

The History of the International Conference on Geometry and Graphics – One Person’s Reflection*

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Abstract. This paper documents the history related to the establishment of the International Society for Geometry and Graphics (ISGG) as well as how the International Conference on Geometry and Graphics (ICGG) impacted the establishment of the ISGG. The first International Conference on Descriptive Geometry occurred in 1978 at the University of British Columbia, Canada. It was sponsored by the Engineering Design Graphics Division of the American Society for Engineering Education in celebration of its 50th year as a division within ASEE. It provided the opportunity for geometry and graphic professionals from throughout the world to meet, exchange ideas, and discuss new developments and applications of descriptive geometry. The momentum resulting from this conference was able to be used to bring about future conferences that enabled the establishment of the ISGG as well as the ICGG. As a result, there has been an international conference approximately every two years since 1984 and during the early part of this history, the “founders” met frequently at the international conference and eventually established the International Society for Geometry and Graphics. This paper details the first four conferences and the impact these conferences had on establishing the ISGG as well as the people involved in making this happen.

Key Words: ASEE, EDGD, Geometry, Graphics, ISGG, ICGG

MSC 2010: 01A74, 51N05

1. The first conference

The *International Conference on Descriptive Geometry* was held June 14–18, 1978 at the University of British Columbia in Vancouver, British Columbia, Canada. It was sponsored by

* Extended version of the plenary lecture at the 17th International Conference on Geometry and Graphics, August 4–8, 2016, Beijing Institute of Technology, Beijing, China.



Figure 1: Conference Proceedings Vancouver

the Engineering Design Graphics Division (EDGD) of the American Society for Engineering Education (ASEE). The conference commemorated the EDGD's 50th year of providing significant leadership in engineering education. Attendees convened from 11 countries, 6 Canadian provinces and 30 states thus enhancing the international atmosphere. Papers were published in a Proceedings that Garland K. HILLIARD served as Editor. Figure 1 shows the outside



Figure 2: Group photo conference attendees

cover of the Proceedings.

The overwhelming success of the conference was due in large part to the organizing, planning and hard work of people under the leadership of Amogene F. DEVANEY, Amarillo College in Texas and Clarence E. HALL, Louisiana State University. Others who served on the committee included Jack BROWN, University of Alabama, and Steve SLABY, Princeton University.

The conference success also was due to the outstanding presentations as well as the international reputation of many of the presenters. Presenters included: Shiro ODAKA from Japan, David BRISSON from Rhode Island, Marc SAUVAGEAU from Quebec, Canada, Yehuda CHARIT from Israel, and Abe ROTENBERG from Australia. Some of these people are shown in the group photo (Figure 2).

At the conclusion of the Vancouver conference, it was the overwhelming feeling of the conference attendees that there is a need for a second conference. The second conference did occur six years later in Beijing, China.

2. The second conference

The second conference was titled “*International Conference on Engineering and Computer Graphics*” and was held August 27 – September 1, 1984 in Beijing. It was sponsored by the China Engineering Graphics Society and the EDGD of ASEE. Professor ZHU YUWAN from Southwestern Jiaotong University was Chair of the Program Committee and Professor Steve SLABY headed the United States Organizing Committee. Professors YUWAN and SLABY were co-editors of the Proceedings published for the conference (Figure 4).

The basic goals of the conference were to establish direct and enduring contacts between scholars and experts in the area of Engineering and Computer Graphics, to further promote development in the fields, to promote international academic exchange and friendship, and to



Figure 3: Conference Chair Beijing

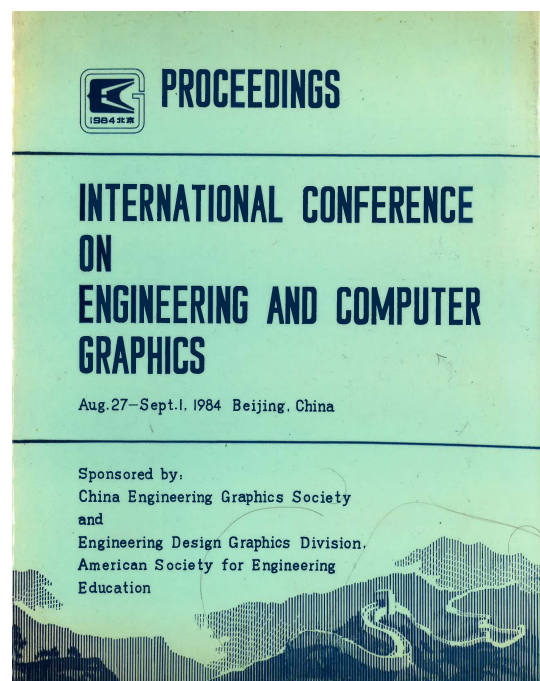


Figure 4: Conference Proceedings Beijing



Figure 5: Group photos of conference attendees in China

further strengthen academic cooperation among the organizations in this field throughout the world.

At this conference, there were 82 papers presented by authors from 11 different countries. The majority of the papers dealt with computer graphics; however, there were some presentations pertaining to theoretical graphics, applied graphics, graphics education, and of course, descriptive geometry.

The impact of the Conference in Vancouver was shown through a number of repeat presenters at this conference. Shiro ODAKA from Japan, Mark SAUVAGEAU from Quebec, Yehuda CHARIT from Israel, Harry OSERS from Venezuela, Hans SEYBOLD from Germany, Clarence HALL from Louisiana, and Harriet BRISSON who presented for her husband David who had passed away just before the conference presented in Vancouver and in Beijing. This is strong evidence of the sustainability of the subject matter and the need to continue to have future conferences. Of major significance was the presence of Hellmuth STACHEL from Austria, Kenjiro SUZUKI, from Japan, and Emiko TSUTSUMI from Japan. This was the first of many conferences attended by these three “founders”. As will be shown later in this paper, they had significant influence on the formation of the ISGG as well as development of future

conferences through the ICGG.

Figure 5 shows group photos of the delegation in China. The Conference Chair is depicted in Figure 3.

The 1984 Conference in China served as a catalyst for future conferences and secured the sustainability of holding conferences on a regular basis. Plans for the third international conference were being made before the Beijing Conference closed. It was no surprise that Hellmuth STACHEL came forward and offered to host the next conference in Vienna, Austria in 1988.

3. The third conference

The third conference was titled “*International Conference on Engineering Graphics and Descriptive Geometry*” and was held July 11–16, 1988 in Vienna, Austria. The conference co-chairs were Steve SLABY and Hellmuth STACHEL. They also served as editors for the proceedings the cover of which is shown in Figure 6.

After the conference in China, it is evident that Professor Hellmuth STACHEL had a genuine interest in cultivating and growing the graphics field on an international level and he ensured that another conference was in the future—the conference in Vienna which he led. He was able to partner with a solid contributor in Professor Steve SLABY, who had been actively involved in the previous two conferences and together they did an outstanding job with regard to leadership of the third conference.

Presenters included many who had presented at the first conference in Vancouver ten years before. These multi-conference contributors included: Harriet BRISSON, Steve SLABY, Yehuda CHARIT, Mark SAUVAGEAU, Abe ROTENBERG, and Hans SEYBOLD. Others who

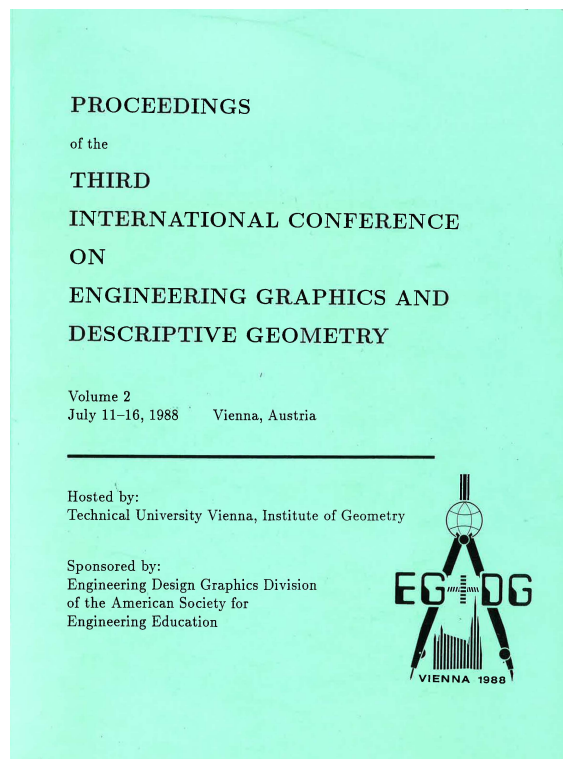


Figure 6: Conference Proceedings Vienna

were active with the organization for this third conference, who continue to be active today include Otto RÖSCHEL and Manfred HUSTY. The Vienna Conference became part of the continuum of geometry and graphics and ignited an interest to have such a conference every two years. Furthermore, shortly after the conference, Hellmuth STACHEL began exploring what interest there may be in forming an International Committee for the express purpose of promoting geometry and graphics on a world-wide basis.

4. Organizing movement

In October, 1988 following the Vienna Conference, Hellmuth STACHEL contacted Steve SLABY with the idea of forming an International Committee. Professor STACHEL offered specific details with regard to the governance of this Committee as well as its charge. Professor SLABY responded very positively and offered a list of important people in the U.S. who also may be contacted with regard to this idea. This list coupled with others from Europe and Asia whom Professor STACHEL knew would form a base group that could be very effective in producing the required elements to form an International Committee.

In the summer of 1989, Professor STACHEL contacted a number of people from the list produced by himself and Professor SLABY with the idea of forming an International Committee. Everyone was very positive about the idea. Correspondence showed a very keen interest with several other ideas coming forth. Professor STACHEL managed to put together all of the input regarding the formation of the International Committee and sent it out to the several people as information only with the idea that there would be a meeting in Miami in 1990 to formalize the plan and perhaps vote on the formation of the International Committee. The persons contacted included: Karoly BÖRÖCZKY from Hungary, Yehuda CHARIT from Israel, Chen JIANNAN from Beijing, Oswald GIERING from Germany, Larry GOSS from USA, Wagih HANNA from Egypt, Hiroshi ISODA from Japan, Roland JENISON from USA, Ming LAND from USA, Walter RODRIGUEZ from USA, Harold SANTO from Portugal, Steve SLABY from USA, Kenjiro SUZUKI from Japan, Merwin WEED from USA, Wladimir WOLKOW from USSR, YING DAO-NING from China, and ZHAO QINGHAUN from China.

It was decided that at the next conference in Miami scheduled for June, 1990, a steering committee would meet and organize the activities of the International Committee.

5. The fourth conference

The fourth conference was titled “4th International Conference on Engineering Computer Graphics and Descriptive Geometry” and was held June 11–15, 1990 and hosted by Florida International University in Miami, Florida. Oktay URAL from Florida International was Conference Chair and David SHEN also from Florida International was the Technical Program and Publications Chair.

As always, there was an outstanding program with presenters from all over the world in attendance. Mark SAUVAGEAU and Yehuda CHARIT were presenters for the 4th time having presented at Vancouver, Beijing, Vienna, and now Miami. Kenjiro SUZUKI and Emiko TSUTSUMI had presented at Beijing, Vienna, and now Miami to make it three conferences in a row.

The most important element of this conference was the having the steering committee meet on June 13, 1990 to organize the activities of the newly formed *International Society for Geometry and Graphics (ISGG)* (see Figure 8).

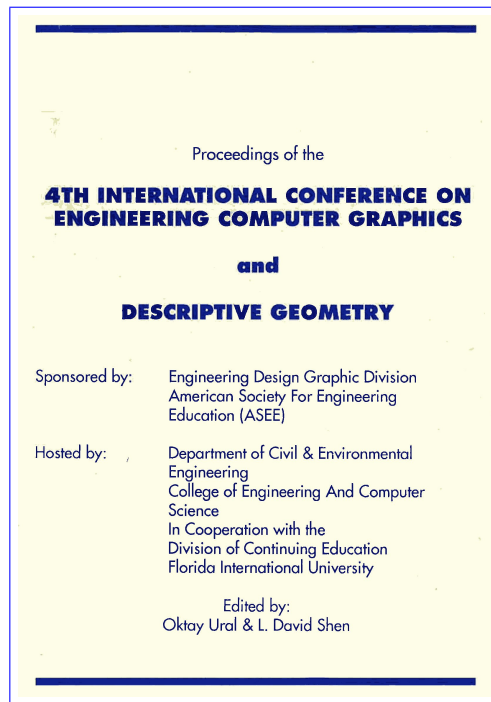


Figure 7: Conference Proceedings Miami

It was determined that the steering committee will act as an advisory board until elections are called. By the next conference to be held in 1992, the Committee Headquarters (Technical University in Vienna) will mail ballots to select the president and three vice-presidents (North & South America, Asia & Australia, and Europe & Africa). The advisory board will be constituted of 10 members from different countries. A mission statement was approved and adopted. Hellmuth STACHEL and Steve SLABY will act as co-chairs of the board with Walter RODRIGUEZ as secretary-treasurer in charge of developing by-laws and establishing a funding mechanism. The ISGG will sponsor *The Journal of Theoretical Graphics and Computing* and a Society Logo will be established.

The following persons served as the first steering committee:

- Vera ANAND, Clemson University, USA



Figure 8: Hellmuth STACHEL leading the discussion regarding formation of the ISGG



Figure 9: Members of the first Steering Committee

- Gary BERTOLINE, Purdue University, USA
- CHEN JIANNAN, Beijing University, PR China
- Wagih HANNA, Ain Shams University, Egypt
- Mehmet PALAMUTOĞLU, Kayseri, Turkey
- Walter RODRIGUEZ, Georgia Tech, USA
- Steve SLABY, Princeton University, USA
- Hellmuth STACHEL, Tech University Vienna, Austria
- Kenjiro SUZUKI, University of Tokyo, Japan
- Varikan O. THOMAS, RMIT, Australia
- YING DAO-NING, Zhejiang University, PR China

6. The fifth conference

The fifth International Conference was held in Melbourne Australia and titled “*5th International Conference on Engineering Computer Graphics and Descriptive Geometry*”. The conference was held August 11–15, 1992. William CARROL from the Royal Melbourne Institute of Technology (RMIT) and Larry GOSS from the University of Southern Indiana, USA were co-chairs of the conference. V.O. THOMAS, RMIT and W.P. LEWIS from the University of Melbourne were co-editors of the Proceedings (Figure 10).

Presenters of significance included Hans SEYBOLD and Steve SLABY. Both of these presenters had presented at all five international conferences. Also it should be mentioned that Emiko TSUTSUMI, Kenjiro SUZUKI, and Harriet BRISSON made presentations marking their 4th conferences.

One of the most important tasks at this conference was a vote to establish *The International Society for Geometry and Graphics*. An interim slate of officers and the Society’s By-Laws were also voted upon. The measures passed overwhelmingly and it was determined a ballot reflecting the first officers would be distributed with the newly elected officers taking over at the 6th International Conference in Tokyo.

The Conference in Melbourne will long be remembered as the Conference that established the International Society for Geometry and Graphics as a major technical society and each

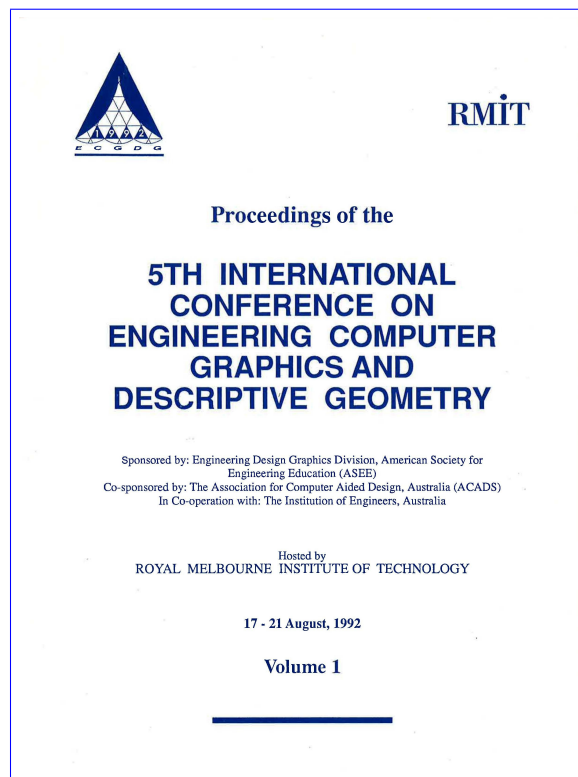


Figure 10: Conference Proceedings Melbourne

International Conference that is held shows the impact and sustainability of geometry and graphics around the world.

7. Post Melbourne

The ISGG has held an ICGG every two years since the Third ICGG in Vienna, Austria. Conferences have been held in exotic locations such as South Africa, Cracow, Poland, Austin, Texas and the Ukraine. Most recently the author attended ICGG conferences in Dresden Germany, Kyoto, Japan, Montreal, Quebec, Canada, and Innsbruck Austria. And now we are back in Beijing, China. These conferences have offered attendees an opportunity to gain in their knowledge of graphics and geometry as well as to expand the social and cultural aspects that they experience while attending such conferences. There is no doubt that the ISGG has had significant impact on most everyone who has attended one or more of the conferences.

Although it took several years to become a reality, the ISGG and the ICGG have been significant factors in the growth of interest and knowledge in the fields of geometry, graphics, and computer graphics on a world-wide basis. And it all started in 1978 by a group of graphics professors associated with the American Society for Engineering Education in Vancouver, British Columbia to celebrate the 50th anniversary of the Engineering Design Graphics Division. One of the most important EDGD members who contributed the most to the establishment of the ISGG and ICGG was Professor Steve SLABY. That is why the highest award given by the ISGG is named the "*Steve Slaby Award*". Also it must be said that Hellmuth STACHEL was the leader that organized the ISGG and was instrumental in developing the two-year plan for the ICGG. We owe a great deal to both Professor Slaby and Professor STACHEL. They are truly giants in the world of geometry and graphics.



Figure 11: Hellmuth STACHEL



Figure 12: Larry GOSS

Acknowledgments

The author wishes to acknowledge and thank those who made significant contributions in order that this work could be completed as well as the presentation prepared. First, thank you to Ted BRANOFF, Illinois State University. Ted had scanned copies of all the ICGG Proceedings from the second conference through the tenth conference. These proceedings enabled me to research authors and presenters to accurately detail those who had presented at each conference.

Hellmuth STACHEL provided an enormous amount of correspondence that took place during the period of time when formation of the ISGG became very serious. His leadership in this was exemplary. The information he provided was outstanding and I thank him for providing me with such detail that it enabled me to recount things in chronological order.

Larry GOSS provided a number of photographs used in the paper and presentation. He had pictures from the second conference in Beijing and from Australia as well as Miami. As always, whenever I have asked Larry for assistance he has always come through and for this I thank him so much.

Received August 5, 2016; final form November 15, 2016