

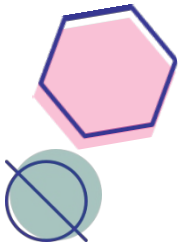


THE **GiST**

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Space resources to inspire girls Webinar September 2022



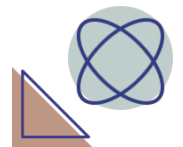


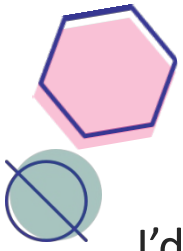
Space resources to inspire girls

Webinar September 2022

Presented by:

- Michelle Hamill – the Girls in STEM Toolkit
- Alice Fairey – Australian Space Discovery Centre | Australian Space Agency
- Peta Kenny – Victorian Space Science Education Centre





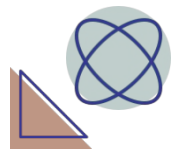
I'd like to begin by acknowledging the Traditional Owners of the lands from which we all meet today, all around Australia.

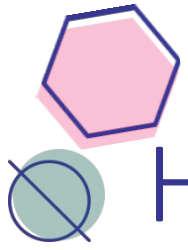
I am coming to you from the lands of the Way wurru people, up in the alps of northeast Victoria.

I would also like to pay my respects to Elders past, present and emerging and acknowledge the ongoing contributions of aboriginal Australians to both education and science.



Artist: Keisha Leon

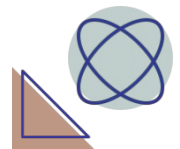




Housekeeping



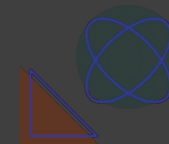
- Webinar PDF
- Introductions
- Questions





Australian Space Discovery Centre and the Australian Space Agency

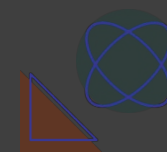
Presented by Alice Fairey

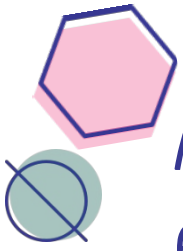




Victorian Space Science Education Centre

Presented by Peta Kenny





Australian space centres, observatories, and education programs



- [South Australia Space Industry Centre](#)
- [Canberra Deep Space Communications Complex](#)
- [Science Space \(Wollongong\)](#)
- [Melbourne Planetarium](#)
- CSIRO
 - [Space industry careers](#)
 - [STEM professionals in Schools](#)
 - [Australia Telescope National Facility](#)
- Hamilton Secondary College [Mission to Mars](#)

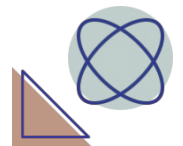


FIGURE 8: OPPORTUNITIES FOR SPACE EXPLORATION AND UTILISATION

POWER AND PROPULSION

- Printable solar photovoltaics
- Energy harvesting and storage
- Telemetry and vector control
- Fuels and catalyst design



HABITAT AND LIFE SUPPORT

- Deep space habitation
- Radiation shielding
- Telehealth and wearables
- Stabilised food and food production
- Recycling wastes



IN-SITU RESOURCE UTILISATION

- Processing new novel minerals and materials
- Additive manufacturing
- Resource mapping and prospecting



AUTONOMOUS SYSTEMS

- Distributed smart sensor networks
- Augmented and Virtual Reality (AR/VR) and teleoperation
- AI and machine learning
- Autonomous robotic systems



EXAMPLE END-USERS



Government space agencies



Technology transfer into industry (e.g. mining, health, food, etc.)

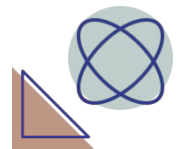


Curriculum



- Science
 - Science as a Human Endeavour 5 – 10
 - Plus Science Understanding in years 6 – 10
- Digital Technologies
 - Digital systems and Data representation 5 – 10
- Mathematics
 - Years 5 – 10

Plus MANY cross curricular opportunities



Women in the space industry

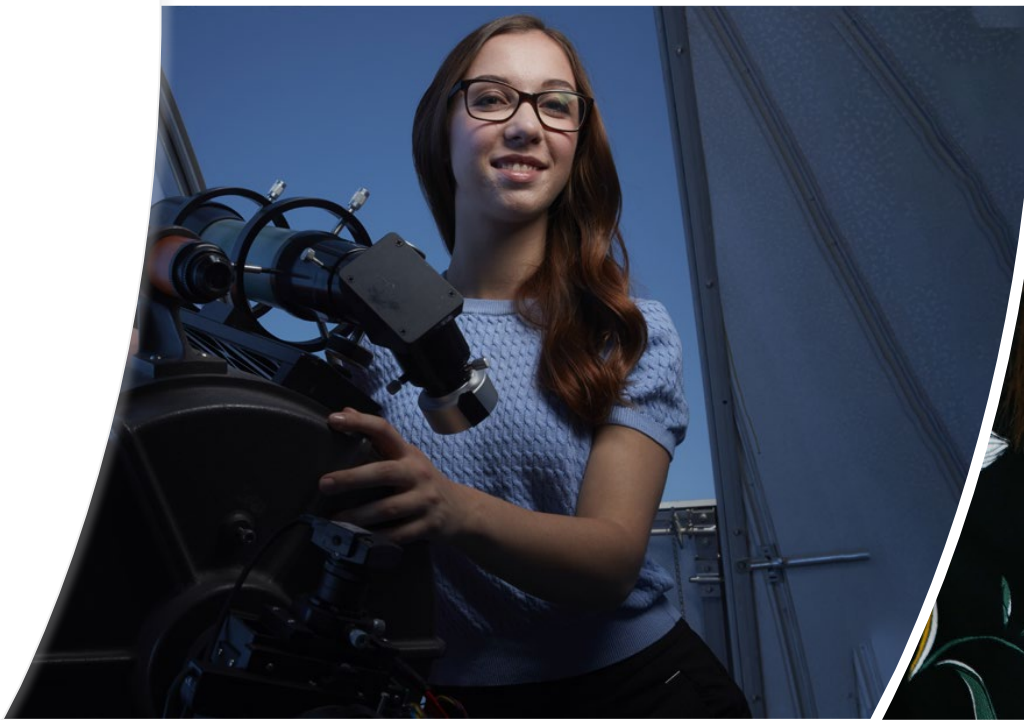
- Space Australia's [Women in Space](#)
- South Australia Space Industry Centre [Career stories](#)
- ANU's [Australian women in the space industry](#)
- Careers with STEM's [Women in space](#)

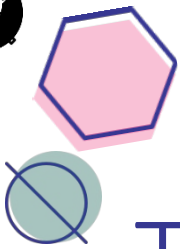


Women in the space industry

And from the
GiST [Q&As](#)

- Imogen Rea
- Kirsten Banks
- Harriet Hunt





Thank You to our presenters

Australian Space Discovery Centre



YouTube: <https://www.youtube.com/c/AustralianSpaceAgency>



Facebook: <https://www.facebook.com/australianspaceagency>



Instagram: <https://www.instagram.com/australianspaceagency/>



Website: <http://www.discover.space.gov.au>



Newsletter: <https://comms.industry.gov.au/australian-space-discovery-centre-subscribe>

Victorian Space Science Education Centre



LinkedIn: <https://www.linkedin.com/company/xvssec/>



Facebook: <https://www.facebook.com/VSSEC>



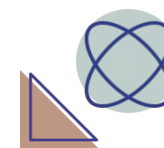
Instagram: https://www.instagram.com/vssec_official/

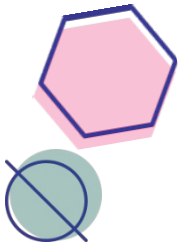


Website and newsletter: <https://www.vssec.vic.edu.au/>



Twitter: <https://twitter.com/VSSEC>





Thank You - stay in touch!



Sign up at www.thegist.edu.au



TheGirlsInSTEMToolkit



girlsInSTEMkit



girlsinstemtoolkit

