

The presence and visibility of the International Commission of Mathematical Instruction (ICMI) in South Africa

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In this article I describe what SACIMU (the South African Committee for the International Mathematics Union) is and how it works. I believe that it is important that the AMESA community is well informed and thus knows how to participate.

The National Research Foundation (NRF), which is the national adhering body of South Africa's membership in the International Mathematics Union (IMU), facilitates the visibility of the International Commission of Mathematical Instruction (ICMI) in South Africa. The NRF set up SACIMU, which is responsible for ensuring South Africa's visibility and participation in ICMI and all the other IMU commissions.



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Membership of the committee

The committee has eight members. Four of these are representatives of AMESA, while the other four are representatives of the South A

of AMESA, while the other four are representatives of the South African Mathematical Society (SAMS). Currently the following members represent AMESA in the committee: Alwyn Olivier, Prof Renuka Vithal, Dr Mellony Graven and Busi Goba.

Guidelines for appointment of members to this committee are given by the South African Board of the International Council for Science (SA ICSU Board). The guidelines emphasise diversity (racial, gender, discipline, age), capacity building and continuity as important principles. Thus, in addition to the eight members of SACIMU, AMESA and SAMS are each required to appoint one capacity building candidate who will attend the meetings as observers while learning how the IMU and its different commissions, including ICMI, work. The committee elects a chairperson and a vice chairperson. These offices are on a rotational basis between AMESA and SAMS.

Term of office

The term of office for members is four years and their associations may resubmit their names at the end of the first term of office. For the sake of continuity, both SAMS and AMESA are required to replace no more than two members at a time.

Meetings of the committee

The committee meets once a year and the meetings are organised by the SA ICSU secretariat, which is funded by the NRF and serves all the other South African committees for other unions, eg IUPAP.

Terms of reference of the committee

The role of the committee is to:

- Advise the SA ICSU secretariat, SAMS and AMESA on matters affecting South Africa's membership of the IMU;
- · Keep the South African mathematical fraternity informed on IMU affairs;
- · Advise the South African ICSU secretariat on the most effective means of liaising and cooperating with the IMU;
- Make recommendations to the SA ICSU secretariat on the attendance and representatives to the IMU General Assembly and other business meetings;
- Endeavour to arrange meetings and scientific symposia of IMU in South Africa;
- · Initiate and promote national mathematics activities in cooperation with mathematics associations in South Africa.





South Africa's representations on IMU commissions

The committee appoints South African representatives to the following IMU commissions:

- ICMI: the South African ICMI representative is nominated by AMESA
- ICMI has the following subgroups and specific members with keen interest on the work of these subgroups are nominated by the SACIMU to report on the activities of these subgroups:
 - o International group for the Psychology of Mathematics Education (PME)
 - o International Organisation of Women and Mathematics Education (IOWME)
 - o World Federation of National Mathematics Competitions (WFNMC)
 - o History and Pedagogy of Mathematics (HPM)
 - o International Commission on Development and Exchange (CDE): the South African CDE representative is nominated by SAMS
 - o International Commission on History of Mathematics (ICHM).

The roles of these representatives are to:

- Keep the committee informed on the activities of the commissions;
- Advise the committee on the most effective means of liaising and cooperating with the IMU commissions;
- Keep the committee informed of any South Africans who serve on any of the international committees of the IMU commissions;
- Advise the committee on suitable South Africans who can be nominated to serve on international committees of the IMU commissions.

Conferences: South Africa's representation at ICME and ICM

Two members of the committee are funded by the NRF to attend the International Congress on Mathematical Education (ICME), held once every four years:

- The first is the South African ICMI representative, who represents South Africa at the ICMI General Assembly held during the ICME;
- The second is a young mathematics education researcher appointed by the committee on recommendation from AMESA.

The committee nominates two South African representatives to the International Congress of Mathematicians (ICM) with funding from the NRF:

- The first is a mathematician member of the committee appointed by the committee to represent South Africa at the General Assembly held at ICM;
- The second is a young mathematician researcher appointed by the committee on recommendation from SAMS.

The committee encourages and supports the hosting of international conferences organised by any of the IMU commissions.

Governance/responsibility structure

The SACIMU is accountable to the SA ICSU board, which is appointed by the NRF. I am currently the vice chairperson of the SA ICSU board. Members of the SA ICSU board are appointed in their personal capacity due to their knowledge and participation in ICSU activities. It is therefore not obvious that the South African mathematics community will be represented in the board. On the next page is a diagrammatic representation of how the SACIMU relates to other scientific bodies and institutions in South Africa.

Structure of the SACIMU report to SA ICSU board

The report is submitted once a year and has to provide the following details:

- Background and composition of national committee (indicating whether any
 of the members of the committees have previously been capacity building
 candidates);
- · Participation by South Africans in union activities;
- Size of local community;
- Capacity building with regard to membership of national committee and involvement of young scientists in international meetings;
- South Africans serving on unions or its subsidiary bodies;
- Attendance of international congresses/workshops;
- · Number of conferences attended;
- Number of South African delegates;
- Number of papers, keynote and plenary talks presented by South Africans;
- Organisation of IMU related conferences in South Africa;
- Contribution by members of AMESA and SAMS to key documents and publications;
- · Value of IMU membership to the community and benefit to South Africa;
- Public society interfaces and outreach programmes self initiated or facilitated by ICSU or its commissions;
- Research highlights;
- Activities involving teachers, students and school curriculum development;
- New initiatives in South Africa (and what benefits these will bring for South Africa);
- Financial assistance received by South Africans direct from ICSU bodies.

How SACIMU relates to other scientific bodies and institutions in South Africa **AMESA** SAMF SAMS projects of SAMS & AMESA Pure & applied naths research research -Promotes quality maths teaching and learning -National council -9 Regional structures, 46 branches as a professio 2 reps Support material Public interest in nal council Public interest maths research Teacher and learner program Fulltime staff Advisory board 4 reps 4 reps SA COMM FOR IMU 8 member committee Advises the ICSU secretariat on metters affecting SA membership in the IMU SA ICMI representative SA ICM representative report ICSU Regional SA ICSU board es the ICSU secretariat on tional cooperation with ICSU office for Africa notes SA's involve ns of the ICSU family report National Research Dept of funding Foundation Science & National adhering body Technology SA ICSU secretariat

The SA ICSU board undertakes an in-depth review of a selection of the national committees every three years and makes recommendations on areas of improvement. The SA ICSU board also makes recommendations to the NRF regarding further funding South Africa's membership in international unions. Since inception to date, SACIMU has gone through two reviews.