

A First Draft of the History of ACMS
(As told by Robert Brabenec)

At the time I received my doctorate in 1964, I could recall no time during my graduate studies at the Ohio State University when the historical framework in which the mathematical concepts originated were discussed. During my undergraduate years as a mathematics major at Wheaton College, I could recall no time spent by my teachers on relating mathematics with Christianity or with other disciplines. To be fair, this was before the days in which the “integration of faith and learning” was an important concept in Christian higher education.

In the early years of my teaching, I began to read books such as The Development of Mathematics by Eric Temple Bell, Introduction to the Foundations of Mathematics by Raymond Wilder, and Introduction to the Foundations and Fundamental Concepts of Mathematics by Howard Eves and Carroll Newsom. I found them to be exciting reading in that for the first time I began to have some structure to organize the mathematics content I had studied and was trying to communicate to my students in an intelligible way. I attended a two week seminar on the integration of faith and learning with Frank Gaebelein that was a new requirement at Wheaton College for its faculty members. I designed a course on the foundations of mathematics for upper division majors to introduce them to ideas that had been missing from my own education.

A natural sequel to this was to see what was happening in this area beyond the Wheaton College campus. I knew the names of a few Christian mathematicians, but do not remember meeting more than could be counted on the fingers of one hand. So I wrote a letter in April, 1975, to 10 or 15 individuals to ask what their experience had been with this topic of the foundational concepts of mathematics in their own study and in their teaching. I found that while there were no “experts” on this topic, there were many who were open to consider these ideas.

One year later, a commitment was made to sponsor a conference on this topic at Wheaton College in April, 1977. The first 4 speakers were faculty members at Wheaton, followed by papers presented by 11 individuals from a wide variety of educational institutions. About 140 people attended the conference, and many have remained active in ACMS until today.

Was the 1977 conference a success? It was successful in that it was the first opportunity to address these issues, and it identified a large number of people who were interested in foundational matters. The published Proceedings have since been distributed to many others who could not attend the conference, so that was also a help. But there were drawbacks to the conference as well. For one thing, since the conference was held during the school year, the delegates had to stay off campus. Also the conference program was filled with papers and allowed little time for discussion and interaction. Finally, the content of the papers had an imbalance on the side of philosophy. All of these drawbacks would be addressed in planning future conferences.

In 1979, we scheduled the conference the week after Memorial Day Monday, and since school was out at Wheaton, we were able to stay in the dormitory and eat at the dining hall. This gave much more opportunity to get to know one another in more informal settings, and we have continued this arrangement ever since. In the evaluations of the 1979 Conference, many delegates asked to broaden the program to include more than philosophical and foundational issues, and to provide opportunity for expressions of our Christian faith.

This was done at the 1981 conference, where we began each day with a devotional thought. We also added a served banquet on Friday night and had 4 delegates share some personal reflections on their life, both from the perspective of mathematics and their faith. The main speaker (Vern Poythress with a doctorate in mathematics from Harvard and then professor of New Testament at Westminster Theological Seminary) blended mathematics and scripture in his talks and there were 11 discussion groups for delegates to choose from. It was unanimous that this was the “best conference yet,” and there was a general expectation that we would continue the tradition of a conference every other year.

The 1997 conference is being advertised as the 11th biennial conference, but most ACMS members are probably not aware that this is actually the 12th conference. In the summer of 1978, we held a week long working conference to follow up on the 1977 conference and to plan for the 1979 conference. It was an intensive week of presentations and discussion for a dozen delegates. It was a profitable time, and there was enthusiasm for a similar conference in 1980, but no one had the time to plan it. Perhaps 1998 would be a better year for such a conference.

The fourth conference in 1983 continued all the features that were successful in the 1981 conference--two talks by the main speaker, several discussion groups, morning devotions, a served Friday night dinner, and a praise service to conclude the conference. The speaker was William Kuyk from the University of Antwerp. We became acquainted with him through his book Complementarity in Mathematics. In choosing a main speaker, we debated whether we should limit ourselves to evangelicals or broaden our search to include those who would be sympathetic with our religious beliefs without necessarily accepting them. We decided then to look for an evangelical if possible, but to consider others as well. In retrospect, this has been a good policy. In addition to Vern Poythress in 1981 and William Kuyk in 1983, we met Donald MacKay in artificial intelligence from the University of Keele in 1985, Donald Knuth in computer science from Stanford University in 1987, Tom Banchoff in mathematics from Brown University in 1989, Joan Richards in the history of mathematics from Brown University in 1991, Joe Dauben in the history of mathematics from CUNY in 1993, David Moore in statistics from Purdue University in 1995, and now Owen Gingerich in 1997. All these individuals have presented well prepared talks and participated fully in the conference activities. It is interesting to observe that almost all the main speakers have not been mathematicians. I wonder who is left for us to invite in 1999 and beyond.

The 1983 conference was significant in that it was at the Business Session there that we decided to initiate a formal organization. Until this time, we had operated informally with no officers, no constitution, no dues, etc. Now a group of 6 individuals (Bayard Baylis from the King’s College, Robert Brabenec from Wheaton College, Gene Chase from Messiah College, Charles Hampton from College of Wooster, Richard Laatsch from Miami University, and Paul Zwier from Calvin College) were appointed to meet in Louisville in January, 1984, to plan this new organization. These plans were to be finalized at the 1985 conference which was scheduled to be held away from Wheaton College for the first time.

Five of these appointees met in the lobby of the Galt House Hotel in Louisville as planned--the ACMS name (Association of Christians in the Mathematical Sciences) was purposely chosen to include a wider group than just mathematicians. A first draft of the Constitution and Bylaws were written. A Friday night dinner was held--24 delegates were seated around one long table. After

dinner there were introductions, but no speaker. The first dinner with a speaker would be held in New Orleans in January, 1986, and Wayne Roberts of Macalester College would be the speaker. (Wayne was also the final speaker at the 1977 conference).

According to schedule, the revised Constitution and Bylaws for the Association of Christians in the Mathematical Sciences were approved at the fifth conference at the King's College in 1985. A first slate of officers was chosen, and Paul Zwier was asked to serve as the first president. Robert Brabenec of Wheaton College was chosen as Executive Secretary. So this is really only the 12th year of ACMS!

This first conference at a site other than Wheaton College was followed by the 1987 conference at Calvin College and the 1989 conference at Messiah College. The conference returned to Wheaton in 1991, before going to the west coast for the first time (Westmont College) in 1993, and back to the midwest at Taylor University in 1995.

One of the highlights of ACMS history was having Donald Knuth as our main speaker at Calvin College in 1987. We had been in correspondence with this busy man since 1981, and were delighted to finally obtain his acceptance. He was in the middle of his 3:16 Bible project at that time and shared this with the delegates. Don made a second appearance at the Westmont Conference in 1993. These were the only two conferences that I missed--perhaps that was the price to pay for having Knuth.

Over the years, we have tried a variety of projects and activities, with varying degrees of success. We seem committed to a biennial conference in the week after Memorial Day of odd-numbered years. The format of the conference has changed with time, becoming full enough in recent years to require parallel sessions. We need to decide if we should be more restrictive in the number of talks we schedule to allow more free time, or more opportunity for interaction after main talks. We have printed the Proceedings of every conference and still have copies available from each one. With the help of Gene Chase at Messiah and Cal Jongsma at Dordt College, we have compiled and have available the Annotated Bibliography of Christianity and Mathematics (1910-1983) from Dordt College Press. We are in process of putting this on the Internet.

Since 1986, we have sponsored a dinner at the January mathematics meetings. We usually have a speaker, and many individuals each year attend this meeting as their introduction to ACMS. We have often talked about ways to expand our visibility among mathematicians at universities or in the MAA community. One possible idea is to sponsor a paper session at the national meetings, such as has been done quite successfully in Humanistic Mathematics.

We began a speakers bureau several years ago with a list of a dozen speakers and an offer to help with travel costs, but this idea has not caught on. Westmont College has used it twice and Taylor University once to my knowledge. An idea with greater success has been to offer a student membership for 2 years at no charge. Many students have been informed about ACMS in this way and have attended the January meetings and the conferences. We hope these people will join as full members when their graduate work is over.

The ACMS organization is certainly shaped by the input of its members, and the Board is always open to new ideas. A questionnaire is attached for you to share some of your insights. We hope that the coming year will be as profitable as have the past twenty.