

Article I. Identification

Section 1. The official name of this SIGMAA is “The Special Interest Group of the MAA on Environmental Mathematics,” which shall normally be shortened to “SIGMAA on Environmental Mathematics.” The group will use the acronym SIGMAA EM.

Section 2. SIGMAA-EM has two goals. The primary goal is to provide a forum for discussion and promotion of mathematical analysis and problem-solving arising from environmental sources. This will include not only the development of mathematical models but also related pedagogical issues. A secondary goal is to contribute to an awareness of our responsibility to address environmental issues, such as recycling and energy conservation, and to utilize sound mathematical analysis to support such promotional activities. Such efforts will be focused on our own profession or institutions, perhaps contributing to a further greening of the MAA, or more globally through efforts with public school systems or in the media.

Since environmental issues are inherently interdisciplinary, lend themselves to team efforts, and offer an abundance of mathematical content at many levels, these goals are designed to attract mathematicians from many specialties as well as physical and social scientists and engineers. These goals demonstrate to the larger community that mathematics recognizes its responsibility to address issues important to society. Further, they will appeal to the inherent environmental interests of young people of our society, including students of mathematics.

Article II. Activities**Section 1.** Intended Activities of the SIGMAA

- a) Organizing presentations and workshops at national, section and regional meetings.
- b) Encouraging members to publish and otherwise disseminate information.
- c) Promoting organizational and individual environmental responsibility
- d) Maintaining a web page, and a database of publications, workshops and other activities.
- e) Promoting the creation and dissemination of classroom electronic and print materials.
- f) Recruiting students to SIGMAA-EM and encouraging their professional activity.

Section 2. Relationships with MAA Activities

- a) SIGMAA-EM will cooperate with MAA committees and other organizations with similar goals. b) SIGMAA-EM activities will be represented as coming from the MAA at large only if these activities have been approved by the MAA Executive Committee.
- b) No activity of this SIGMAA, including publications, shall be represented as coming from the MAA at large, but rather from this SIGMAA, unless such activity and representation have been approved by the Executive Committee of the MAA.
- c) Reports of this SIGMAA's activities shall be included in an annual report submitted by the SIGMAA to the MAA Committee on SIGMAAs, with copies to the chair of the Coordinating Council to which the SIGMAA is assigned.

Article III. Meetings

Section 1. Frequency and place of meetings. General membership meetings of SIGMAA EM shall take place at the January meeting of the MAA. The Council (defined below) will be responsible for the agenda of the general membership meeting. The agenda, along with notice of the meeting time and location, will be e-mailed to members at least three weeks before the meeting date. Other activities of SIGMAA EM may be scheduled at the summer MAA meeting or at MAA Section meetings. SIGMAA EM business may also be conducted electronically provided that a quorum is attained.

Section 2. The SIGMAA Chair presides over the annual general membership meeting. The Chair circulates an agenda via e-mail one month in advance and asks for additional agenda items at that time. At the meeting the Chair shall allow ample time for discussion and seek to achieve consensus. When a consensus is not reached, decisions shall be made by a vote using Robert's (simplified) Rules of Order.

When the Council decides that an issue requires attention of the entire SIGMAA EM membership before the next general

meeting, it can decide to conduct a business meeting electronically. The same definition of a quorum applies to any vote taken, and again it is expected that ample time for discussion will be allowed. Members will be given at least two weeks to vote on any issue requiring an electronically conducted vote.

Section 3. A quorum at membership meetings, including electronic meetings, shall consist of at least 20 members, including at least two council members. For electronic meetings, those counted in the quorum shall be those voting, including any self-identified as abstaining.

Article IV. Membership

Section 1. Membership in this SIGMAA shall be open to any MAA member.

Article V. Administration

Section 1. Officers and Executive Committee

The Executive Committee of SIGMAA-EM shall consist of five elected officers and one ex officio member. It will be known as the Council. Elected members will serve staggered three-year terms.

The officers are Chair, Secretary, Vice Chair for Programs, Vice Chair for Activities, and Vice Chair for Communications.

In addition, the immediate Past Chair shall serve ex-officio on the Council for three years after leaving office.

Section 2. Duties of Officers

- a) **Chair.** Presides at all meetings, reports to the Membership and the Council, and serves as liaison to the MAA Committee on SIGMAAs. Appoints, with the consent of the Council, two non-officers to the Nominating Committee for staggered two year terms. The Chair is elected in October of year $3N+1$, and the term begins on the subsequent January 1.
- b) **Secretary.** Keeps records of all meetings, handles correspondence, and completes MAA annual reports. The Secretary is elected in October of year $3N$, and the term begins on the subsequent January 1.
- c) **Vice Chair for Programs.** Works with members to organize formal events (such as panels, paper sessions, minicourses on the scientific program – anything that requires approval of other MAA committees) so that there are environmental mathematics events on the scientific program of JMM and MathFest as often as possible. Provides assistance to the Vice Chair for Activities. The Vice Chair for Programs is elected in October of year $3N+1$, and the term begins on the subsequent January 1.
- d) **Vice Chair for Activities.** Works with members to organize informal events (such as receptions, speakers at the business meeting, or field trips – anything completely up to SIGMAA EM leadership) there are some environmental mathematics activities at every JMM and MathFest. Provides assistance to the Vice Chair for Programs. The Vice Chair for Activities is elected in October of year $3N$, and the term begins on the subsequent January 1.
- e) **Vice Chair for Communications.** Maintains website, moderates the listserv, and oversees the use of the listserv for publicizing SIGMAA events and activities. The Vice Chair for Communications is elected in October of year $3N+2$, and the term begins on the subsequent January 1.
- f) If the Chair is unable to preside at a meeting, the duty falls, in priority order, to Vice Chair for Programs, Vice Chair for Activities, Vice Chair for Communications, and Secretary.

Section 3. Elections, Appointments, and Terms of Office

- a) The three – person Nominating Committee (consisting of the Past Chair and two appointed non council members) will provide a slate for election before October 1. The slate will consist of at least one nominee for each open position along with a short biographical statement for each person to appear on the official electronic ballot.
- b) Nomination and election of officers will take place by electronic ballot of the membership. By October 1 the MAA will distribute to the SIGMAA members instructions for voting by October 31. The electronic ballot will indicate that write-in votes are permitted. The winner will be the candidate receiving the most votes. Ties will be broken by a fair, unbiased random device supervised by the MAA.
- c) All terms on the Council begin on the January 1 immediately following the election.
- d) Should an office other than Chair become vacant midterm, the SIGMAA EM Council, in consultation with the most recent Nominating Committee, shall appoint a member of the SIGMAA to fill that office for the remainder of the term of office. Should the office of SIGMAA EM Chair become vacant midterm, the SIGMAA EM Council shall appoint a member of the SIGMAA EM Council (to include the ex officio immediate Past Chair) to fill the office of Chair for the

remainder of the term and, should this appointment create a vacant office, shall fill the vacant position according to the rules just given.

Article VI. Finances

Section 1. An annual MAA dues supplement shall be assessed each member of this SIGMAA. This fee will be used to support in part the activities of this SIGMAA, and the manner of collection and disbursement of these funds will be determined by the MAA Executive Committee. This SIGMAA may formally request a change of this amount by sending such a request to the MAA Committee on SIGMAAs, which after consideration will forward a recommendation to the MAA Executive Committee. The MAA Executive Committee may also initiate a request for a change of the dues supplement.

Section 2. This SIGMAA shall submit an expense budget for each calendar year to the MAA Director of Programs and Services no later than March 15 of the preceding year. It shall include the projected cost for any regularly planned activities, including receptions, room charges, equipment, etc. at national meetings. The budget is subject to the approval of the MAA Executive Committee.

Section 3. This SIGMAA may apply to the MAA for specific funding beyond what is provided from dues. All requests for funds shall be substantiated by a budget for the proposed expenditures.

Article VII. External Funding

Section 1. No officer or member of SIGMAA EM may apply for a grant to support this SIGMAA's activities or enter into any contract to support such activities or to provide services without specific approval in writing by the president of the MAA or designee thereof. If SIGMAA EM wishes to apply for external funds, it shall coordinate this activity with the MAA Subcommittee on Externally Funded Projects and go through the standard procedures for applying for external funding under the auspices of the MAA.

Section 2. Neither SIGMAA EM nor any officer nor representative thereof shall have any authority to contract debts for, pledge the credit of, or in any way bind the MAA.

Article VIII. Changes

Section 1. Changes to this Charter may be proposed by this SIGMAA if a recommendation for such changes is supported by a two-thirds majority of the members voting. The proposed changes must then be submitted for consideration to the Committee on SIGMAAs, which will forward a recommendation on approval to the MAA Executive Committee.

Section 2. Changes to this Charter may also be initiated by the MAA Executive Committee, which will forward such a request to the MAA Committee on SIGMAAs. In turn the Committee on SIGMAAs will work with the SIGMAA to develop specific new language for the charter that is acceptable to the SIGMAA. The Committee on SIGMAAs will then forward the revised charter to the MAA Executive Committee to be considered for approval. In this event, changes must be approved by the Board of Governors.

Article IX. Dissolution

Section 1. This SIGMAA shall be dissolved for either of the following reasons:

- a) Failure to maintain at least 30 members for two consecutive years
- b) Reasons agreed to by a majority vote of the Board of Governors.

Section 2. If dissolved, any unspent funds of this SIGMAA shall be returned to the general fund of the MAA.