

Dutch Under

A Dutch nanotech/biomedical mission
to Australia

Partners and stakeholders:



Australian Government
Australian Trade Commission



National Research
FLAGSHIPS
Future Manufacturing



Department of Innovation,
Industry and Regional Development

TWENTE
KENNISPARK

UNIVERSITY OF TWENTE.



Meet and Greet:

the experts of the Australian nanotech industry,
in the field

from NanoMedicine and Health
to Energy & Clean water!

during:

a nanotech/biomedical fact-finding &
trade/investment mission
to Australia from October 17th till October 22nd,
2010, organised by NanoNed, CSIRO, AusBiotech,
Victorian Government
& the Australian Trade Commission

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Introduction

Nanotechnology is an emerging enabling technology that is moving from fundamental research towards application. Establishing in-depth Dutch-Australian relationships and international collaboration between science and industry in the field of health, medicine, clean energy & environment creates a competitive advantage which could lead to mutually beneficial partnerships in R&D collaboration and global commercialisation.

There are good reasons for the Netherlands and Australia to work together in nanotechnology:

- Both countries have a worldwide acknowledged top position in nanotechnology research and innovation;
- Both nations also have medium-sized economies positioned adjacent to much larger nations; several key industries; strong scientific bases; and governments keen to stimulate nanotechnology in emerging technologies;
- Further, there is little competitive conflict between the two nations in nanotechnology, in that they serve different geographic and product markets, and do not compete in funding sources.

About the mission

- It is believed that 50% of future nanotech will be in the biomedical area. The Netherlands and Australia could complement each other and by partnering up, investing and working together this mission could generate strong propositions in creating Australian/Dutch frontier nanomedical-driven healthcare approaches for booming middle classes in China & India;
- You will get acquainted with government bodies, R&D institutes, universities, sector clusters and individual businesses;
- You will experience site visits, briefings, group introductions and be actively present at AusBiotech.

The mission's benefits

The mission has three benefits for participants:

1. Gaining knowledge about who is doing what in Australia and The Netherlands in the field of nanotechnology in the biomedical and broader industries, both on R&D and application/commercialisation level;
2. Getting a focussed network in Australia/The Netherlands on government, university and industry/business level and linkages;
3. Be the first to know about investment and R&D opportunities in Australia and the Asia Pacific region for Dutch participants and reverse for Australian participants in Western Europe.

Additional opportunities

The mission is organised around **AusBiotech 2010** in Melbourne. Participants of this mission will have the chance to exhibit at AusBiotech through a NanoNed mission stand. More importantly, and in conjunction with the organisers of AusBiotech, there will be a session/forum on e.g. 'Dutch-Australian investment/business opportunities in nanotechnology' at AusBiotech on Thursday Oct 21, fully dedicated on and for the Dutch delegation members.

Key figures on AusBiotech:

- AusBiotech 2010, with its key theme 'Creating Global Solutions', will focus on the solutions that biotechnology is developing to deliver a brighter future. Whether it is in new therapies, diagnostics, medical devices, agricultural, industrial or climate change, nano/biotechnology is at the heart of finding better options and answers to issues that we share around the globe. From the research laboratory, through the process of development and commercialisation, to the consumer, it's all about creating solutions.

- Biggest conference of its kind in the region
- Apr. 1500 visitors (of which 1000 Australians and 500 mainly from USA and Asia)

More information on: <http://www.ausbiotech2010.com.au/>

Schedule (preliminary)

The mission is organised from Sunday October 17th until Friday October 22nd, 2010. The (preliminary) schedule looks as follows:

When	What	Where
Sun Oct 17	16:00 Day at leisure – city exploration	Melbourne
Mon Oct 18	Welcome and Site visits South Eastern Melbourne/Monash Precinct: 8.15am Welcome Breakfast & presentations by Victorian Government 9.30am Depart city 10.30am Small Technologies Cluster: includes MiniFAB 12 noon Monash University: Abid Khan, James Friend, Milton Hearn et al <i>including Lunch</i> 2.30pm CSIRO 4.00pm Australian Synchrotron 5.00pm Melbourne Centre for Nanofabrication	Melbourne Level 46, 55 Collins Street, Melbourne

Tue Oct 19	<p>Site visits Parkville Precinct (timing TBC)</p> <p>Melbourne University (Frank Caruso & Paul Mulvaney et al)</p> <p>NICTA (BionicEye) @ University of Melbourne + if any interest Bio21 Institute</p> <p>Company visits/meetings as requested &/or arranged</p> <p>AusBiotech 2010 Conference Welcome Reception - hosted by the Victorian Government</p> <p>OPTIONAL: The International Life Science Investment Summit</p>	Melbourne
Wed Oct 20	<p>AusBiotech – visit AusBiotech Conference</p> <p>AusBio Session - Dutch/Australian opportunities - timing TBC by Program Committee</p> <p>Meetings as organised &/or through AusBiotech online Business Matching Program</p> <p>18.00 International Reception (Exhibit Hall)</p>	Melbourne
Thu Oct 21	<p>AusBiotech Conference</p> <p>AusBio Session - Dutch/Australian opportunities - timing TBC by Program Committee</p> <p>Meetings as organised &/or through AusBiotech online Business Matching Program</p> <p>19.00 AusBiotech Conference Dinner</p>	Melbourne
Fri Oct 22	<p>AusBiotech Conference</p> <p>Company visits/meetings as requested &/or arranged</p>	Melbourne
Sat Oct 23	<p>End-of-program or on individual request in the following week: fact finding trip site visits pre-arranged company meetings specific (on-site) requests</p>	return to The Netherlands

Pre-Matchmaking

Three levels of interest have been identified:

1. government;
2. R&D/institutional/university;
3. private/commercial businesses.

Through the AusBiotech delegate pass participants will have access to the online business matching program from AusBiotech. In addition, and on request, we can facilitate in arranging individual meetings with companies, institutes or others not mentioned in the program.

All interested organisations are explicitly invited to state their interest in this mission and the organisation(s) they would like to meet/visit. Please contact Sjoerd Rameckers (sjoerd.rameckers@ustrade.gov.au).

Budget estimate

NB: this is a preliminary budget only. The ATC will try to lower the costs through sponsorship deals.

Total appr. 5.160A\$ / appr. € 3.600 per participant (based on minimum of 10 participants); including international flight, accommodation + breakfast, site visits, matchmaking, transportation, full delegate pass AusBiotech, lunches/dinner, reception. (does not include other personal expenses, drinks/entertainment, etc)

Including:

- One week visit program with individual matchmaking, meetings on request, introductions to key organisations in Australia such as CSIRO, DIIRD, Invest Victoria, Australian Office of Nanotechnology and the Australian Research Council Nanotechnology Network, visit to AusBiotech conference and more
- Site visits (TBC, possibly sponsored by Austrade/DIIRD, CSIRO)
- Entry to AusBiotech (1260 AUS early bird)
- Possibility to exhibit at AusBiotech booth (sponsored by NanoNed, Kennispark & Dutch embassy)
- 1 Dutch-Australian forum (investment session) at AusBiotech

Also included:

- | | |
|---------------------------------|--|
| • Hotel & breakfast (6 nights): | 900 AUS (6 nights x appr 150 \$A) |
| • Dinner/lunch (6 days): | 750 AUS (6 x appr 125 \$A) |
| • Ground transportation | 150 AUS |
| • Miscellaneous | 400 AUS |
| • International travel | from 1700 AUS (roundtrip eco NL – Australia) |

Participation

Participation is open to **all** nanotech R&D institutions, government bodies, sector clusters and industrial/commercial companies from the Netherlands involved in a range of topics such as diagnostics, micro and nano fluidic devices, industrial biotech/nanotech, activity monitoring, food, research translation, transfer models and more

Organisation

The mission is organised by the Australian Trade Commission (Sjoerd Rameckers) and coordinated in The Netherlands by Rens Vandenberg (NanoNed – r.vandenberg@stw.nl) and in Australia by Clive Davenport (CSIRO Future Manufacturing), Trish Vardon Victoria State Government & Glenn Cross (AusBiotech).

Registration

Please register **before August 1, 2010** with Sjoerd Rameckers (ATC, organisation). sjoerd.rameckers@austrade.gov.au or F: +31 20 419 8508 / T +31 20 4198507

Nano in Australia – a short overview

The Australian Government considers that enabling technologies have the potential to provide significant long term social and economic benefits for Australia. Enabling technologies have the potential to underpin an increasing number of breakthrough innovations in products, services and processes and to offer effective solutions to help address major global and national challenges, such as medical treatments, energy generation and environmental remediation. They may also pose new health, safety and environmental risks and have ethical and social impacts. A balance needs to be found that manages the risks and impacts while ensuring that the benefits can be obtained.

“enabling technologies” are defined as new technologies or new uses for existing technologies that enable new products or services or more efficient processes. The Strategy (National Enabling Technologies Strategy; N.E.T.S. part of the Super Science – Future Industries Initiative) will focus primarily on nanotechnology and biotechnology and will also undertake strategic assessment of the development of new enabling technologies and the convergence of new and existing technologies. The Strategy will deal with ICT to the extent that it is an enabler for and/or converges with nanotechnology, biotechnology or other new enabling technologies. The Strategy will build on the work of the National Biotechnology Strategy (2000 to 2008) and the National Nanotechnology Strategy (2007 to 2009), in particular, the Australian Government’s Objectives for the Responsible Management of Nanotechnology.

Australia also sees nanotechnology as an important factor in future economy and the Commonwealth Government invested around \$141 million in research, regulatory activity and policy in 2007-08. Nanotechnology research in Australia is conducted across about 75 parties, within government research organisations, medical research institutes, biotechnology research organisations and universities. Areas of expertise include biotechnology, electronics, energy, environment, materials, photonics and quantum computing and quantum technology. Presently, there is no formal coordination of nanotechnology research within Australia. However there are several research centres and larger programs, mostly supported by Government's funding agencies. Information on many of them can be found from The Australian Research Council Nanotechnology Network, (ARCNN) which is the main promoter for collaboration and exchange within the field.

There are about 80 nanotechnology companies in Australia, most being small-to medium sized. N.E.T.S. and Australian Nanotechnology Alliance (ANA) concentrate on increasing awareness and uptake of nanotechnology by Australian industry and also link the Australian sector into global networks.

Australian Government has recently provided funding for nanotechnology related research infrastructure. The Australian National Fabrication Facility (ANFF), offers specialist fabrication services, including rapid prototyping of nano- and micro-devices. In addition, Australian Microscopy and Microanalysis Research Facility provides specialised nanoscale imaging services. The ARCNN website (see above) contains a Nanotechnology Research Facilities and Capabilities database that lists additional resources.