

For Immediate Attention of the Media

March 19, 2014

National Museum of Emerging Science and Innovation (Miraikan)

## Questacon – The National Science and Technology Centre of Australia 2014 Science Circus Tour Japan April 24 (Thurs) to May 25 (Sun), 2014

The National Museum of Emerging Science and Innovation (Miraikan), in partnership with Questacon – the National Science and Technology Centre of Australia, will hold the “2014 Science Circus Tour Japan” in science museums and schools in the Tohoku region. The Science Circus is a program that tours hands-on exhibits and science shows. It brings excitement and discovery in science and encourages children’s hopes and dreams. There are thirty exhibits that let participants play and learn, and educational science shows about the mystery of sound and the movement of objects such as pendulums. After kicking off at Miraikan, the tour will go to Tohoku to visit science museums and schools in Minamisanriku in Miyagi, Morioka and Kuji in Iwate, and Misawa in Aomori. At each science museum, the local staff will cooperate with Questacon and Miraikan’s science communicators to create science shows. At the schools, Japanese and Australian Science Circus staff will visit with cooperation from the local board of education to perform a thirty minute science show and interact with the students, providing an opportunity to learn while having fun with science.

2014 signifies Questacon’s 25<sup>th</sup> anniversary. To celebrate 25 years of inspiration, Questacon will hold this tour to celebrate Japanese-Australian friendship and to demonstrate their appreciation to the Japanese government and industry for providing half of the construction costs for Questacon in 1988. Tohoku was chosen as the location for the tour due to Australia’s continuing involvement in recovery efforts following the Great East Japan Earthquake, and as a way to support areas affected by the disaster. Questacon’s Science Circus has toured Australia and other countries, but this will be the first time it tours in Japan.

On Saturday April 26<sup>th</sup>, in commemoration of the introduction of “2014 Science Circus Tour Japan,” it is our honor to host a lecture at Miraikan presented by Dr. Brian Schmidt, who is the 2011 Nobel Laureate in Physics and is a member of Questacon’s Advisory Board.

### ■Overview ■

**Term:** April 24 (Thurs) to May 25 (Sun), 2014  
**Organizer:** National Museum of Emerging Science and Innovation (Miraikan)  
 Questacon - The National Science and Technology Centre of Australia  
 Board of Education, Minamisanriku, Morioka Children’s Museum of Science, Board of Education, Morioka, Kuji Amber Hall, Board of Education, Kuji, Misawa Aviation & Science Museum, Aomori, Board of Education, Misawa  
**Coorganizers**  
 Board of Education, Morioka, Kuji Amber Hall, Board of Education, Kuji, Misawa Aviation & Science Museum, Aomori, Board of Education, Misawa  
**Supporter** Australian Embassy, Tokyo  
**Funded by** Australia-Japan Foundation, Department of Foreign Affairs and Trade  
**Collaborator** Scitech Discovery Centre, Australia



A Science show touring in Australia.

### ■Tour Schedule ■

April 26 (Sat)-April 27(Sun)	Tokyo: Opening ceremony and exhibition at Miraikan
April 30 (Wed)- May 4 (Fri)	Minamisanriku, Miyagi Pref: Exhibition and Science shows at Bayside Arena; Science shows at seven elementary schools and junior high schools
May 7 (Wed)- May 11 (Sun)	Morioka, Iwate Pref: Exhibition and Science shows at Morioka Children’s Museum of Science; Science shows at six elementary schools
May 14 (Wed)- May 18 (Sun)	Kuji, Iwate Pref: Exhibition and Science shows at Kuji Amber Hall; Science shows at four elementary schools
May 21 (Wed)- May 25 (Sun)	Misawa, Aomori Pref: Exhibition and Science shows at Misawa Aviation & Science Museum; Science shows at seven elementary schools

Inquiries from general visitors:  National Museum of Emerging Science and Innovation (Miraikan) TEL: +81-3-3570-9151 / FAX: +81-3-3570-9150 URL: <a href="http://www.miraikan.jst.go.jp">http://www.miraikan.jst.go.jp</a>	For information on this release, please contact:  Public Relation Section, Exhibition Development Division, Miraikan 2-3-6, Aomi, Koto-ku, Tokyo 135-0064 TEL: +81-3-3570-9192 / FAX: +81-3-3570-9150 EMAIL: <a href="mailto:press@miraikan.jst.go.jp">press@miraikan.jst.go.jp</a>
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## [Exhibition Outline]

These exhibits let participants learn while being entertained, with subject matter including various natural phenomena that we see in our daily lives, such as sound, light, gravity, balance, friction and resonance. The thirty brightly colored exhibits all have explanatory panels, and are not only fun to interact with, but also show how understanding is fun. Below are descriptions of several of the exhibits.

### ■Be-San-ophone ■

This is a unique exhibit where a beach sandal is used to hit the openings of colorful pipes of different lengths to produce sounds. Pipes of different lengths produce sounds of different pitches, so it may be possible to play songs. As the term sound waves suggests, sound is waves in the air, or in other words vibration of the air. The pitch and frequency of sound is related to vibration of the air. Since the air in the long pipes vibrates slowly for a long time, a low sound comes out when hit. On the other hand, since the air in the short pipes vibrates quickly for a short time, a high sound is made. The same principle is used for pipe organs.



### ■Packing Parcels■

There are nine parcels of varying sizes. This exhibit involves thinking about how to place these parcels so that they will all fit nicely into one large crate. The smaller parcels will be put in, taken out and adjusted in attempts to fit all the parcels in. Cleaning up is something that everyone does at some point, and when doing so the brain is considering the three-dimensional space. It is often more difficult to think of space in three dimensions than it is to think of space in two dimensions. Even people who are good at two-dimensional puzzles may become engrossed in this exhibit.



### ■Balancing Nails ■

Can you balance six nails on top of one fixed nail without any of them touching the table? This exhibit involves thinking about the centre of mass and the support point of the nails and balancing them while placing them. Objects are balanced when their centre of mass is directly above the support point, but if the centre of mass is below the support point then the object hangs from that point. This principle of centre of mass and balance is used for the roofs of houses. Think like an architect building a house when attempting this exhibit.



### ■Touch Test ■

There are five materials on top of the box and five inside the box. First, touch the material outside the box, and then put your hand inside the box to try and find the same texture. When checking objects with touch alone, we need to move our fingers across a texture, so touch receptors in our skin can be stimulated. Your fingers and thumb, and your lips, are the most touch-sensitive parts of your body as they have the most nerve endings.



\*Related press releases are on the Miraikan's website.  
URL: <http://www.miraikan.jst.go.jp/en/press/>

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## Opening Ceremony Information 2014 Science Circus Tour Japan

Date: Thursday April 24<sup>th</sup>, 2014  
 Time: 18:30- 20:30  
 Location: National Museum of Emerging Science and Innovation (Miraikan)  
 1F Symbol Zone  
 Reception: From 18:00, Entrance 1F, Miraikan  
 Schedule: 18:30- Dr. Mamoru Mohri (Chief Executive Director, Miraikan)  
 Professor Graham Durant (Director, Questacon)  
 Mr. Bruce Miller (Australian Ambassador to Japan)  
 18:50- Toast  
 19:00- Time to view exhibits  
 19:40- Science Circus Tour Starting Declaration  
 Science show by Questacon and Miraikan science communicators  
 20:00 End of the opening ceremony



From April 24<sup>th</sup> (Thurs) to May 25<sup>th</sup> (Sun), the National Museum of Emerging Science and Innovation (Miraikan) (Chief Executive Director Mamoru Mohri; Address: Aomi, Koto-ku, Tokyo) will hold the 2014 Science Circus Tour Japan. Details are given above for the opening ceremony to be held. We would be very pleased if you could attend despite your busy schedule.

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### FAX Application Form (Please send this sheet) [FAX 03-3570-9150] Returned by April 24th, 2014 (Tues)

Company / affiliation \_\_\_\_\_ Name \_\_\_\_\_

Number of delegates \_\_\_\_\_ Camera  Will use  Will not use \_\_\_\_\_

TEL \_\_\_\_\_ FAX \_\_\_\_\_ E-mail \_\_\_\_\_