

“Science is People!”
**An Unabashed Personal Report of the Inauguration of the Alan G. MacDiarmid
Institute of Jilin University, 2001**

Preface: As the new Vice President for Research and Graduate Education of the University of Texas at Dallas, I led a strong academic and industrial delegation to China to participate, among many activities, the inauguration of the Alan G. MacDiarmid Institute of Jilin University, and made visits to Beijing and Hong Kong.

Preamble

From November 7th through the 17th, a delegation from the University of Texas at Dallas (UTD) visited China. Our primary reason for going to China was in response to invitation issued by Professor Zhong-shu Liu, President of Jilin University, to UTD to attend from the 9th to the 12th the following activities:

- The inauguration ceremony of the Alan G. MacDiarmid (AGM) Institute of Jilin University (JLU). AGM is the 2000 Chemistry Nobel laureate;
- The formal appointments by Jilin University of two delegation members as honorary and guest professors respectively, and
- The signing of a Memorandum of Understanding (MOU) between UTD and JLU. This will be framework for future collaborations between the two universities.

Since AGM is the 2000 Nobel laureate in Chemistry, the inauguration ceremony, as expected, attracted media attention throughout China.

In Beijing, we were hosted by the Director of the Institute of Applied Physics and Computational Mathematics, Dr. Xian-Geng Zhao, and took a day to visit Mid-November “frozen” but always panoramic landscape of the Great Wall in Ba-Da-Ling. I am delighted to see how the Institute has grown in the past decade.

In Hong Kong, we were hosted by the two Presidents of Hong Kong Baptist University (HKBU) (my wife’s alma mater) and Hong Kong University of Science and Technology (HKUST), Dr. Chin-Fai Ng and Dr. Paul C. W. Chu respectively. I met many old friends, made new friends, and saw the helm of HKUST passes from the founder of the HKUST and its first President Chia-Wei Woo, to one of the most distinguished scientists in the world, Paul Chu. I have no doubt that Paul will elevate the HKUST to new heights in modern Asia, and will be one of the critical bridges for the East and the West!

Three of the four members of the delegation are UTD administrators/faculty members and the fourth is an industrialist who is a strong and palpable supporter of the University. They are

- Da Hsuan Feng, Vice President for Research and Graduate Education and Professor of Physics. In 1994, Dr. Feng was appointed by Jilin University as Guest Professor in Physics and now a member of the Executive Board of the AGM Institute of Jilin University;
- Ray Baughman, Robert A. Welch Professor of Chemistry and Director of UTD's NanoTech Institute. Dr. Baughman was appointed as Honorary Professor of Chemistry during this visit. He is also now an Executive Member of the AGM Institute of Jilin University;
- Si Qing Zheng, Head of Telecommunication Engineering and Professor of Electrical Engineering. Dr. Zheng, an alumni of Jilin University, was appointed half a year ago by Jilin University as Guest Professor of Physics;
- Jim Von Ehr, Chairman and CEO of Zyvex Corporation, the first molecular nanotechnology corporation in North America. Mr. Von Ehr was appointed by Jilin University during this visit as Guest Professor of Physics. He is also now a member of the Executive Committee of the AGM Institute.

Although not officially designated, one should consider AGM also as a member of UTD's delegation. This is because just a month ago, he was appointed by UTD as

- (A) Distinguished Scientist in Residence;
- (B) Chairman of the Advisory Board of UTD's NanoTech Institute and
- (C) Science Advisor of the President of UTD, Dr. Franklyn Jenifer.

In addition of being the first Chairman of the Executive Board of the AGM Institute, in 1999, AGM was also appointed by Jilin University as Honorary Professor of Chemistry, a year prior to his winning the Nobel prize.

What is the AGM Institute

As is internationally known, Alan G. MacDiarmid is one of the three 2000 Nobel laureates in chemistry for his ground breaking work of conducting polymers. During the decade of the 90's, AGM had visited JLU numerous times. In return, a number of JLU scientists had worked in AGM's laboratory in Philadelphia.

As soon as the pronouncement that AGM, together with Alan Heeger of UC Santa Barbara and Hideki Shirakawa of Tsukuba University, won the Nobel prize in Chemistry was made by the Swedish Academy, President Liu, in his congratulatory note to AGM, included a far reaching suggestion to establish a world class research Institute at Jilin University which will be devoted to fundamental and applied research in physical and biological sciences, with emphasis in the scientific and technological cutting edges of nanoscience and nanotechnology.

President Liu suggested that the Institute be named the JLU AGM Institute, the first Institute in China to be named after a non-Chinese citizen, albeit a very distinguished one!

Knowing how devoted AGM is to internationalization of science, I am not in the least surprised that he responded enthusiastically to this proposal. I was told that upon receiving the letter, he immediately requested his close collaborator Professor Yen Wei, a distinguished chemistry professor of Drexel University in Philadelphia, who himself is a Guest Professor of Jilin University, to work with the Jilin colleagues to iron out the details, so that this proposal of historical proportion can be turned into reality.

Through nine months of collective hard work of individuals inside and outside of China, the AGM Institute was formed and attracted the sustainable support of the Chinese National Natural Science Foundation (the equivalent of the US National Science Foundation), the Chinese Ministry of Education as well as other Governmental agencies. It also attracted significant financial support from Chinese private industries. These companies recognize the potential commercial R&D values from the Institute. The AGM Institute will be housed (which is now nearly completed) in the beautiful 58 million RMB (approximately \$7.3 million US) spectacularly architected new building.

I would be remiss in my duty here if I did not emphasize that the AGM Institute of Jilin University was NOT built from a vacuum state. Stating from the very beginning of this university, it already had tremendous leaders with incredible vision. For example, outstanding scientists such as Professor Ao-Qing Tang, a world renowned quantum chemist, Professor Shi-Shu Wu, a world renowned nuclear scientist, and many others have long been leaders of this university. There are now a number of key national laboratories in physics and chemistry in JLU which are already internationally recognized.

Activities during the Changchun visit (November 9th – 12th)

One must recognize the meticulously orchestrated end-to-end (from the moment we arrived in China until when we left Changchun) arrangements of our schedule. We were literally showered with warm hospitalities. With the large number of JLU folks involved in all logistics, it is not easy for me to even accurately count the number of individuals who poured their hearts out to ensure that our visit was spectacular, comfortable and memorable. The best guess I could make would be in the many ten's, from the President to the bright eyed students!

Our Changchun schedule was simply jammed packed! Besides many “normal” ten course lunches and dinners (which after the first few they became blurry pleasures !), the following events were particularly note worth.

First, on the 10th, there was an intense AGM Institute executive committee meeting, an official welcoming ceremony for all guests, foreign and domestic, as well as a formal banquet. This executive committee meeting discussed the logistics, plans and programs of the Institute. I think everyone at the meeting found it to be substantive, serious and to a certain extent, exhilarated. The official welcoming ceremony was hosted by President Liu. Although it started off with the usual “stoginess”, there was an “incident” which quickly turned the atmosphere warm and friendly. It occurred when President Liu introduced his spouse, he referred to her as his “Fu Ren”, or “wife”. This was immediately counteracted by someone at the meeting who whimsically “corrected” him by saying that perhaps he should refer to her as his “Ai Ren” (the way Chinese referred to spouses prior to the open door policy). Of course, once it was literally translated into English, namely “lover”, laughter brought the house down! From there onwards, everyone refer to his/her spouse as “lover”!

A central theme at both the executive committee meeting and the welcoming ceremony, AGM emphasized that “Science is People” which is he way of saying that the most creative work in science is done by people!

Second, during the morning of November 11th, a Sunday, JLU formally introduced AGM to the entire university community, during which AGM delivered what the Chinese referred to as his Nobel lecture. This event was held on JLU’s new South campus. In 1995, when I visited JLU, the construction just got started. Now, by amalgamating 5 universities in the city of Changchun, with 55,000 students, it is now fully operational. I was told that the campus costs JLU more then \$2 billion RMB to construct and required some creative financing (such as selling some highly valuable land the university owned in downtown Changchun). There is no doubt in my mind that Jilin University can be a mega-university of the 21st century.

Although this was a Sunday morning, where students normally are not around, this morning the campus was buzzing with excitement. Nearly two thousand students came to meet and hear AGM. Since the lecture hall where AGM physically delivered the lecture was not large enough to accommodate all those who want to attend, a significant fraction was deflected into two other large lecture halls, where the audience can observe AGM’s lecture in real time but “virtually”. I was told that the entire campus now is connected by high speed wide bandwidth connectivity (but I do not have details). Since the lecture was the same as the one he delivered not so long ago in UTD, but of course now laced with some local flavor, I will not go into it here.

However, just as the previous day, AGM told this enthusiastic audience in three major lecture halls that “Science is People”!

Third, there was a solemn ceremony where Ray Baughman and James Von Ehr were appointed as Honorary and Guest professors respectively. At the conclusion of the ceremony, the organizers requested that I, as Vice President for Research and Graduate Education of UTD, to say a few impromptu comments about this event. Not having prepared to say anything, all I could muster to say was that since Zheng, myself, AGM,

and now Ray and Jim are all associated with Jilin University, we probably should refer to UTD as “Jilin University Dallas campus”! Fortunately this brought a great deal of smile on the faces of the JLU officials.

Fourth, there was the official opening ceremony of the AGM Institute on the morning of the 12th, followed by the MOU signing ceremony between UTD and Jilin University. The opening ceremony took place just outside of the new AGM Institute building. Several hundreds of students, together with the dignitaries, braved the brisk 20 degree F for more than half an hour. The speeches, in response to the temperature, were “short, heartfelt and to the point”. Standing right next to the Deputy Governor of Jilin Province at the ceremony, I was particularly impressed by how enthusiastic he is about the forward looking attitude of Jilin University.

I was asked to say a few words on behalf of UTD at the ceremony. I spoke in Chinese (without translation so that we could get out of the cold as soon as possible) something to the effect that “during the year 2001, there were (at least) four major events which will profoundly impact on China in its open door policy in the 21st century.

- First, China is given the opportunity to host the 2008 Olympics.
- Second, China, on the same day of this ceremony, has just been granted the WTO membership.
- Third, Premier Zhu Rongji, together with his counterpart in the 10 nations in the Association of Southeast Asia Nation, agreed on the past week to establish, within a decade, the so-called 10+1 free trade zone. With 1.7 billion people, this will be the largest free trade zone in the world. It also has sparked the discussion of building a “bullet train from Singapore to Qun-Min, China”!
- Fourth, the establishment of the AGM Institute of Jilin University. In my opinion, naming the Institute by a distinguished individual who is not Chinese is entirely consistent with China becoming a part of the international community. With literally hundreds of thousands of Chinese intellectuals establishing close collaborative relations with distinguished individuals throughout the world, I believe this might just open up a new flood gate for global collaboration for this nation.

In the short comment by AGM, he again reiterated the theme of “Science is People”!

Epilogue

In 1995, after my three week visit to China (which included attending a conference in Changchun), I wrote the following comments about my personal feelings:

“I would like to say that on the eve of my departure from China, I walked along the Bund in Shanghai. Seeing the many historically significant and beautifully restored buildings along the waterfront, all painted in the evening with golden colored floodlights, and seeing across the Wangpu River the 460 meter tall, ultra modern, almost science fiction-like tower Dong-Fang-Ming-Zhu (Bright pearl of the East), a recently constructed TV Broadcasting station, piercing the night sky, and remembering the 20th century history of China I learned as a student, as an adult, from my mother and wife, both Shanghainese, and which the Bund had recorded with deep sadness and now with a glimpse of joy, I felt on the one hand Gan³-Kai⁴-Wan⁴-Qian¹ (a thousand to ten thousand mix feelings) and on the other, a rare opportunity of looking into a narrow time window of what China could be like in the 21st century. I became emotional.”

China of 1995 is very different from the China of 2001. While I did not visit Shanghai this time, I could see for myself the enormous transformation of Changchun from 1995 to what it is today, a modern city in 2001. The Jilin University of the late 90’s is replaced by a modern university of 55,000 students, with new campuses spread over the city of Changchun in 2001. In 1995, I cannot imagine that there will be a research institute named after a foreigner (not even a Chinese American). In 2001, it is a reality!

Perhaps it was appropriate that the “finale” of our ten-day visit to China was to attend the HKUST Business Roundtable dinner in the magnificent “Hong Kong Club” in Chung Wan (Central Circle), in the heart of Hong Kong’s business center. This dinner, hosted by President Paul Chu and Dr. Helmut Sohmen, Chairman of World-Wide Shipping Agency Ltd (and a Law Graduate and Board of Trustee member of Southern Methodist University), is a venue where administrators and faculty members of HKUST “rub shoulders” with the economic and political movers and shakers of Hong Kong, and therefore of Asia.

I am very happy to see that Paul gave UTD such a prominent role at this dinner.

The after dinner speaker, who spoke about the timely issue of “China’s Entry into the World Trade Organization”, was a University of Chicago trained economist, Professor Justin Yifu Lin. Professor Lin grew up in Taiwan, came to Mainland China in 1979, received a doctorate in economics from the University of Chicago in the mid eighties, taught in various US universities, and eventually ended up jointly as a Professor of Economics of HKUST and the Director of Peking University’s China Center for Economic Research. He is also now a member of the China People’s Political Consultation Committee.

Since I sat next to Professor Lin at dinner, I had an extensive discussion with him about China, Pacific Rim and the world at large. I was especially intrigued by his generous use of the term “integration”. He regarded China’s joining the WTO and the proposed China-ASEAN free trade zone at the ASEAN leaders meeting of the previous week in Brunei all symbolizes China’s intention to be “integrated” into the world at large. From what I could surmised, what Lin was saying was that China intends to, via the process of integration, to spread and enhance the wealth of all nations, especially those in ASEAN,

so that mankind can all benefit. In a certain sense, this is China's global responsibility as an economic power of the 21st century.

This unusual background is probably a signal as to what Asia will be like in the 21st century.