

NeCEN

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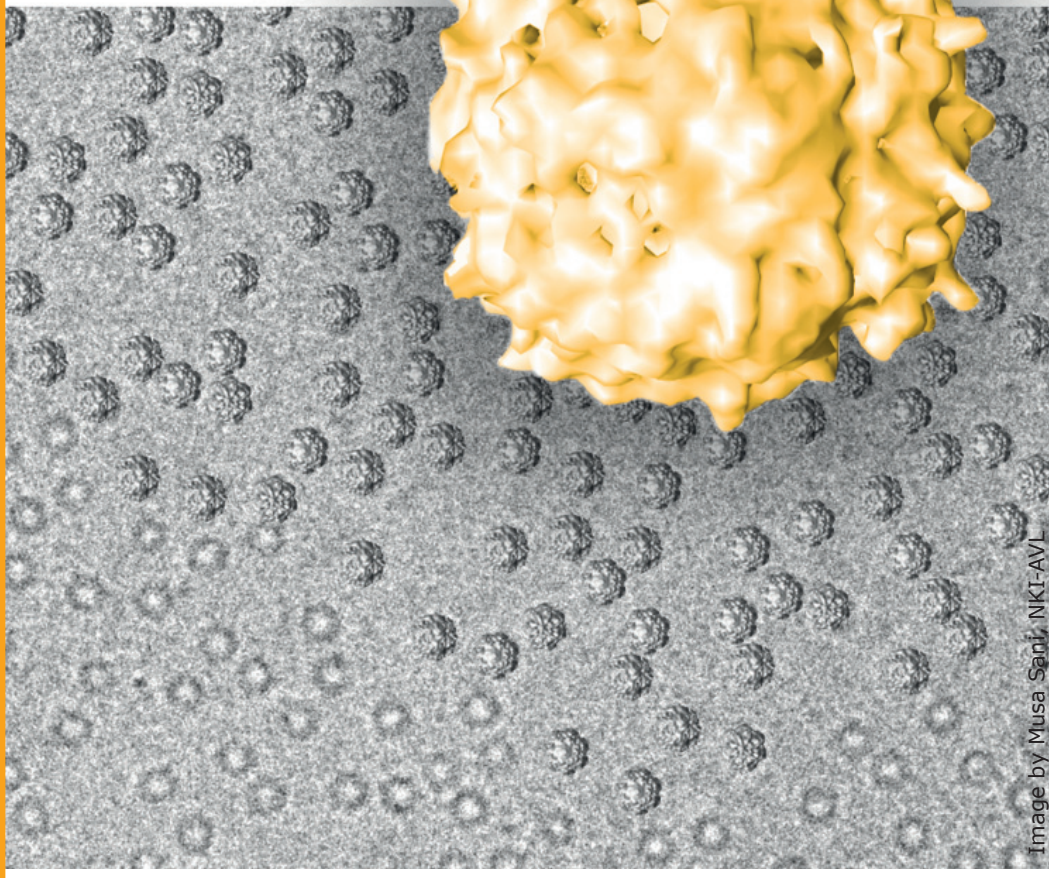
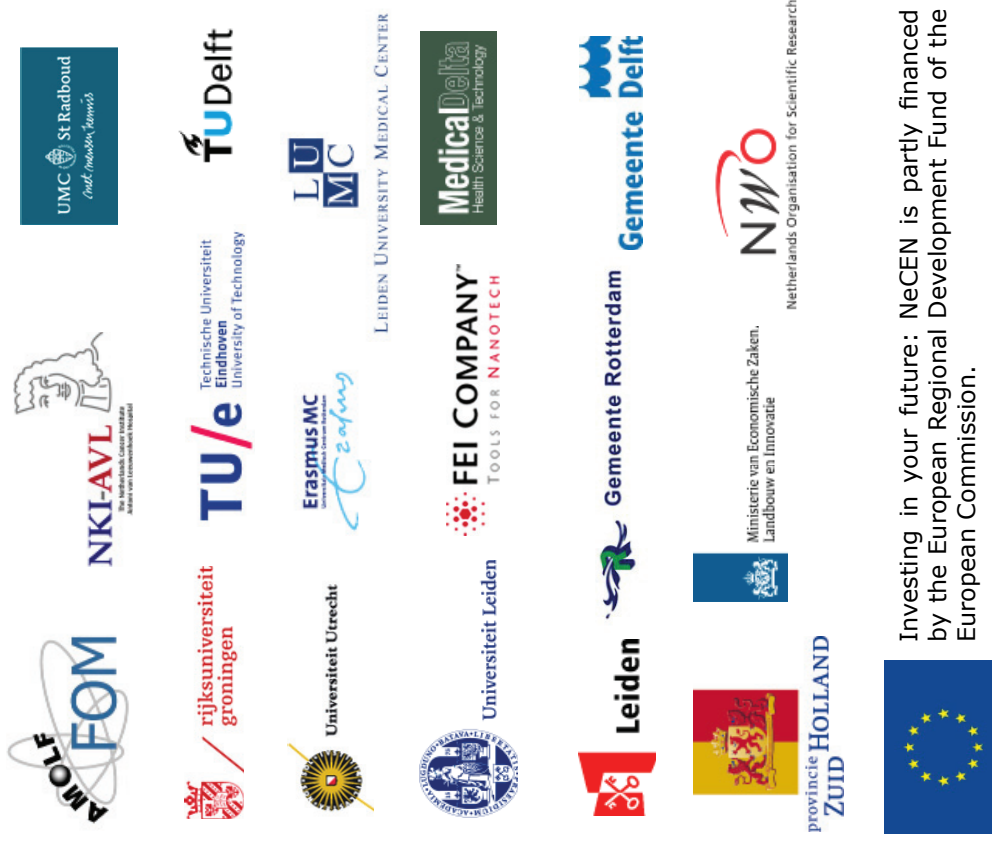


Image by Musa Sant, NKI-AVL

Opening symposium of the Netherlands Centre
for Electron Nanoscopy
27 October 2011

Investing in your future: NeCEN is partly financed by the European Regional Development Fund of the European Commission.

13:00 General welcome



Prof. dr. Jan Pieter Abrahams, Leiden University

Jan Pieter Abrahams is part of the management team of NeCEN and has been involved in the grant applications. He will open the afternoon session, give an introduction about NeCEN and explain the program of the day.

13:15 The world of electron microscopy



Prof. dr. Holger Stark, University of Göttingen

“Electron microscopy has a very long history in science. It is interesting that almost 80 years after its invention by Ernst Ruska, the electron microscope still plays such an essential role in biology as well as in material science. One can hardly imagine where science would be today without the electron microscope. This year’s Nobel Prize in Chemistry for Daniel Shechtman adds one more piece to the success story and represents another striking example for the power of electron microscopy. His discovery of quasi crystalline materials would have been almost impossible without the use of a high-resolution electron microscope.

It is in fact surprising that electron microscopy seems to experience a continuous boom concerning its importance in Science. This can be attributed to the numerous technological developments and improvements made by the microscope manufacturer over decades. However, the scientists who developed ideas and strategies for data interpretation and analysis are obviously equally important. With hopefully many more advances and developments to come in the future, I would expect electron microscopy to face an even brighter future in the years and decades to come.

The NeCEN imaging centre will be equipped with the most advanced electron microscopes which are currently on the market and will provide a unique environment for researchers to expand the horizon of our current biological understanding of cells and macromolecules. The NeCEN concept of sharing expensive technology to make it accessible to a broad range of scientists is novel and economically promising. Apart from the expected scientific advances, the NeCEN concept has the potential to become an interesting export model to be copied by other countries to minimize the costs and to maximize the scientific output.”

14:00 - 16:30 Carrousel of workshops

What does it take to start up a high quality research facility like NeCEN? We will answer this question during a carousel of three workshops that involves science, governments and industry. The group has been divided into three groups beforehand: orange, blue and black. Group orange starts with workshop science, group blue with workshop governments and group black with workshop industry. All groups will attend all workshops and visit the microscopes.



Workshop science

By prof. dr. Bram Koster (LUMC) and prof. dr. Peter Peters (NKI-AVL)

Bram Koster and Peter Peters both have a strong background in cryo-transmission electron microscopy and are part of the management team of NeCEN. During this workshop they will provide insight into the scientific relevance of a high quality centre for cryo-TEM. Together with them, you will discuss the conditions for a top-end research facility from a scientists’ point of view.



Workshop governments

By dr. Jeannette Ridder-Numan (Ministry OCW)

Jeannette Ridder is senior policy advisor at the ministry of education, culture and science and has a background in biology herself. Local and national governments can contribute significantly to realizing a centre like NeCEN. Together you will discuss the factors that are important for this collaboration.



Workshop industry

By dr. Dominique Hubert (FEI company)

Both NeCEN microscopes are made by FEI company in Eindhoven. Dominique Hubert (FEI Company) will explain the value of collaboration between science and industry. He will discuss both sides of the collaboration: the relation between microscope manufacturer and the centre and the relation of NeCEN to companies that will use its facilities.