

## Delegation – Japan Science Museum Association (JASMA)

Date: Thursday 18 March 2021

Time: 16.30 – 18.30pm (ADST Canberra), 14.30 – 16.30pm (Tokyo)

Location: Galleries, Questacon Parkes

### Purpose of visit

Questacon is hosting a virtual tour of Parkes for our JASMA colleagues.

Miraikan serves as the secretariat of the Japan Science Museum Association (JASMA). JASMA have been conducting overseas study tour every year, but due to the pandemic, have moved to an online tour this year. They have partnering with a travel agency for the first online tour. Participants will join from science centers around Japan.

Questacon has been selected as the first destination for the tour.

### Pre-Tour Videos

- [https://www.youtube.com/channel/UCzW1vsUdcnHQLKw\\_ryQcy0g](https://www.youtube.com/channel/UCzW1vsUdcnHQLKw_ryQcy0g) Questacon overview
- <https://www.youtube.com/watch?v=QZVMVjgXp-k> Questacon as a COVID safe science centre

### Background

#### Questacon's 1988 Establishment

On 23 November 1988, Questacon was opened as a joint Australia- Japan Bicentennial Project. The Government and business community of Japan contributed AU\$10 million funding. During the 31 year relationship, there has been an active program of cooperation between Questacon and various Japanese Government agencies and organisations, including cooperation agreements with the National Museum of Nature and Science and with the National Museum of Emerging Science and Innovation (Miraikan).

#### Questacon and the Japan Aerospace Exploration Agency (JAXA)

Questacon accepted delivery of a Hayabusa 1 exhibit from the Japan Aerospace Exploration Agency (JAXA) in 2010. Hayabusa 1 landed near Woomera, South Australia in 2010. Questacon accepted delivery of the Hayabusa 2 exhibit in August 2018 to showcase the project currently underway. The exhibits have been publicly displayed at Questacon during the Hayabusa 2 mission that returned to Earth on 6 December 2020.

#### 2014 Questacon Science Circus Tour Japan

The tour engaged 14,700 students and families during its delivery in April and May 2014. Over 5-weeks the travelling exhibition and science presentations toured tsunami-recovering communities in the Tōhoku region of north-eastern Japan. Delivered in partnership with Japan's National Museum of Emerging Science and Innovation (Miraikan) and supported by Scitech Discovery Centre (Perth), the tour introduced the successful Questacon Science Circus outreach model of science communication to Japan. The tour was funded by the Department of Industry and sponsored through a grant provided by the Department of Foreign Affairs and Trade through the Australian-Japan Foundation.

The tour promoted and raised the international profile of science communication. In legacy of the Australia-Japan relationship. The 30 portable hands-on science exhibits displayed on tour were gifted to participating science centres and schools upon completion of the tour in Minamisanriku, Morioka, Kuji and Misawa.

#### 2018 Questacon Science Circus Tour Japan

In October and November 2018 Questacon toured Osaka, Nara, Nagoya and Kochi in Western Japan. Ambassador Extraordinary and Plenipotentiary of Japan, His Excellency Mr Sumio Kusaka accepted three Australian science exhibits gifted from Questacon to science centres in Osaka, Nagoya and Kochi to recognise their participation in the tour. The tour:

- Engaged over 4,600 school students and a public audience of over 19,000 in four cities through high-energy science shows and hands-on science demonstrations.
- Was supported by the Australian Government through the Australia–Japan Foundation of the Department of Foreign Affairs and Trade with Japan as the Country of Focus in the 2018 Australia Now program.
- Was delivered by Questacon in partnership with Australian National University, Osaka Science Museum, the Japan Science Museum Association (JASMA) and other local partners.
- Built science communication and engagement capacity in both Japanese and Australian science communicators.

### **Questacon & INPEX Ichthys Pty Ltd**

Questacon's partnership with INPEX Ichthys Pty Ltd focuses on SDG7 of the United Nations' Sustainable Development Goals - affordable and clean energy.

- The partnership, over four years, will deliver a suite of hands-on science, technology, engineering and mathematics activities, focusing on building energy literacy in Australia and Japan.
- The purpose of Questacon's partnership with INPEX is to inspire the next generation through a suite of activities focused on young people, energy and sustainable futures.
- The program will be delivered in communities across Australia and Japan, enhancing Australia's relationship with Japan.
- Through four activities, designed to inspire and engage, the partnership will raise awareness and generate a greater understanding of energy. Activities will also highlight the availability of affordable, reliable, sustainable modern energy.
- The four activities are:
  1. The young person's energy dialogue seeks to inspire global change to address complex issues about power generation, increases awareness of SDG7 and provides a cultural exchange between students from Australia, Japan and Indonesia.
  2. Energy shows seek to improve energy literacy through entertaining demonstrations which will build a greater understanding of the concepts of energy.
  3. Questacon STEM Futures will support teachers to develop and encourage an inquiry mindset with their students to facilitate learnings about energy. STEM Futures will be delivered to educators in Western Australia and the Northern Territory.
  4. Science Circus Tour Japan will see a legacy of science communication and exchange between Australian and Japanese science communicators. It will build capacity and skills through creating hands-on, inquiry-based science activities and education in Niigata and surrounding regions.

### **Questacon's Karakuri Puppets**

In 1988 the Japanese Government gifted to the Australian people two traditional Karakuri puppets. One puppet in traditional costume and the other mechanised with exposed robotic technology, operated by pulleys and strings through an electronic control box. Questacon accepted custodianship of these puppets, to be displayed in the Questacon Centre.

In 2018 in preparation for Questacon's 30th anniversary, a decision was made to restore the second puppet using the skill set of our in-house workshop team along with the assistance of curators from the National Museum of Australia to enable a basic level of non-synchronised movement by the puppet. The work conducted delivered repairs and replacement of parts plus additional development work to replace the existing pneumatics with cord controls coupled to a more sophisticated but non-synchronised operational level.

The restored Karakuri Puppet was displayed at official engagements with the Japanese Embassy (Emperor's birthday celebration in December 2018) and showcased at public activities celebrating Questacon's 30th anniversary in November 2018.

FOH itinerary to avoid school groups visiting Questacon

	Gallery 1	Gallery 2	Gallery 3	Gallery 4	Gallery 5	Gallery 8
16:15	16-16:20			16-16:45	16-16:45	
16:30	16:30 foyer	16:15-16:45				
16:45	16:45 G1		16:25-17:05			16:40-17:00
17:00	17-17:20	17:00				
17:15		17:15-17:45		17-17:45	17-17:45	17:15
17:30			17:30			
17:45				17:45 - Schmidt studio		17:40-18:00
18:00	18-18:20			18:00 - G4/5		
18:15		18:15-18:45		18:15 - Early learning? TBC		
18:30			18:25-19:05			
18:45						18:40-19:00





## Run Sheet

When	Duration	Who	Where	What/ themes explored	Notes
From 16.00pm	N/A	All	Zoom	Connect to Zoom, test WIFI, connections and microphones	2-3 tablets with microphones in the galleries at Parkes  Presenters will be dispersed in galleries. This will minimise time delays and transitions
16.30pm	10 minutes	Professor Graham Durant, Director  Dr Bobby Cerini, Deputy Director, Science and Learning	Questacon Ceremonial Entrance and Japan Wall, Foyer	Welcome and introduction to the history of Questacon and relationship with Japan	Virtual tour starts  Graham and Bobby send their apologies as they both have other engagements and are unable to stay for the full tour.
16.40pm	20 minutes	Concepts  Travelling exhibitions	Gallery 1 Australia in Space	Questacon's exhibitions and use of public data to inform government policy	Concepts team introduce Questacon's exhibition process  Travelling exhibitions talk about Questacon's travelling program Questacon's newest exhibition, installed 12 March 2021  JASMA interested in: <ul style="list-style-type: none"><li>• The flow of making new exhibit room/temporary exhibition</li><li>• The valued things while making new exhibits, especially for the concepts</li><li>• The flow of evaluation, verification and updating/improvement of exhibits</li></ul>

17.00pm	15 minutes	Concepts Production Visitors Services and a volunteer	Gallery 2 Fundamenta l	Questacon's Volunteer program and original science exhibits	<p>Concepts introduce Questacon's Fundamental exhibition</p> <p>Production talk a little about the history of exhibits (e.g. Harmonograph and Gravitrax)</p> <p>Visitors Services introduce a volunteer, stationed at Volunteer Corner, and Questacon's volunteer program (possible short interaction at Volunteer Corner)</p> <ul style="list-style-type: none"> <li>• In 1977 Questacon began as a volunteer-led organisation, led by Founding Director Professor Mike Gore, at Anslie Primary School, Canberra</li> <li>• In 1988 Questacon opened as Australia's National Science Centre thanks to funding provided by Japan</li> <li>• Questacon has always and continues to have a close association with volunteers...</li> </ul>
17.15pm	15 minutes	Graham Joel Barcham	Gallery 8 Mars	Questacon's space themed exhibitions and public engagement activities through COVID-19 (M2M and M2M junior)	<p>Hayabusa 1&amp;2 exhibits and JAXA relationship</p> <p>Joel Barcham on standby to support Graham who has an offsite engagement at 5.30pm</p>
17.30pm	5 minutes	Learning Programs (TBC)	Gallery 3 Awesome Earth (spinning bodies and earthquake house)	Questacon's space themed exhibits	<p>Faraday Cage/Tesla coil scheduled activates at 5.40pm</p> <p>This gallery is being toured briefly to allow more time for early learning below</p>

17.35pm	10 minutes	Emcee (TBC)	Gallery 4 Schmidt Studio	<p>Questacon's digital engagement and studio</p> <p>Virtual tour of Questacon's exterior and science garden</p> <p>Speak to Questacon Science Circus and virtual excursions</p>	<p>Pre-recorded footage will be shown on a green screen</p> <p>Questacon may need control of Zoom to show this content (TBC with Miraikan)</p>
17.45pm	20 minutes	Learning Experiences (TBC)	Gallery 7 Science Sprouts	Questacon's early learning programs, and the integration with Centre activities	<p>JASMA interested in:</p> <ul style="list-style-type: none"> <li>• The methods to create new early childhood program, and the values and approach to create new early childhood program</li> </ul>

18.05pm	15 minutes	Learning Experiences (TBC)	Gallery 4 Q Lab	Questacon's science experiments and science shows	<p>JASMA interested in:</p> <ul style="list-style-type: none"> <li>• The methods to create and evaluate science shows</li> </ul>
18.20pm	10 minutes	Emcee (TBC)	Gallery 5 Questacon's response to COVID-19	Engaging audiences in a post-COVID world	Brief overview of Questacon's evolution to hands-on science engagement in a COVID safe world
18.25pm	N/A	Emcee (TBC)	Gallery 8 Mars	Thank you and follow-up/farewell at the end of the tour	Virtual tour ends