

Molecular Machines & Switches

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CEMES-CNRS laboratory (www.cemes.fr)
29 rue Jeanne-Marvig, Toulouse, France

ORGANISATION TEAM



Dr. Xavier Bouju
*SRA Molecular Machines
Coordinator*
CEMES-CNRS, Toulouse,
France



Prof. Christian Joachim
Director of Research
Nanoscience Group,
CEMES-CNRS, Toulouse,
France



Prof. Arie Rip
*Technology Assessment of
Nanotechnology*
University of Twente
The Netherlands



Douglas K. R. Robinson
*Frontiers Technology
Assessment Coordinator*
University of Twente
The Netherlands



Martin Ruivenkamp
*Researcher in Image dynamics
in Nanoscience and Technology*
University of Twente
The Netherlands

Joint Vision Assessment and Scientific Meeting *SRA Molecular Machines*

This SRA meeting will be a joint meeting with the Vision Assessment workshop organised by the Frontiers Technology Assessment Programme.

For this first **SRA meeting**, the objective is to bring together researchers involved in molecular machines & switches activity within the Frontiers network. Discussions will give the opportunity to identify the scientific convergence points and to initiate collaborations. Such a meeting will prepare further actions in order to answer forthcoming EU grant applications.

The **Vision Assessment** workshop will gather journalists, researchers in sciences and in social sciences dig deep into the role and impact of visions and images of molecular machines and related nanotechnologies. Frontiers researchers are invited to participate to the discussions of the workshop. *More information elsewhere in this flyer.*

Format

The meeting is a one-day meeting. Participants are asked to attend the whole day by booking travel and hotel for this event.

Contact

Frontiers@technologyassessment.info

Preliminary program

Monday, June 11th

- 9h00 Introduction
- 9h10 Three scientific presentations of current and future research directions and visions
- 10h40 Coffee break
- 11h00 1st part of Vision Assessment - Discussions and reactions about morning presentations from media and scientists
- 13h00 Lunch
- 14h00 2nd part of Vision workshop - Visions in the media
- 16h00 Wrap up of Vision Assessment Workshop
- 16h30 Discussions of SRA partners
- 18h30 End of meeting and workshop

Perceived futures of molecular machine based devices

Visions inside and outside the laboratory

The Issue

For research into molecular machines, both nanoscience, nanotechnology and the media have constructed high expectations, both for understanding phenomena at this level and for the promise of harnessing molecular mechanics to do work in the macro-world in which we live.

Research into molecular motors and rotors in fields such as physics, chemistry, biology and material sciences have their own dynamics but also appear to converge towards a vision of harnessing mechanical motions (through functionalised surfaces, crystals or MEMS). Images play an important role in research and in communication about research, also to wider audiences. Their uptake and circulation is an issue in its own right, and may well have repercussions, both on the directions of research and on expectations and public reception.

It is timely to probe visions of the field (both in the various streams of research and outside the lab - in the media and elsewhere).

With this in mind we look at two questions here:

- Which visions and images (of molecular machines) are viable in the convergence/ divergence of research communities stemming from biotechnology, material sciences and supra-molecular chemistry?
- Which visions and images are viable promises in circulation in the media (and elsewhere) in the industrial and societal debate on the promise of molecular machine based devices?

The visiona assessment workshop

To address these questions, the Frontiers Network of Excellence, the University of Twente (NL) and CEMES-CNRS (FR) invite scientists from the various disciplines investigating molecular machines as well as media people and social scientists to participate in a small meeting (about fifteen participants).

The objective of this vision assessment exercise is to probe each other's world, and use the insights gathered in participants' own situation. A key issue is to understand the role such visions play in perception (inside and outside the lab) on the further development of technologies. One example is the possible move from molecular motors to molecular devices.

The workshop will be hosted at CNRS-CEMES, in Toulouse, 11th June from 09:00 - 16:30. Costs will be covered by the Frontiers Network

More information available at:
www.technologyassessment.info/molecular