

**SPEECH BY DR FRANCIS YEOH  
CHIEF EXECUTIVE OFFICER, NATIONAL RESEARCH FOUNDATION  
AT THE OFFICIAL OPENING CEREMONY OF  
THE EARTH OBSERVATORY OF SINGAPORE (EOS)**

**Thursday, 19 February 2009, 10.30AM**

**at**

**Nanyang Technological University**

Dr Su Guaning

President, Nanyang Technological University

Chairman Tan Gee Paw and members of the Earth Observatory Governing Board

Professor Kerry Sieh,

Director of the Earth Observatory

Distinguished Guests,

Ladies and Gentlemen,

- 1 I would like to add the congratulations and good wishes of the National Research Foundation to NTU and Professor Sieh at this official opening of the Earth Observatory of Singapore, which is one of a small number of world class Research Centres of Excellence or RCE funded jointly by the NRF and the Ministry of Education. I am sure my good colleagues at the Ministry of Education would also join me in expressing the same good wishes.

- 2 Both MOE and NRF view the RCE programme as a very strategic initiative to build up several world-class research centres that would grow into peaks of excellence in our local universities. The RCE initiative, together with other NRF programmes as well as efforts by agencies such as A\*STAR and EDB would position Singapore as a leading nation in science and technology R&D and a major node in the global knowledge network.
  
- 3 Although Singapore is a tiny country, it's bold plans to invest in research and innovation are quite well known around the world. Barely a month ago, the NRF announced support for 4 large research projects of about \$10m each, dealing with various aspects of 'Ageing'. A couple of days later, the NRF announced the second award of the NRF Research Fellowship to 10 bright young scientists from all over the world. The NRF Fellowship gives these young scientists their first opportunity to lead an independent research team at our local universities. And a month before that, NRF awarded 9 proof-of-concept grants to researchers from the universities and polytechnics for them to take their research from the lab and turn them into prototypes for possible commercialisation. The proof of concept grant is part of a slew of initiatives under NRF's National Framework for Innovation and Enterprise which aimed to build a vibrant innovation eco-system in Singapore. So the RCE programme, along with the various other initiatives I described would be expected to grow the research and innovation capability of our institutions of higher learning. They are all in line with Singapore's strategy to invest in R&D as a driver for economic growth and as a foundation for long-term competitiveness.
  
- 4 The RCE programme has gone off to a good start. Three RCEs have been approved for funding so far by NRF and MoE. The first RCE was the Center for Quantum Technologies at the National University of Singapore, led by Professor Artur Eckert from Oxford University. The next 2 were the Earth Observatory of Singapore, for which we are celebrating the opening

today, and the Cancer Science Institute of Singapore, led by Professor Daniel Tenan from the Harvard Medical Center. A 4<sup>th</sup> RCE should be announced shortly, subject to the approval of the NRF Board. .

- 5 The EOS will receive S\$150 million funding from NRF and MOE for the next 10 years to carry out research in earthquakes, tsunamis, volcanic eruptions, sea-level rise, tropical storms and other natural hazards.
- 6 Let me assure everyone here, especially our guests from abroad, that Singapore is very safe from these hazards of nature – we have been fortunate to have been well shielded. However, the larger Southeast Asian region where we are located, is an area of colliding tectonic plates, tropical storms, typhoons and volcanic activities – fertile ground for earth sciences research. So the understanding of the earthquake geology of Southeast Asia gained through the research by Professor Kerry Sieh and his team at the EOS would certainly help the region to be better prepared for the inevitable earthquakes and tsunamis when they occur. Such knowledge would be highly valuable to government and industry alike. The EOS therefore, would be an important centre of information and expertise on earth sciences in the region as well as beyond.
- 7 I'm pleased that Prof Sieh has started the EOS with a great team of renowned experts in earth science. Among them are: Prof. Chris Newhall, a highly respected authority on volcanism of Southeast Asia from the Philippines who invented the widely used Volcanic Explosivity Index (VEI), and Prof. Paul Tapponnier, an earthquake expert from Institut de Physique du Globe de Paris in France who was one of the first to understand the huge potential of satellite imagery for looking at active large-scale tectonics. I am sure the EOS will attract many more noted earth scientists, seismologists and geologists in the years ahead.

- 8 I note with interest the news last Thursday, February 12 about a major earthquake with a magnitude of 7.0 that struck off the northeast tip of Indonesia's Sulawesi Island. I understand that Prof Kerry Sieh and his colleagues had, in a paper in Nature on 4 December 2008, reported that the analysis of the coral and GPS data together with seismological records and remote sensing data from the Mentawai islands raised the likelihood for another large earthquake off the coast of Sumatra. This reinforces our belief about the importance and timeliness of the EOS for the region.
- 9 I understand too that the EOS has been the catalyst for a new education program at NTU. An Earth Science related post-graduate programme will be established and expects to admit its first group of students in 2010.
- 10 Let me congratulate Prof Kerry Sieh and his team for having already created impact for the EOS even as the Centre is just being set up. I look forward to great and ground-breaking (not referring to earthquakes!) achievements arising from the EOS in the years to come.
- 11 Thank you.