The Brief History of the Development of ATCM

The Asian Technology Conference in Mathematics (ATCM) was initiated by an individual, Professor Wei-Chi Yang, from Radford University of Virginia, USA. In his article "Mathematics Education Reform in the East and the West Technology Issues", Dr. Yang indicated that many issues in mathematics education reform motivated him to initiate this conference. He recognized that technological tools impacted mathematics teaching and learning in the US, and computer software had influenced the manner of teaching and research in higher education. In particular, how to make use of the hardware and software technologies to assist our *teaching* and *research* in mathematics was one of the main purposes of why ATCM was founded.

The very first Asian Technology Conference in Mathematics was hosted by the National Institute of Education in Singapore in 1995. The purpose of this conference was to facilitate a series of discussions on the use of computers and related software in mathematics research and teaching among Asian countries. The conference theme was *How Can Mathematics Software Be Used in Research and Teaching Activities*. The conference attracted more than 300 scholars from 22 countries around the world. Of the attendees, 40% were from Singapore, and 60% were from other countries. More than 80 presented papers were published in the conference proceedings. The conference definitely had a good kickoff.

From 1997 to 2006, ten consecutive ATCM Annual Conferences were hosted by ten universities in different countries/regions. They are listed as follows:

- ATCM 1997 was held in Penang (Universiti of Sains Malaya), Malaysia. Topics such as *Distance Learning* and *Teaching with Multimedia Technologies* started to appear.
- ATCM 1998 was held in University of Tsukuba, Japan. Scholars gathered in the University of Tuskuba for the third ATCM conference. Although the conference theme was *Research and Teaching with Computer Algebra Systems (CAS), Computer Assisted Teaching and Learning in Mathematics* was also among the main topics explored. The topic of *Distance Learning through the World Wide Web* was seriously discussed as well.
- ATCM 1999 was held in Guangzhou Normal University, China, and hosted by Guangzhou Normal University, with the theme of *Applying Scientific and Technological Methods in Mathematics Research and Teaching*. The conference first established the *Best Papers Award*.
- ATCM 2000 was held in Chiang Mai, Thailand, and hosted by Chiang Mai University. Listed as the major topics for the conference to explore were *Graphics Calculators, Computational Algebra and Geometry, Internet Technology for Mathematics, Machine Learning and Theorem Proving, and Parallel and Distributed Computing and Applications*.
- ATCM 2001 was held in Melbourne, Australia, and was hosted by RMIT University. The major topics discussed at this conference included *Implementing Technology in Education from K-12 to University Level, Assessment of Implementation of Technology in Education*, and *Mathematics and Information Technology*.

- ATCM 2002 was held in Melaka, Malaysia, and hosted by Multimedia University. The conference theme was *Multimedia for the Advancement of Mathematics*. At this year's conference, suggested by the host University, *Multimedia Distance Learning* was added as one of the major topics under discussion. More than 300 scholars attended the conference. The number of attendees was about the same as those at the previous conferences. More than 90 presented papers were published in the Conference Proceedings.

- ATCM 2003 was held in Hsin-Chu, Taiwan, and hosted by Chung Hua University. This was the first time for Taiwan to organize the ATCM Conference. Like the host universities of the previous ATCM conferences, it was obvious that Chung Hua University made great efforts to make the conference a success. This made clear that ATCM was the most important conference in the field of technology application in mathematics research and teaching in Asia. This year's conference attracted experts in this field from all over the world, and provided opportunities for Taiwanese experts in this field to exchange ideas and experiences with the conference attendees.

- ATCM 2004 was held in Singapore, and hosted by the National Institute of Education and Nanyang Technological University. The conference theme was *Technology in Mathematics: Engaging Learners, Empowering Teachers, and Enabling Research*. The conference attracted over 400 participants around the world.

- ATCM 2005 was held in Cheong-Ju, South Korea, and hosted by Korea National University of Education. The conference theme was *Enriching Technology in Enhancing Mathematics for All*.

- ATCM 2006 was held in Hong Kong, and hosted by the Hong Kong Polytechnic University. The conference theme was *Advancing and Fostering Mathematical Sciences and Education through Technology*.

- The ATCM Conference was conducted in Taiwan for the second time in 2007. ATCM 2007 was hosted by the National Tsing Hua University. The conference theme was *Making Mathematics Fun, Accessible and Challenging through Technology*. The size and reputation of the speakers' team has surpassed the records of all previous conferences. The Electronic Proceedings of ATCM 2007 is now available at this site, http://atcm.mathandtech.org/EP2007/EP2007.htm.

The 13th Asian Technology Conference in Mathematics (ATCM 2008) will be held at SuanSunandha Rajabhat University, Bangkok, Thailand during December 15-19, 2008. The local organizing committee visited the ATCM 2007 and promised they will bring in participants not only from Thailand but also nearby countries such as Vietnam, Cambodia, Lao and etc. As a result, we expect to attract over 300 participants from over 26 countries around the world.

Indeed, we are in the cross road of integrating evolving technological tools into teaching and research in mathematics. The adoption of technology varies from country to country. Many people wonder if students from some countries did so well in the Program for International Student Assessment (PISA), where is the role of technology? Some will say-It is not simply how well students can perform in a test, it is how they can explore mathematics (if

technological tools are adopted) and enhance their mathematics understanding to a higher level. Come and see how much you will learn from ATCM 2008-it will be an enjoyable and instructive conference.

Contributed by ATCM friends.