation chromatography, then feel free to contact solon.oikonomopoulos@ntnu.no