



Society of Mining Professors  
Societät der Bergbaukunde

# **Strategic Plan (2015)**

**(towards 2020 and beyond)**

# A Brief History

- Delft, 2004 – Review meeting to develop future strategies
- Freiberg, 2004 – New constitution adopted
- Sydney 2009 – developed a “Roadmap for the Future”
- Tallinn 2010 – Roadmap was reviewed and refined (again in Arequipa in 2011)
- April 2012 – SOMP Strategic Planning Committee met in Delft. This led to:
  - Recommended amendments to SOMP Constitution
  - Development of SOMP “Rules and Procedures”
  - Preliminary development of a forward strategic plan
- June 2014 – New strategic projects identified at Sth African AGM
- April 2015 – Survey of SOMP members
- May 2015 – Strategic Planning Ctee held 2 day workshop in Aachen
- June 2015 - New Strategic Plan presented to Council and AGM

# Vision and Mission

(Article 3 of Constitution)

*“The Society of Mining Professors is intended to be a vibrant global Society, representing the majority of mining and mining-related academics. The purpose of the Society is to promote the responsible practice of Mining Engineering as an engineering discipline, and to facilitate information exchange, research and teaching collaboration and other collaborative activities among its members.”*

## Vision

- To be the leading international society for mining university professionals, recognised for:
  - effective networking;
  - fostering collaboration and innovation in research, teaching and learning practices;
  - relevance and impact for the global mining sector and society at large.

# Vision and Mission

## **Mission**

To contribute towards a sustainable minerals supply for society through:

1. actively developing and supporting the mining engineering discipline;
2. development of long-term professional relationships;
3. exchanging innovative experience in teaching and learning practice;
4. sharing research experiences, capabilities and future challenges;
5. fostering professional career development and social awareness;
6. providing timely, authoritative and independent comments on relevant global issues.

# Examples of major achievements to date

- Establishment of regional meetings to assist with Capacity Building (Thailand, Vietnam, Namibia, Columbia)
- Assistance with curriculum development and teaching by multiple SOMP universities – eg Namibia
- Sharing of innovative teaching technologies through virtual reality – Australia, South Africa, USA
- Collaborative international research projects – Torino and US and Australia; Virginia Tech & UNSW; etc
- Collaborative teaching models – FEMP
- Innovative teaching and learning/assessment tools shared
- Staff exchanges, visits, staff referencing for promotions etc
- International benchmarking of curricula and of staff profiles

# Structure of Strategic Plan

- The six objectives from the SOMP Mission Statement are used as generic, over-arching strategic frameworks, with specific initiatives identified within each of the six categories

# Mission Objectives

## **Mission**

To contribute towards a sustainable minerals supply for society through:

1. actively developing and supporting the mining engineering discipline;
2. development of long-term professional relationships;
3. exchanging innovative experience in teaching and learning practice;
4. sharing research experiences, capabilities and future challenges;
5. fostering professional career development and social awareness;
6. providing timely, authoritative and independent comments on relevant global issues.

# Major Strategic Initiatives

## 1. Actively developing and supporting the mining engineering discipline.

- 1) Implement a broader survey process for mining engineering programs around the world, and form database with links to program websites to access curricula details etc
- 2) Support new mining engineering education programs and capacity in developing regions through initiatives such as: short term staff lecturing exchanges; postgrad student exchange; shared teaching resources etc.
- 3) “Tandem” assistance for teaching delivery/techniques (use of SOMP staff exchange)
- 4) Education Ctee to develop a list of example staff exchange mechanisms available to members (not a SOMP role to organise exchanges)
- 5) Develop a plan to gain greater SOMP engagement in both India and China; commit to holding a SOMP annual meeting in China in next 5 years
- 6) Maintain/establish SOMP “champions” in each key developing region



# Major Strategic Initiatives

## 1. Actively developing and supporting the mining engineering discipline (cont'd)

- 7) Share resources and access to personnel for range of functions, such as external examiners; staff referencing for promotions etc.
- 8) Continue efforts to expand SOMP involvement across North America, through:
  - Continuation of successful 2015 initiative for special SOMP session at each future annual SME meeting
  - Discuss opportunities for promoting SOMP in Canada – need a “champion” – CIM?
- 9) SOMP should initiate discussion/keynotes on current and future industry trends – briefly at 2015, more extensive in 2016 and beyond (look at international perspective) (Not just preparing graduates, but impact on student intake)

# Major Strategic Initiatives

## 2. Development of long-term professional relationships.

- 1) Conduct an effective, high quality annual meeting of members where there is informed dialog and state of the art keynotes, plus interactive workshops/discussion forums.
- 2) Important to recognise the value of SOMP annual and regional meetings (both technical and social programs), but ensure that:
  - meeting arrangements and budgets are carefully scrutinised and managed
  - industry sponsorship of meetings is acceptable and encouraged, provided it is appropriate to the purpose, and not seen as influencing the meeting content or direction.

# Major Strategic Initiatives

## 2. Development of long-term professional relationships (cont'd)

- 3) Effectively utilise a range of communication media for members to maintain contacts and awareness of ongoing activities and projects eg
  - member database on website, including both teaching and research interests for each member (to be entered by members);
  - Recent Newsletters to be available in public section of SOMP website
  - greater use of Newsletters (2/yr) to include:
    - annual reports from each Committee;
    - new section on “members achievements and movements”;
    - “lost” members;
    - list of PhD student completions (name, university and thesis titles).
  
- 4) SOMP website to be demonstrated at each SAM

# Major Strategic Initiatives

## 3. Exchanging innovative examples in teaching and learning practice.

- 1) Provide greater focus and support for “scholarship of teaching”
  - Sharing best practice in mining education, through keynote papers leading workshop discussion – must involve full membership engagement at meetings.
  - Commit to one full day of each SAM on education.
  - Highlight curriculum of the future incl technology developments in mining; broader engineering innovations; principles of sustainable mining/softer issues of “licence to operate”; management and leadership skills for the mining industry (integrating these issues across curriculum).
  - commit to include keynote and panel discussion (eg World Bank speaker) followed by workshop at 2016 SAM.
  - Focus on teaching & learning innovation.
  - SOMP meetings to encourage networking to facilitate collaborative education programs (eg FEMP)
  
- 2) Create SOMP teaching and learning innovation annual excellence award for a recent/current initiative – call for applications before meeting; Ed Ctee to select winner; winner to present as keynote, followed by workshop (run by Ed Ctee) – the Tim Shaw Award for Innovation in Teaching & Learning.

# Major Strategic Initiatives

## **3. Exchanging innovative examples in teaching and learning practice (cont'd)**

- 3) SOMP website to list 3 priority teaching topics for each member (searchable)
- 4) Establish a repository of links of useful resources, eg YouTube clips
- 5) Further consideration of concepts and opportunities for collaborative international Masters coursework programs (through distance education)
- 6) What are the most effective options for teaching sustainability to mining engineers? Document examples of “best practice” education methodologies.

# Major Strategic Initiatives

## 4. Sharing research experiences, capabilities and future challenges.

- 1) Develop an annual meeting structure that includes focussed break-out groups to identify and discuss future research needs, for the benefit of members.
  - *SOMP should encourage collaborative research initiatives (and publicise examples of recent initiatives that have been fostered through SOMP networking)*
  - *SOMP website will be searchable on member research interests*
  - *SAM to provide informal opportunities to discuss specific research opportunities individually*
  - *It is not the role or within the capabilities of SOMP to manage extensive databases, or to coordinate collaborative research*

# Major Strategic Initiatives

## 4. Sharing research experiences, capabilities and future challenges (cont'd)

- 2) SOMP remains committed to involvement with Mining Technology Journal for members research publications.
  - Opportunity to publish here is not fully utilised by SOMP members.
  - Recommend that the Editor seeks SCI listing of Mining Technology Journal by Thompson Reuters (can SOMP assist in this?)
- 3) Consider establishing SOMP Award for collaborative research project initiatives
- 4) Establish a research Forum on website for sharing research ideas/possible collaboration interests, relative to specific sub-disciplines

# Major Strategic Initiatives

## **5. Fostering professional career development and social awareness.**

- 1) Provide regular opportunities for interaction between members through meetings and other facilitated networking.
- 2) Promote “Junior” membership status for current PhD students, with encouragement to attend SOMP meetings, incl. reduced registration fees.
- 3) Further development & implementation of mentoring program
- 4) How to increase the number of under-represented minorities?  
(staff and students)



# Major Strategic Initiatives

## **6. Providing timely, authoritative and independent comments on relevant global issues.**

- 1) Authority for this initiative lies with Council
- 2) Establish protocols for Council to identify critical international issues that warrant comment, and then act.
- 3) Next possible topic for “white paper” is future mining education curriculum directions, following release of “Mines of the Future” report.
- 4) SOMP should only selectively comment on issues where we have informed and authoritative opinions, relevant to SOMP mission and vision, which find wide international application.

# Other Initiatives and Considerations

- 1) Recognise that SOMP does not have the benefit of a funded administration unit, and therefore is not in a position to conduct major ongoing database development, support etc. We are reliant on voluntary member efforts, so our role is more to facilitate rather than to provide an extensive administration or management function.
- 2) Keep track of all membership status, and encourage members who move from academia to industry to remain involved as Associate Members, provided they maintain active interest in education and research.
- 3) SAM content and program template to be updated, to ensure future meetings include the following key elements:
  - priority on SOMP member engagement throughout meeting, based on topics of interest
  - opportunity for “thought leader” keynote presentations, followed by panel discussions/workshops/break-out groups
  - peer-reviewed technical paper presentations (relevant to broader SOMP membership)
  - optional poster presentations
- 4) SOMP Committee “Terms of Reference” to be updated and Committee Chairs/members to be reviewed on a regular basis

## Other Initiatives and Considerations (cont'd)

- 5) Establish a new SOMP Committee – IT and Communications – to be chaired by Director, IT and Membership, and have management and content responsibility for website and various SOMP social media sites, including copyright and privacy issues.
  
- 6) Complete “Mines of the Future” project during 2016 – to outline the future industry direction over next 10-20 years; and based on that, identify both the educational needs and trends; and research needs and opportunities. Topics for consideration:
  - “Jurassic to joystick mining”
  - automation
  - health and safety/ergonomics
  - social issues
  - Management/leadership
  - Deep sea mining
  - Data analytics
  - Gas engineering

# Other Initiatives and Considerations (cont'd)

- 7) Establish an international mining engineering discipline ranking or assessment scheme (Council initiative, through small project sub-committee)
- at least agree on some objective performance metrics that we can all measure ourselves against?
  - not to create competitive environment but to drive quality performance improvement

# Action Plan and Time Schedule

Initiative No.	By Whom	By When
1.1	Education Ctee	June 2016
1.2	Capacity Building Ctee	ongoing
1.3, 1.4	Education Ctee	June 2016 and ongoing
1.5, 1.6	Council & Capacity Building Ctee	2020
1.7	All members	ongoing
1.8, 1.9	Council	ongoing
2.1, 2.2, 2.3, 2.4	Council	ongoing
3.1	Education Ctee	June 2016 and ongoing
3.2	Council and Education Ctee	June 2016 and ongoing
3.3	IT Director, plus all members	June 2015
3.4	IT Director, plus all members	ongoing

# Action Plan and Time Schedule

Initiative No.	By Whom	By When
3.5, 3.6	Education Ctee	June 2017
4.1	Council plus R&D & Industry Ctee	June 2016 and ongoing
4.2	All members	ongoing
4.3	Council plus R&D & Industry Ctee	June 2016
4.4	IT & Membership Director, plus all members	August 2015, plus ongoing
5.1, 5.2, 5.3, 5.4	Council , plus Members Development Ctee, plus all members	ongoing
6.1, 6.2, 6.3, 6.4	Council	ongoing
Other (1)	All members	ongoing
Other (2)	IT & Membership Director	ongoing
Other (3 & 4)	Strategic Planning Ctee plus Council	August 2015 and ongoing

# Action Plan and Time Schedule

Initiative No.	By Whom	By When
Other (5)	Council	June 2015
Other (6)	Project Sub-Ctee plus invited authors	Sept 2016
Other (7)	Council plus project Sub-Ctee	June 2018