



Australian Government

Ansto

Nuclear-based science benefiting all Australians



Nuclear Open Day Event Program

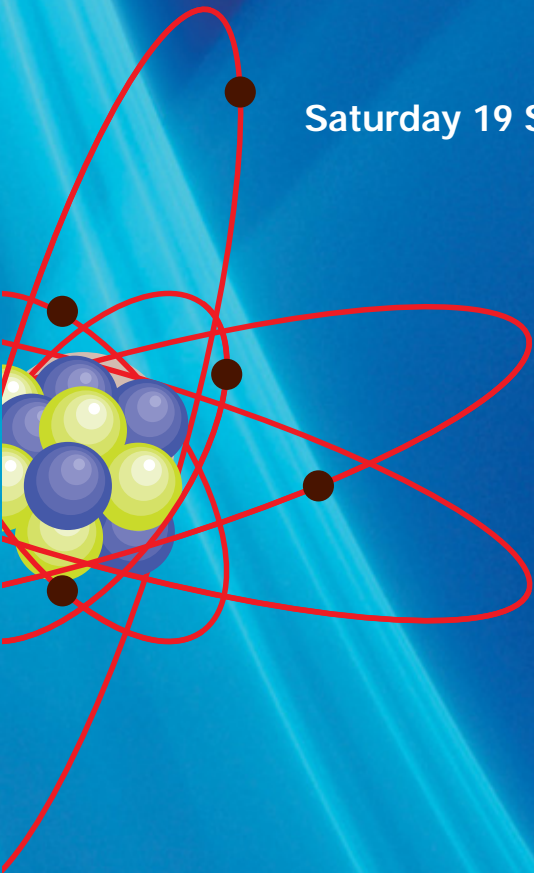
Saturday 19 September 9am-4pm, New Illawarra Road, Lucas Heights

Taking a campus tour? Don't forget:

- Anyone can visit the main event area which is outside the secure zone. However if you are taking a campus tour, photographic identification details (e.g., drivers licence or passport number) must be provided
- Visitors are not permitted to take: any bags; prams/strollers; unauthorised photographic devices including mobile phones with cameras or other recording equipment; weapons; firearms; explosives; alcohol; animals; or containers with volatile liquids on site
- Fully enclosed shoes must be worn at all times
- A limited number of lockers are available at the Visitor Centre. However it is preferable you do not bring handbags and other valuables.

Help!

ANSTO's friendly staff will be available at the Help Desk, located outside the ANSTO Café, to answer any questions you may have about the day's activities.



Marquee exhibits

1 Radiation (ANSTO)

Radiation is emitted by both natural and man-made sources. It is around us all day. Visit the radiation stand to learn how radiation works and why it is an essential part of our everyday lives.

2 ANA, WiN and AYGN

Visit the Australian Nuclear Association (ANA), Women in Nuclear (WiN) and Australian Young Generation in Nuclear (AYGN) stand and learn how these organisations increase awareness of the benefits of nuclear and radiation applications; provide a means for people working in nuclear to meet and network; and how they provide a means to acknowledge outstanding contributions within the nuclear industry.

3 Silicon irradiation (ANSTO)

ANSTO is one of the world's leading suppliers of silicon irradiation services – supplying consumer electronic companies in Asia and Europe. Learn how silicon is irradiated in the OPAL reactor before being integrated into a wide range of consumer products, such as computers, TVs, fridges, washing machines and microwaves.

4 Health (ANSTO)

Visit the Health stand to learn how ANSTO applies its nuclear expertise to radiopharmaceutical production and research used for the diagnosis and treatment of serious illnesses like cancer and neurological disorders, such as Alzheimer's disease.

5 Waste operations (ANSTO)

Visit the waste operations stand to learn more about how the small amount of radioactive waste and spent fuel produced by ANSTO is safely handled and stored.

6 Materials engineering (ANSTO)

Visit the materials engineering stand to learn about ANSTO's research into improving the structural integrity of materials, reducing fatigue and damage to materials used in high temperature plants (e.g. nuclear power stations), and the organisation's studies into the effects of radiation on materials.

7 Neutron scattering (ANSTO)

Neutron scattering allows scientists to see what X-rays cannot. It looks at materials from the inside out, understanding their atomic structure and how materials respond to various stimuli. Visit the neutron scattering stand to learn how ANSTO's state-of-the-art neutron-beam instruments are used to solve complex research and industrial problems in many important fields.

8 Environment (ANSTO)

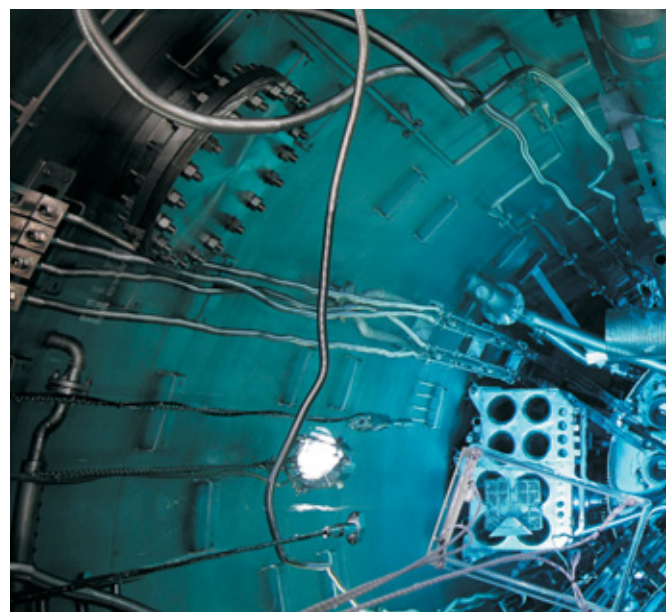
Discover the role that ANSTO, using isotopic techniques, has in understanding how environmental systems function and interact, and the impact that humans are having on the environment.

9 Wollongong University

Visit the The Sydney Business School (SBS) (part of the University of Wollongong) stand to learn about further business and management education at their Loftus, Sydney and Wollongong campuses.

10 Powerhouse Museum

Experience a variety of hands-on demonstrations that will get you thinking about the wonderful world of science and technology. See how the Museum's Van de Graaff Generator makes sparks and test out how much static electricity you can make yourself through friction. Discover the wonderful world of slime and even learn how to make your own at home.



Program of events

11 Sutherland Shire Council

9am-12.30pm - Visit Council's stand and collect your free copy of the Shire Visitors Guide plus enter the 'Bumper Sticker Competition' to come up with a slogan to promote the Shire! Bushcare representatives can also tell you how you can get involved in helping your local environment as well as how to control/identify both environmental and noxious weed species.

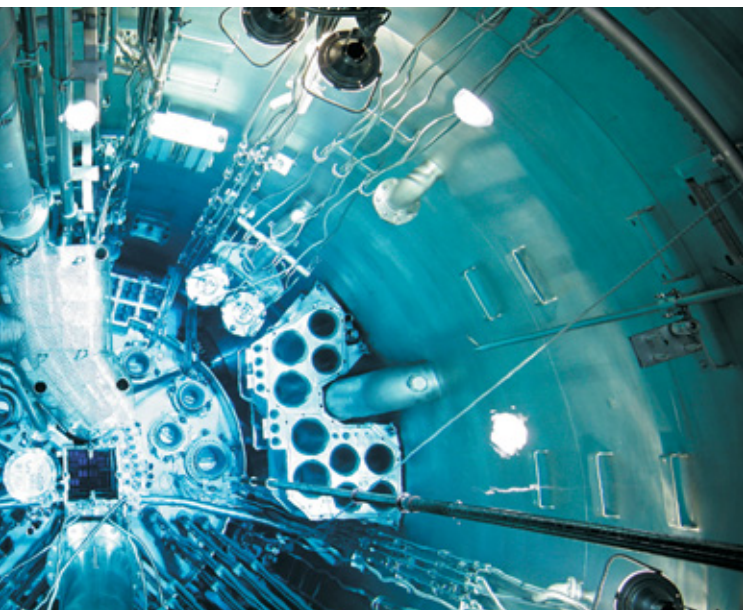
12.30pm-4pm - Visit Council's Science Unit representatives to learn more about the environment and obtain free information on sustainability, local bicycle tracks and Council's greenweb program. You can also learn more about recycling, composting and worm farming and Council's free environmental courses from Waste Services staff.

12 The Shire Group Training

Discover the role of a Group Training Company and how to apply for apprenticeships and traineeships at The Shire Group Training stand. You can also learn how to produce a successful resume and cover letter.

13 Lucas Heights Scouts

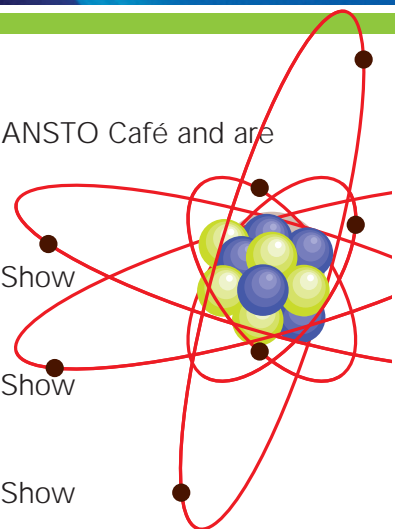
Relocating to ANSTO three years ago, the 1st Lucas Heights Scouts offer three groups for young people to join: Cubs, Scouts and Venturers. Visit the Lucas Heights Scouts stall to learn more about how you and your kids can get involved.



KIDS SCIENCE SHOWS

The shows are located in the ANSTO Café and are half an hour in length.

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| 9.30am | Bubbles Show |
| 10.30am | Liquid Nitrogen Show |
| 11.30am | Bubbles Show |
| 1pm | Liquid Nitrogen Show |
| 1.45pm | Bubbles Show |
| 2.30pm | Liquid Nitrogen Show |



SCIENCE TALKS AND PANEL DISCUSSION

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| 10am | Environmental research in Antarctica - Henk Heijnis |
| 11am | 'Cleaner energy options for our future' - chaired by science broadcaster and journalist Robyn Williams.

Panel discussion with ANSTO's Chairman, Ziggy Switkowski, energy media commentator Keith Orchison, Burt Beasley from the Australian Coal Association and a representative from the Clean Energy Council. |
| 12.30pm | Break |
| 1pm | Medical research and radiopharmaceuticals - Andrew Katsifis |
| 1.30pm | Break |
| 1.45pm | Storage and handling of radioactive waste - Duncan Kemp |
| 2.15pm | Break |
| 2.30pm | The science of materials - Greg Lumpkin |
| 3pm | Break |
| 3.15pm | Neutrons in science - Mike James |
| 3.45pm | Close |

Be a radiation safety worker

Visit the 'Be a radiation safety worker' exhibit to learn hands-on, what's involved in working safely with radioactive material.

Open Day event site map



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