

Circular fibres Pitchathon

as part of the "Threads + Opportunities Symposium" 2022



KEY INFORMATION

You're invited to participate in Australia's first circular fibres pitch-a-thon. Open to high school, TAFE, and university undergrads, we are challenging you to explore and invent circular fibre and textile solutions. A "pitchathon" is a challenge where ideas are pitched in a short amount of time to panel of judges. In our event, each pitch takes the form of a 3-minute pre-recorded video entry. Judges watch the video pitches and select the top entries based on the brief below.

Participation is free.

We want to hear your ideas for sustainable fibres and textiles in one of the following themes:

Lessons from First Nations

Redesigning fibres

Tracking Fibre through its life

Fibre Waste

Competition opens: 15 March 2022

Entries close: 2 May 2022 11:59 PM AEST Monday

Winners announced: 23-26 May 2022 at the Threads + Opportunities Symposium (Online)

PRIZES

Prizes for the top three winning entries in each theme will be awarded.

These videos will be displayed as part of the Threads + Opportunities Symposium program. This means your pitch will be watched by Australian and international industry delegates and researchers. Delegates attending the symposium will also have the opportunity to vote for their favorite pitch to win a People's choice award. Prizes include Pitchathon Winner Certificates, 1st, 2nd, and 3rd cash prizes for each of the four themes, sponsor merchandise, and free attendance to the online Threads + Opportunities Symposium. High school and tertiary (undergrad/TAFE students; note that University Honors Students are not eligible) pitches will be awarded separately.

THE BRIEF

Sustainable fibres are a global priority for closing the loop on resource-flow and energy-use. In 2021, the Commonwealth Government added clothing textiles to the product stewardship priority list. The expectation is that all stakeholders – from brands and retailers, to consumers, charities, and recyclers – will play a role in mitigating the environmental impact of textiles and move towards a circular textile economy. Addressing one of the four themes below your pitch can focus on many areas, depending on your interests, for example: fibre design, fibre production, fibre manufacture, fibre sustainability for healthy soils and waters and people, fashion and clothing design, waste-reduction, recycling, synthetic biology, agriculture, or advanced manufacturing.

First Nations fibres on this continent – then, now and the future.

First Nations Peoples have and continue to produce and use fibres in sustainable ways across lands and waters of this continent. For example, naturally renewable and biodegradable fibres from Black Palm have been used in weaving dili bags. Native spinifex has been used as a waterproof material for shelters and as a source of resin; it's incredible cellulosic fibres with unique properties are leading to some new science and materials such as new carbon nanofiber inputs for composite materials with unique properties. Fibres from tree-bark have been used to make rope and nets, taking the uses of fibres beyond textiles. Your pitch could address:

- What can we adapt from Indigenous uses of fibres into our future use?" (What knowledge or practice has an application now and into the future?)
- What fibres have been used for more than one use?
- Are there First Nations uses of fibres that come close to being exemplars of "circular", closing the loop on resource-flow and energy use?

Redesigning fibres - for closing the loop, via natural and man-made fibres.

Textile industries use both natural and man-made fibres. Consumers wear and use a wide range of materials that have different properties for different purposes – such as hand-feel, how well the garment fits the individual, the level of irritants/allergens, the level of breathability and moisture-wicking, whether garments have stretch, and specialist properties such as waterproofing, and much more. Currently, polyester (polyethylene terephthalate, PET) is a man-made synthetic petroleum-based fibre that is the most widely used fibre in textile industries because of its cheap price and attractive properties. However, polyester is a plastic, is not biodegradable, and is very challenging to recycle. Polyester also releases microfibres that pollute soil and water while we are wearing or washing our clothes. On the other hand, plant-fibres are the dominant natural fibre in the global textile industry. Cotton, linen, jute, hemp, as well as animal and insect fibres like wool and silk are naturally biodegradable. Also, products made from one type of fibre can be easily recycled. Can we redesign natural or man-made fibres to still have the great properties that is fit for our needs, but is also more environmentally friendly? Pitch your ideas to re-design functional and sustainable fibres for textiles: For example:

- How can man-made fibres be redesigned so they are biodegradable?
- How can natural fibres be re-designed to have new properties?
- What is the most important property we can re-design into natural/man-made fibres?
- What might a completely biodegradable piece of clothing look like, and how would it be made?

Tracking the fibre through its life: Trends, Challenges, Opportunities for making + tracing sustainable textiles.

Once the fibre is produced it starts a long journey from place of production to a pure or blended yarn, which is then woven into textiles. These textiles are dyed and finished, then constructed into a product like a garment. Over this journey, the fibre passes through many hands and places and often travels vast distances. The product is usually sold at least once, purchased by a consumer, used, or worn once or many times (or not at all), finally ending up as waste. Energy, water, chemicals, dyes, labour, creative design, and many other factors are interwoven during this journey – affecting people, the planet, and businesses.

Your pitch could address:

- How can fashion and/or textile designers play a bigger role in tracking fibre through its life cycle?
- What can fashion and/or textile designers do to make fibre tracing more transparent to consumers?
- Why tracking the fibres is important?
- What technologies could be used to track textile fibres?

Fibre Waste.

Both during and at the end of its life, fibre waste is an issue. For example, when washing synthetic fabrics, microplastics enter the waterways and are causing havoc in our oceans and soils. Donation centers are overwhelmed with clothing and textiles that are poor quality, and so unusable or sellable. Many Australian

donations to charity bins end up being shipped to Africa and end up as landfill overseas. At the very end of life, recycling clothes and fibres is complex and too much ends up in the rubbish.

Your pitch could address:

- How can we address the challenges and impacts of textile or fibre waste in the soil?
- What ways are there to reduce the amount of textile waste the world produces? How can these be improved?
- How can we reduce or contain the amount of fibre waste making its way into the waterways and oceans?
- How can we make it easier and cheaper to recycle textile waste?
- Are there new ways to use fibre waste or recycled fibres so they don't go to landfill?

YOUR ENTRY

Your pitch should be a 3-minute (maximum) video. In this you should:

- SUMMARISE the specific circular fibre challenge or area you are addressing
- Describe your solution
- Explain how your solution addresses this challenge or area

Your pitch should focus on the concept. While the idea should be feasible/practical and scientifically sound, we are not expecting you to have proven results yet. You can use any kind of visuals or video material to support your pitch.

Applications for entering the Pitchathon is via the Symposium webpage – please fill in the application form available on-lien and click submit. Once you (or your team) have submitted an application form, you will receive information on your application including how to upload your video pitch - submission of your video is via an online portal.

PITCH VIDEO RESOURCES, EXAMPLES, AND TIPS

https://www.youtube.com/watch?v=r-iETptU7JY

https://www.youtube.com/watch?v=G6BVhuBvzQY

https://youtu.be/zBhQymJSdKg

https://youtu.be/yXn5UkMPwPw

https://vimeo.com/showcase/8930173

TIME DILATION — explained in an elevator ride | Elevator Pitch

To get started:

- Create mind-maps to focus your central theme and associate ideas (hand-drawn or digitized).
- If the questions feel too big, narrow down your focus to one type of product (tea towels? laptop bags? T-shirts?) or one type of fibre.
- Come up with some keywords (these are helpful to narrow down ideas, but to also offer clarity and connectivity)
- Use these keywords to research your theme, idea, and its challenges
- You don't need to focus on what has been done or what is happening now, go wild and speculate. What could the future of the circular economy look like in 10, 20 or 50 years?
- Have fun with your ideas what do your ideas look like in reverse, upside down, thrown up in the air and rearranged?
- You do not require prototypes, but if you have some or drawings of ideas that you would like to include in your 3-minute video, that would be great.



TERMS AND CONDITIONS OF ENTRY

- 1. This <u>free</u> competition is open to all Australian high school, TAFE, and undergraduate university students. University Honors students are not included.
- 2. Prizes will be given for 1st, 2nd, and 3rd in each theme category. Pitches from high school students and tertiary (undergrad/TAFE, honors students are not included) students will be awarded separately.
- 3. The total prize pool is \$2000 AUD.
- 4. There will also be a people's choice winner drawn from these 24 prize winners for each group of students (high school students and tertiary students), decided by Threads + Opportunities Symposium delegates. The maximum number of prizes is 26.
- 5. Please submit your entries online in the link provided by 11:59 PM AEST Monday 2 May 2022. Submissions after this deadline will not be considered. We encourage the participants to submit their videos earlier to avoid unforeseen issues in the last minute of their submissions.
- 6. English is to be the primary language in submitted videos and communications.
- 7. All videos are to be submitted as ".mov" or "vimeo" files, ideally in landscape format. The minimum length of the video is 1 minute, and the maximum length is 3 minutes. Captions for videos are encouraged.
- 8. Students can work in teams or as individuals. Prizes are per entry. If a team wins it is up to them to work out an equitable prize distribution.
- 9. Participants are allowed to submit multiple entries, but each entry needs to be submitted/registered separately.
- 10. Everyone participating will receive individual digital participation certificates.
- 11.An independent panel of expert judges will be appointed and whose decision will be final.
- 12. The intellectual property rights for entries submitted for judging remain with the entrants.
- **13.**When uploading a video, the entrants also give the organizers and sponsors permission to use their videos for use in education materials with prior consent.
- 14. The organizer will use reasonable efforts to notify the prize winner by no later than two weeks post the symposium closing date. If a winner cannot be contacted or refuses the prize it will be cancelled or offered to the next participant selected by the judges.
- 15.If this competition is interfered with in any way or cannot be conducted due to any reason, the organizer reserves the right to modify, suspend, terminate, or cancel the competition, as appropriate and permitted by the law.
- 16.To enter the competition participants will need to provide the organizer with participant's names, email addresses, school or institution name and location. We collect this personal information to check eligibility and to conduct the competition. CSIRO's Privacy Policy is available at: https://www.csiro.au/en/about/policies/privacy

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Threads and Opportunities Symposium 2022 Webpage:

https://events.csiro.au/Events/2022/February/8/Threads-and-Opportunities