

Report of the Young Members Presidential Group 2017-2021

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SUMMARY: This report presents the work of the Young Members Presidential Group primarily from 2020 to 2022 with background provided on the work done in 2017 to 2019 as context. The report summarizes the major initiatives undertaken, the objective behind the initiatives, and the outcomes achieved. This report also describes how these initiatives supports the overall mission of the committee in its transition from an advisory committee to the President to becoming the nexus of younger member networks within the ISSMGE.

1 INTRODUCTION

The Young Members Presidential Group (YMPG) is a Board Level Committee within the ISSMGE working to engage the next generation of geotechnical engineers. This report primarily details the work of the YMPG from 2020 to 2022 in continuing the mission that was determined at the end of the 2017 to 2019 term. Where applicable, the work done during the 2017 to 2019 term was included to provide context and completeness.

2 MISSION STATEMENT

The Mission Statement that the YMPG adopted for the 2020 to 2022 term is as follows:

The mission of the YMPG is to engage the next generation of geotechnical engineers in the ISSMGE. This is accomplished through a wide network of liaisons and corresponding members around the world. The YMPG will act as the nexus of this network by:

1. Enabling the sharing of knowledge and ideas
2. Connecting groups with each other, and
3. Facilitating communication between younger members and ISSMGE leadership.

2 MEMBERSHIP

The committee is led by the Chair, appointed for a four-year term by the ISSMGE President. Membership is restricted to ISSMGE members 35 years of age or younger at the time of appointment. Members serve two-year terms, renewable for an additional two years depending on interest, activity level, and age eligibility. In previous terms, three members from each region were nominated by the Regional Vice Presidents, creating a committee of 19 members representing a broad global reach.

At the end of the previous term (2017-2019), a change to the composition of the membership was proposed to the Board to reduce the size of the Core Committee Team to less than ten members. The Core Team will still be very international in its composition but will not represent any region or Member Society. This Core Team would transition the YMPG from a group that creates initiatives to become the nexus of young member activities within the ISSMGE. This would be accomplished through the creation of official liaisons with all Member Societies and eventually with Technical Committees and other affiliated groups. For the 2020-2022 term, the Core Team comprised 7 people.

3 INITIATIVES AND ACHIEVEMENTS

This section describes the activities undertaken by the committee during this term.

3.1 Bright Spark Lectures

The Bright Spark Lectures award is an initiative started by the current ISSMGE President, Professor Charles Ng. The purpose of the Bright Spark Lectures award is to promote young and promising geotechnical engineers/academics by giving them a platform to deliver keynote and invited lectures at conferences.

During the previous term, the YMPG, with the support of the Vice Presidents and Conference Organizing Committees, advertised and vetted applications for four of the 2019 Regional Conferences: Europe, Africa, Pan-America, and Asia. The lectures at these conferences were well received. It was recognized that since the Regional Conferences are only held every four years, there is some inherent luck with applicants who are close to the age cutoff. These lectures were used as platforms to encourage Member Societies and Technical Committees to host Bright Spark Lectures at their own conferences. The award was promptly adopted by a number of conferences and its prestige has grown over this period.

Therefore, the selection of the Bright Spark Lectures for the Sydney ICSMGE became a center focus initiative for the YMPG in 2020 due to the conference's importance and prominence in ISSMGE activities. With the help of the Organizing Committee and Member Societies, the Committee aggressively advertised this award. A total of 45 nominees and 22 societies were received, far exceeding expectations. The nominations were very high quality and winners were announced in the ISSMGE Bulletin Volume 14, Issue 5, October 2020 and ISSMGE News.

3.2 YMPG Alumni

Since the YMPG has existed for more than 10 years, there is now a growing list of former YMPG committee members. This is a valuable group of people who are likely to be willing to serve on one-off task forces, provide mentorship, and willing to be panelists for younger member sessions at conferences. Maintaining this group as a community would allow the YMPG to continue to tap into the group as a resource.

A list of all past committee members has been created. No further action had been taken to reconnect with this group during this term. This committee believes that most YMPG alumni would highly appreciate targeted communications and also continue to contribute and interact with the Society.

3.3 YMPG Liaisons

One of the most important initiatives undertaken this term was the development of the network of YMPG Liaisons. The committee sought official nominations from each Member Society ensuring that the representative has support from his/her Member Society. This structure also better reflects the way the Society communicates through Member Societies rather than directly to individual members.

This network would be a venue to share ideas, allow groups to network with each other, and allow the Society to gain better feedback from its younger members. With full engagement from all Member Societies and Technical Committees, this would create 100-200 young member positions within the ISSMGE community, allowing more people to participate on the international level.

3.3.1 Pilot Group

An initial pilot group of seven liaisons were chosen from some of the most active societies. The nominated representatives took part in monthly meetings to explore different topics of interest, test methods of communication, and to get to know each other on an informal basis. One of the key findings was that even though the Liaisons were very active in their own Member Society, they did not seem to know about some key ISSMGE resources. The outcome was the creation of onboarding presentations about the ISSMGE and YMPG that were used to onboard subsequent YMPG Liaisons.

3.3.2 General YMPG Liaison Meetings

After the initial pilot group, nominations were accepted from all Member Societies. The group of YMPG Liaisons grew to about 30 individuals. Even though this does not come close to the total number of Member Societies in the ISSMGE (more than 90), this was deemed to be an adequate size group.

After initial onboarding meetings, meetings included guest speakers and specific topics. Guest speakers include Darren Paul (Chair of 7iYGEC), Sukumar Pathmanandavel (Co-Chair of CAPG), and KK Phoon (Vice Chair of IDC). Another particularly engaging meeting was a discussion about the structure of young member groups in each Member Society. The Liaisons described how their Member Society engages their younger members and opportunities ranged from having a position on the Board to dedicated student and young member groups. The global and diverse nature of the group created space for everyone to consider something different from their own norms. The group came to the conclusion that there is no single right way for professional society engagement but rather it is an ongoing effort to adapt to the needs of the members.

3.3.3 Overdesign Survey/Challenge

The confluence of this international collaboration and global events was the spark that influenced a series of “Are We Overdesigning” competitions that took place at the end of 2020.

The CAPG had been promoting the Overdesign Survey and it was recognized that the survey may get more responses if there is an actual event. The global pandemic normalized virtual events. The YMPG Core Team and Liaisons, both being “remote-first” groups where members meet virtually on a regular basis, were in a special position to take the technical work that the CAPG has started and disseminate it. After a few months of getting to know each other, the Liaisons were ready to take on a challenge. The following events were led and executed through the leadership of the YMPG Liaisons and other younger member representatives appointed by their Member Society (see Table 1).

Table 1. Overdesign Events/Competitions and Engagement

Region/Society	Engagement
Africa, led by South Africa	150 live attendees
Australia and New Zealand	480 registered, 300 live attendees
Southeast Asia (jointly hosted by Singapore, Indonesia, Malaysia, Hong Kong Societies)	500 registered, 300 live attendees, 600 views on YouTube

Latin America (jointly hosted by Paraguay, Chile, Argentina Societies)	3 separate events, 100 participants each
Francophone event (jointly hosted by France and Morocco Societies)	170 live attendees, 700 views on YouTube
Canada	300 live attendees

Most notable was that the Latin American and Francophone events held entirely in Spanish and French, respectively. The leaders of these events took it upon themselves to translate all the technical material from English into French and Spanish. They considered this to be a critical part in making this event accessible to their members. Reception from the audience was overwhelmingly positive, many of whom remarked that the international nature of these events excited them to attend and participate.

3.4 Future of Geotechnics Event

In 2021, the Committee centered its focus in the creation of the Future of Geotechnics, an online event that explored the future of the profession with an international audience. The event was inspired by the success of the Overdesign Challenges, the call-to-action for the Time Capsule Project, and the desire to create a capstone event to end the current YMPG term.

This event had four main objectives:

- To inspire younger geotechnical engineers to think beyond their own national borders
- To provide younger engineers the opportunity to interact with professors and researchers doing cutting edge research
- To demonstrate how geotechnics can contribute to big global problems
- To contribute to the Time Capsule Project by encapsulating what we think the future looks like

Three central themes, held as separate events, centered on the questions of “What will the world and the field of geotechnics look like in 40 years?” The themes are as follows:

- Mitigation of Climate Change: The current and future contributions of the geotechnics profession on the mitigation of global carbon emissions through supporting advances in renewable energy technologies, developing a circular carbon economy through research and development of energy geotechnics, and enabling carbon capture through sequestration.
- Adaptation to Climate Change: Increasing awareness on challenges that arise from climate change in the form of sea level rise, groundwater inundation, permafrost loss, and the increased frequency of natural disasters leading to an increased need for resiliency in our built environment.
- Technology, AI, Big Data: Realizing that the intersection of technology and geotechnical engineering will require geotechnical engineers to embrace and integrate advances in computing in their practice. This event was co-hosted with TC309, the Technical Committee on Machine Learning and Big Data.

The events were held as three separate, two-hour events approximately eight hours apart over the course of two days in October 2021. The timing was selected to allow an international audience to reasonably attend two out of the three events live.

The events featured participation from many groups within and affiliated with the ISSMGE. The leadership provided by TC309 in making the Technology event happen was invaluable. The Adaptation event featured a special appearance from the International Geosynthetics Society (IGS), a sister society of the

ISSMGE and a member of the Federation of International Geo-Engineering Societies (FedIGS). Several speakers were nominated by the Corporate Associates of the ISSMGE. The YMPG Liaisons promoted the event through social media and other channels in multiple languages.

Online registration for the event reached audiences in over 80 countries with more than 2,700 online tickets issued, far exceeding expectations. The live events were well attended and the recordings provided an additional way for members to engage with the content.

This event showcased a way to engage global members in a dialogue that is both meaningful and impactful. The YMPG envisages that this event is the start of a conversation where engineers consciously think about the future of the profession. As part of the Time Capsule Project, the YMPG also hopes that this event encapsulates the sentiments and concerns of the engineering community at this point in time.

4 CORRESPONDING MEMBERSHIP

The corresponding membership of the YMPG through Google Groups email list, GeoWorld Group, and LinkedIn Group have steadily increased over the past four years despite the lack of emphasis on increasing the membership numbers (see Figure 1). Previous terms have driven membership numbers and achieved a critical mass such that the groups continue to grow with little direct recruiting effort. The purpose of these communication channels was to enable direct communication to younger members worldwide as well as provide a platform for all members to share and disseminate resources and events happening in their own societies.

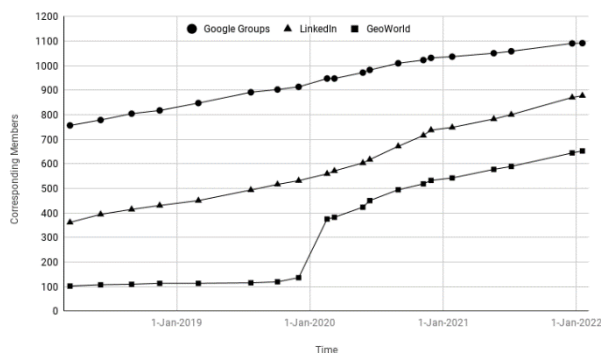


Figure 1. YMPG corresponding membership numbers over the past four years.

5 RECOMMENDATIONS

The Committee has started the transition of the committee's mission and composition to allow for wider participation of younger members in the Society. The following recommendations are provided for consideration for future YMPG committees:

- Continue to redefine the mission of the YMPG as a platform where initiatives are created, ideas are exchanged, and networks are formed.
- Build the YMPG Liaisons and Alumni networks to enable and elevate the participation of younger members on the national, regional, and international levels.
- Enhance the Society's impact on younger engineers through collaboration with other Board Level Committees and Technical Committees.

- Continue to promote the Bright Spark Lectures and the idea of allowing younger engineers to give prominent keynote lectures.

6 ACKNOWLEDGEMENTS

This committee would like to thank the efforts of other Board Level Committees, Board Members, and Technical Committees for supporting our initiatives. Special thanks go to the CAPG, IDC, and TC309 for their enthusiasm and unwavering support.

The group would also like to applaud the individual efforts of the YMPG members, both the Core Team and the Liaisons, who operated on a voluntary basis to advance the field of geotechnical engineering for younger members around the world. Their efforts and continued dedication have been remarkable especially given the challenging circumstances due to the global pandemic.