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It was said...



LEE MYUNG-BAK

President of South Korea

"(...) I sincerely pledge to you that I will dedicate my body and soul to this historic mission of the time.

These are my promises to you:

I will serve the people and bring peace to this nation,

I will invigorate the economy and unite our society,

I will enliven our culture and advance our science and technology,

I will strengthen our security and lay the foundation for peaceful unification.

I will faithfully carry out our duties to the international community and contribute to the prosperity of all peoples.(...)

We fought for and regained our land that had been taken from us and established our nation. We gave our best to our day's work.

As a result, our great nation achieved what no other nation ever achieved in history. In the shortest period of time, this nation achieved both industrialisation and democratisation. Never before seen in human history, we achieved all this with only our own fierce determination and sheer fortitude. That is how one of the poorest countries in the world has come to bid for its place among the 10 largest economies in the world. A country that lived by the mercy of others is now able to give to others in need and stand shoulder to shoulder with the most advanced countries. Some say this is a "miracle". Others say this is a "legend". But we know what it truly is. This is not a miracle but the shining crystallisation of our blood, sweat and tears. This is not a legend but a genuine testimony to how each and every one of us has lived.(...)

The miracle will continue. The legend will go on. I will reignite the engine of growth that once marveled the whole world and make it pump harder. I will take the lead, and with you beside me as one, we can do it. (...) Beyond the miracle of the Han River, let us now embark together on creating a new legacy (...). I (...) will take the lead. When we march together as one, we can do it. We will do it."

From President Lee Myung-bak's Inaugural Address on 25th February, 2008 in Seoul, South Korea

Editorial

Daejeon, located in the centre of South Korea, is the capital city of Chungcheongnamdo Province. It is the fifth largest city in South Korea. The Daejeon area was historically known as Hanbat, a native Korean term for "large field", during the Joseon Dynasty. The term "Daejeon" simply means the same thing in Hanja. Daejeon is a seat of KAIST, formerly known as Korea Advanced Institute of Science and Technology. It is a research university located in Daedeok Science Town, Daejeon, South Korea. KAIST was established in 1971 as the nation's first graduate school specialising in science and engineering education and research. In January 2008, the university dropped its full name, Korea Advanced Institute of Science and Technology, and changed its official name to only KAIST. It is the nation's leading science and technology institution and is considered to be the MIT of South Korea. The University helped pioneer establishment of competitive graduate school programmes in Korea. The goals of KAIST are to become one of the best science and technology universities in the world, and to become one of the top-10 universities by 2011. Over the last 36 years, KAIST has educated 33,380 scientists and engineers, 6,867 PhD graduates, 17,911 master's degree holders and 8,602 bachelor's degree holders. KAIST is home to young doctorate degree holders who are in their twenties, with 43 percent, or 2,920 out of 6,726 doctoral graduates, in their twenties upon graduation. KAIST graduates are working in universities, businesses and research institutes as well as in some of the most prestigious schools abroad. In spite of KAIST there are yet 22 other research institutes are localised in Daejeon. The best known among them are the Korea Research Institute of Bioscience and Biotechnology (KRIBB), the Korea Atomic Energy Research Institute (KAERI), a leader in nuclear power, the Electronic and Telecommunications Research Institute (ETRI) whose WiBro technology has been adopted as the international standard for 3G wireless communication, the Korea Aerospace Research Institute (KARI), developer of the KOMPSTAT satellite programme and the National Fusion Research Institute which just unveiled the KSTAR nuclear fusion reactor. Because of that reason Daejeon belongs to the most important scientific centres in South Korea.

In turn Pohang belongs to the most important industrial cities in South Korea. It is a city in North Gyeongsang Province, South Korea. Pohang, previously a fishing port whose major industry was processing fish and marine products, became a major industrial centre. It is the home of the Pohang Iron and Steel Company, or POSCO and a host of related industries. With the new addition, POSCO becomes the world's second largest producer of sheet-steel just behind ArcelorMittal. In addition to the huge integrated steel mill, Pohang became an industrial complex housing companies that manufacture finished steel products of raw materials provided. As a result of the steel industry, the port of Pohang is active. Currently, POSCO operates two steel mills in the country, one in Pohang and the other in Gwangyang. Along with Samsung, POSCO is viewed by many Koreans as a symbol of national pride and 'can do' spirit. With the strong Korean ship-building and automobile industry dependent on POSCO for steel, it has been seen as the bedrock of Korea's industrial development over the past 40 years.

The capital of South Korea is Seoul, one of the largest metropolitan city in the world. Seoul, is consistently placed among the world's top ten financial and commercial cities. Seoul's influence as a leading business, financial, technology and cultural centre contributes to its status as a major global city. The city is located on the basin of the Han River in the country's north-west. The Seoul National Capital Area includes three UNESCO World Heritage Sites: Changdeokgung, Hwaseong Fortress and the Jongmyo Shrine. Seoul has one of the world's most technologically advanced infrastructures. Seoul Station houses 300 km/h KTX bullet trains and the Seoul Subway is currently the third largest in the world. AREX train connecting Incheon and Gimpo Airport. Seoul is connected to every major city in Korea by railroad. Seoul is also linked to most major Korean cities by the KTX high-speed train, which has a normal operation speed of more than 300 km/h.



South Korea, officially the Republic of Korea and often referred to as Korea, is a country in East Asia occupying the southern half of the Korean Peninsula. "Land of the Morning Calm" to popular name of South Korea. However, today the name – one of the "Four Asian Tigers" in relation to South Korea is more often met, because of South Korea's transformation into a developed country during the latter half of the 20th century. It is often called the Miracle on the Han River. South Korea is a developed country with a high standard of living with the 4th largest economy in Asia and the 15th largest in the world. An extremely competitive education environment and motivated workforce are two key factors driving this knowledge economy. South Korea is regarded as a strong economy, despite lacking natural resources and having the smallest territory among the G-20 major economies. Like West Germany and Japan, rapid industrialisation since the 1960s has made South Korea one of the world's top ten exporters. South Korea has the second highest savings rate in the developed world and has the world's sixth biggest foreign exchange reserves. South Korea is leading in technologically advanced goods such as electronics, automobiles, ships, machinery, petrochemicals and robotics. Many globally well-known South Korean concerns such as Samsung, Hyundai-Kia, Hyundai Heavy Industries, LG, SK, and POSCO have rapidly grown to become world leaders in their respective industries. South Korea is a member of the United Nations, WTO, OECD and a founding member of APEC and the East Asia Summit, and a major non-NATO ally of the United States. Among Fellows of the World Academy of Materials and Manufacturing Engineering there are a few from South Korea, first of all Professor Yong Taek Im from KAIST in Daejeon, very famous worldwide and very active. This Issue of the Journal AMSE is dedicated to him.

We deliver to P.T. Readers the next Issue of the Journal AMSE. I thank all who contribute by their work and involvement cause that the next issues of the monthly are systematically published. As usual I invite P.T. Readers for reading of this Issue, and also encourage P.T. Authors to publish their next papers in the journal.

A handwritten signature in black ink, appearing to read 'Leszek A. Dobrzanski'.

Prof. Leszek A. Dobrzanski M.Dr H.C
Editor-in-Chief of the AMSE
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Gliwice, in 2009