Strategic Plan, Self-evaluation and SEP

In preparation for the SEP evaluation, an in-depth evaluation to which all NWO institutes are subjected every six years, ARCNL composed two important documents: the ARCNL Strategic Plan 2017-2022 and the ARCNL Self-evaluation 2014-2016. In the self-evaluation, we look back and review the conception, organization and achievements of ARCNL over the first three years of its existence. The strategic plan looks ahead and shows the plans that the ARCNL staff has for the future. Both documents can be found on our website: Strategic Plan, Self-evaluation.

From 20 to 22 September 2017 the ARCNL SEP committee, chaired by prof. Ellen Williams, was in Amsterdam for an extensive site visit to ARCNL. The outcome of the evaluation will be formulated in a report that will become (publicly) available in March 2018. We are very pleased that we are able to share with you that the committee is very positive about the setup, the achievements and the future direction of ARCNL!

Update Matrix VII building

Construction work on the Matrix VII building entered a new phase. After weeks of driving piles in the ground, the focus shifted upwards. At the present rate of construction, the building grows by one floor in less than a month. It should reach its final size already early 2018 and ARCNL is getting ready to move in the second half of next year.
**New research group**

A new research group started at ARCNL: the Contact Dynamics group led by Prof. Steve Franklin. The research activities of the new group focus on developing a fundamental understanding of friction mechanisms and on how to manipulate them. Franklin works for ARCNL and for ASML. He is an expert in the field of tribology, which is devoted to contact formation, friction and wear phenomena, down to the atomic scale. These topics are all relevant to the manufacture of semiconductor devices. [Read more.](#)

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**ARCNL delivers its first doctor**

On Wednesday, 18 October, ARCNL PhD student Pavlo Antonov defended his PhD thesis on new methods to drastically lower friction and wear by the use of advanced materials and nanostructures. This makes Antonov the first ARCNL PhD student to earn a doctor’s degree. He started his research at Leiden University and moved to Amsterdam at the start of ARCNL. The defense took place at Leiden University with Joost Frenken as promotor. [Download thesis.](#)

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**Fred Brouwer receives prestigious award**

At this year’s Conference of the Japanese Photochemistry Association in Sendai, Fred Brouwer received the prestigious Honda-Fujishima Lectureship Award. This award is handed out each year to a foreign photochemist who has made significant contributions to the research field. Brouwer’s lecture was about ‘Molecular fluorescent probes in materials science’. 

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‘Perspectief’ program on lensless imaging

Six new ‘Perspectief’ programs have been given the green light by NWO. Stefan Witte and Kjeld Eikema (ARCNL/VU) are co-initiators of the program on ‘Lensless Imaging of 3D Nanostructures with Soft X-Rays (LINX)’. In the context of this program, the ARCNL/VU group will lead the project on experimental implementation of new soft-X-ray measurement schemes. Read more.

EU H2020-INFRADEV funding for Ronnie Hoekstra

ARCNL group leader Ronnie Hoekstra received EU funding for his work on the dynamics of the electron beam that drives a Free Electron Laser with wavelengths into the X-ray regime. The grant was awarded to the consortium CompactLight of which ARCNL and VU are partners. CompactLight aims to advance the development of X-ray FEL sources across Europe and beyond by making the sources more cost efficient. They intend to achieve this by combining new and innovative accelerator technologies.

Recently published

All ARCNL publications can be downloaded on website.


Prof meets CTO

On Friday, October 13th ARCNL hosted the successful event ‘Prof meets CTO’ organized by Holland Instrumentation. Representatives of academia and industry exchanged the latest developments in their field and explored ways in which they can collaborate. The participants focused on two topics that play a major role in high tech development: nanophotonics and plant and seed technology.
Open Day

ARCNL participated in the annual Amsterdam Science Park Open Day on October 7th. Despite the rain, many visitors found their way to ARCNL. A popular activity for families was the home-built Magnetic Canon that demonstrated the conversion of energy. The instructive lecture on nanolithography by Wim van der Zande (ASML) was well appreciated, as evidenced by the survey carried out by Amsterdam Science Park. In the ARCNL canteen, ASML’s demo machine proved useful to explain the lithography process, after which visitors were invited to join the lab tour.