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**SPEECH BY GEORGE YEO, MINISTER FOR FOREIGN AFFAIRS,
AT THE OFFICIAL OPENING OF THE 3RD INTERNATIONAL
CONFERENCE ON BIOENGINEERING AND NANOTECHNOLOGY
(ICBN 2007) ON 13 AUGUST 2007 AT 9:30 AM AT THE BIOPOLIS**

1. In case you are wondering why the Foreign Minister is addressing you this morning, please allow me to explain. When the Singapore Government gave a decisive push to the biomedical sector in the year 2000, I was then the Minister responsible. The Agency for Science, Technology and Research, or A*STAR, is a statutory body under the Ministry of Trade and Industry. It was during my watch when Jackie Ying was appointed by Philip Yeo as the Director of the Institute of Bioengineering and Nanotechnology. So, when Jackie invited me to officiate at this opening, it was hard for me to say 'no' diplomatically.

2. But I am delighted to be here this morning. It is good to have the 3rd International Conference on Bioengineering and Nanotechnology (ICBN) back in Singapore. ICBN is the first international conference devoted to exciting new possibilities at the interface of bioengineering and nanotechnology. By integrating nanoscopic and macroscopic engineering,

scientists can create novel biomaterials and medical devices which mimic biological systems and functions.

3. Since the launch of the National Nanotechnology Initiative by the US in the year 2000, at least 35 countries around the world have initiated national programmes in nanotechnology. It has been estimated that, from 1997 to 2003, government organisations worldwide have increased their R&D investments six-fold. In Singapore, we have identified it as an exciting new area for our own economic development.

4. A*STAR's objective is to stimulate university research through specific program initiatives related to nanotechnology, such as nano-electronics, polymer and molecular devices, computational materials science, and electro-mechanical systems (MEMS/NEMS). Presently, the research institutes of A*STAR do nanotechnology research in areas like nanomagnetism, spintronics, nanoimprinting, nanophotonics, nanocomposites and applied catalysis. IBN does research at the interface of nanotechnology and bioengineering. Since its inception in 2003, IBN's staff has grown to more than 180. Its researchers are recruited from over 19 countries, from top universities in the US, Europe and Asia. For a relatively young institute, IBN has done rather well creating novel biomaterials,

medical devices and chiral pharmaceuticals, resulting in 346 publications and 380 patent applications in the past 4 years.

5. According to a Lux Research Report published in November 2005, Singapore, together with Taiwan and Israel, are three economies, which have become global niche players in nanotechnology. I remember having a long conversation with President Shimon Peres in Israel a few years ago on the importance of nanotechnology. In case you did not know, he has become an absolute convert, even a missionary!

6. For Singapore, a city-state which lacks space and has no natural resources, the biomedical sector suits us well. We are small but we are relatively well-run. Having a cosmopolitan outlook, Singaporeans welcome foreigners into our midst. Our culture enables people of diverse backgrounds to come and work together on the basis of equality, using English as the common language. Since our Free Trade Agreement with the US was signed a few years ago, our protection of intellectual property has become the best in Asia. In six years, the value of the biomedical sector more than tripled from S\$6 billion in 2000 to S\$23 billion last year. The future of the sector looks promising. For R&D, the activities are concentrated here at the Biopolis. We were flattered when SCIENCE journal described the Biopolis as a 'scientific Emerald City'.

7. Chandrababu Naidu, the former Chief Minister of Andhra Pradesh, a state of India - an able man with a far-sighted view of the importance of IT - once described Singapore to me as a city built on nanotechnology. He meant it figuratively of course. He was explaining to me why a big country like India should be interested in the intricate workings of a city-state. Singapore adds value, not by scale or volume, but in the selection of good ideas and the development of new ideas. Ideas are like seeds. They occupy little space but they are the most important. A good seed will produce a valuable crop. A good fry makes fish farming worthwhile. The right DNA is decisive. Singapore thrives only to the extent that it is a crucible for interesting ideas. We cannot create such a mix by ourselves. We have to be like an Italian renaissance city-state welcoming talented individuals from near and far, and facilitating their creative development. On this basis, Singapore has plenty of space which was the point Naidu was making to me.

8. As I leafed through the resumes of the scientists making presentations at ICBN 2007, I must confess to being in awe of your knowledge and accomplishments. You are a remarkable collection of brilliant minds and we are so fortunate to have all of you here in Singapore.

9. I wish you a productive conference. Thank you.

