



**2<sup>nd</sup> FIG Young Surveyors Conference**  
**17 - 19 June 2014**  
**Impiana KLCC Hotel, Kuala Lumpur, Malaysia**

**MEETING CHAIR/S** : FIG Young Surveyors Network

**NUMBER OF ATTENDEES** : 200 participants from 46 countries as follows:

- |               |                  |                    |
|---------------|------------------|--------------------|
| 1. Algeria    | 17. Jamaica      | 33. Singapore      |
| 2. Australia  | 18. Japan        | 34. Slovenia       |
| 3. Austria    | 19. Kenya        | 35. South Africa   |
| 4. Brunei     | 20. Malaysia     | 36. South Korea    |
| 5. Cambodia   | 21. Micronesia   | 37. Sweden         |
| 6. Canada     | 22. Mongolia     | 38. Switzerland    |
| 7. China      | 23. Morocco      | 39. Tanzania       |
| 8. Croatia    | 24. Nepal        | 40. Taiwan         |
| 9. Egypt      | 25. Netherlands  | 41. Turkey         |
| 10. Fiji      | 26. Nigeria      | 42. United Kingdom |
| 11. Finland   | 27. Philippines  | 43. United States  |
| 12. Germany   | 28. Russia       | 44. Uruguay        |
| 13. Ghana     | 29. Rwanda       | 45. Uzbekistan     |
| 14. Hong Kong | 30. Samoa        | 46. Zimbabwe       |
| 15. Indonesia | 31. Saudi Arabia |                    |
| 16. India     | 32. Serbia       |                    |



Figure 1 The 2<sup>nd</sup> YSC before and after

**LINK TO FIG COMMISSION:** All FIG Commissions, Working Groups and Networks especially FIG Young Surveyors Network

## INTRODUCTION

The 2<sup>nd</sup> FIG Young Surveyors Conference (2<sup>nd</sup> YSC) took place at Impiana KLCC Hotel, Kuala Lumpur. This event was organized in conjunction with the XXV International Federation of Surveyors (FIG) Congress. It was hosted by FIG Young Surveyors Network (YSN) together with YSN Malaysia, and was supported by the FIG, FIG Foundation and Association of Authorized Land Surveyors Malaysia (PEJUTA). It was also one (1) of the three (3) sub events tailored for Young Surveying Professionals / Students (YS) with more workshops, career and hands-on innovation sessions. The Conference offerings include coffee "speed networking" sessions; mentoring program; YS plenary and workshop sessions, Professional Development and Hands-on "How To" sessions. The 2<sup>nd</sup> YSC attracted two hundred (200) registered YS participants from forty six (46) countries covering most parts of the world which included Asia, Europe, North America, South America, Africa, Australasia and the Pacific and a number of walk-in full FIG Delegates. It was indeed an achievement as the initial target of YS participation was 180 people.



Figure 2 All set for 2<sup>nd</sup> YSC!

The Young Surveyors Network Malaysia welcomed and hosted the YS participants to a Cultural Welcome Reception at Saloma Bistro and Theatre, Kuala Lumpur on 16th June 2014. Prominent FIG / Surveying Industry and Partners were invited too to create opportunities for YS to network with these prominent personalities.



Figure 3 YS Cultural Welcome Reception

## HIGHLIGHT AND OUTCOMES

Day 1 - 17 June 2014

The first day kicked off with a soft opening session “Welcome and Recognition of 2014 FIG Foundation Young Surveyor Fellows”, where welcome addresses were given by Kate Fairlie, (Chair FIG YSN), Eva-Maria Unger (Incoming Chair FIG YSN), John Hohol (President of FIG Foundation) and Zurairah (YSN Malaysia).



**Figure 4 Top: From Left to Right, Kate, Eva-Maria and Zurairah delivering their Welcoming Addresses. Below: John Hohol giving introductions on FIG**

John Hohol then introduced the 2014 FIG Foundation Fellowship award winners and gave away certificates, thereafter. The 2014 FIG Foundation Young Surveyor Fellowship recipients were Chandan Das (Nepal), Odil Akbarov (Uzbekistan), Asmae Azzoui (Morocco), Melissa Robert (Uruguay), Irena Rojko (Slovenia), Jonathan Gustafson (USA), Emily Tidey (New Zealand) and Odkhuu Khalzan (Mongolia). As FIG Foundation Fellowship winner, one is fully funded to attend all FIG events during the XXV FIG Congress including air tickets, FIG dinners, accommodation and daily allowance.



**Figure 5 The 2014 FIG Foundation Young Surveyors Fellowship winners**

YS Plenary Session 1

Kate Fairlie chaired the first YS plenary session with the theme “Surveying the 99%: Engaging the Need”. The session transports the logic of the Occupy Movement, which identifies the inequality of wealth in the world, to the profession of surveying. 2<sup>nd</sup> YSC was pleased to have Jack Makau from Slum Dwellers International, Arnulf Christl, former President of the Open Source Geospatial Foundation, Chryssy Potsiou, FIG Vice President (Incoming President) and Dianne Dumashie, current FIG Africa Task Force Chair to address the issues on; who are we surveying for? What key needs are we addressing? And: What technologies and knowledge will best meet these needs?



**Figure 6 Left: John Makau, Right: Arnulf Christl**

Jack Makau from SDI (Slum/Shack Dwellers International) gave a short introduction on SDI's work in developing countries especially Africa. He emphasized the need for tenure security in those countries and the recognition of all relationships between people to land. Therefore SDI is looking forward to work together with the FIG Young Surveyors Network.

Arnulf Christl, former president of the Open Source Geospatial Foundation, emphasized the importance of data instead on putting the focus on format. He encourages YS to take over the role of change Agents by working together with international associations and networks. 'Do-grecy' – do something! A word we should keep in mind.

FIG Vice president (Incoming FIG President) Chryssy Potsiou presented on the current cadastral projects and work happening in Greece. The projects embrace social media and crowd sourcing technology to increase transparency. She emphasized YS must have a pragmatic and flexible approach in order to deliver.

Current FIG Africa Task Force Chair (Incoming Vice Chair FIG) Diane Dumashie inspired YS to provide the society leadership. She pointed out what is needed to address the 99%. She provided a good overview and timeline of the global agenda and how it addressed sustainable development in the 1990; in 2000 this evolved in the Millennium Development Goals (MDGs) and is now addressing



**Figure 7 Left: Chryssy Potsiou, Right: Diane Dumashie**

Climate change. She emphasized the focus on equality and that it is mostly women who are suffering from inequality. Lastly, she encouraged YS to mind the gap and to start taking the lead by delegating and mentoring.

### YS Plenary Session 2



Figure 8 The 2<sup>nd</sup> YS Plenary Session on Fit-for-purpose

Paula Dijkstra (Netherlands) was the chair the second YS plenary session with the theme “Fit-for-purpose Land Administration: Debate and Discuss”. The session discussed about the FIG’s most recent publication “Fit-for-purpose Land Administration” arises from cooperation with the World Bank to address the issue of building and sustaining land administration systems that are fit-for-purpose, rather than blindly implementing top-end technological solutions.

2<sup>nd</sup> YSC was pleased to have Robin McLaren (KnowEdge), Brent Jones (ESRI), Kevin Daugherty (Trimble) and Chris Rizos (President, International Association of Geodesy) with us to present an industry review and to discuss the document: to look at how it could be implemented, and what gaps or challenges may arise.

Robin McLaren talked on the approach to land administration data which includes flexibility, affordability and reliability. He also stated what was discussed in the collaboration between World Bank and FIG, the constraints, the threats and the opportunities involved. The way forward as he concluded was that the politician, the decision maker and the main professionals must effectively share their knowledge for the growth of the profession.



Figure 9 Left: Robin McLaren, Right: Cris Rizos

Chris Rizos stressed that there is a need to build affordable and sustainable systems to identify the way land is occupied and used. Accuracy of the data used must not be compromised because good coordination begins with good co-ordinates.



Figure 10 Left: Brent Jones, Left: Kevin Daugherty

Brent Jones highlighted all the elements of the data in land administration such as: Secured, Dependable, Ensureable, Reliable and Updateable! These are the key elements in building and sustaining land administration systems that are fit-for-purpose.

Kevin Daugherty highlighted that professionals in land administration must look into technology as the main factor needed in land administration. Land is money making market. We must support our profession; we must do everything to move the profession forward.

Additionally, a Trimble Photo Competition was carried out during the YSC. This competition was sponsored by Trimble Navigation. Lilly Capell (USA) won a ticket to the FIG Foundation Dinner. Thanks to Keith Hofgartner for Trimble's noteworthy support in our YSC event. On the right you can see the winning picture and the happy winner.

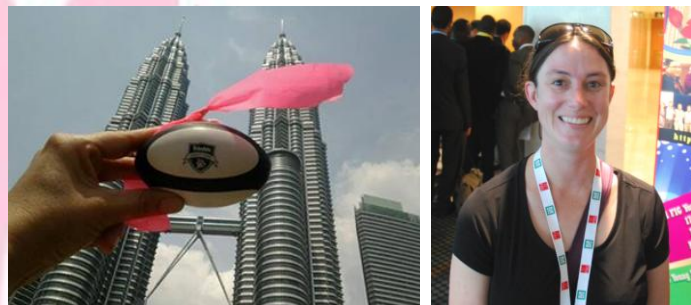


Figure 11 Lilly Capell and her winning photo



Figure 12 The Prime Minister of Malaysia officiating the XXV FIG Congress

In the afternoon, YS attended the Opening Ceremony at Kuala Lumpur Convention Centre (KL Convec) that was officiated by the Prime Minister of Malaysia, Dato' Sri Haji Mohammad Najib bin Tun Haji Abdul Razak.

*"In an era of big data and open source policy making, the challenges for surveyors is to ensure that information sharing practices evolve at the right pace, that knowledge gathered is put to productive used."*

- PM Malaysia -

## Report on 2<sup>nd</sup> FIG Young Surveyors Conference

Day 1 of the 2<sup>nd</sup> YSC was concluded with YS Networking Drinks at Cedar@15 Rooftop Restaurant, Impiana KLCC Hotel where YS had the opportunity to network among themselves and also take the opportunity to meet and greet with others invited.



Figure 13 The YS Networking Drinks

## Day 2 - 18 June 2014

Day 2 of 2<sup>nd</sup> YSC setup was based on parallel workshops. Each workshop was designed to be associated with the FIG Commissions and was supported by the respective FIG Commission Chairs. The parallel workshops commenced immediately after the coffee break of the Plenary Sessions within the XXV FIG Congress.

### Session 1A: Surveying for Post-Disaster Recovery



Figure 14 Left: Activities during Workshop 1A, Right: Kazuaki Fujii doing his presentation

The speakers were Kazuaki Fujii (Japan) and Ir Mohammed Adnan Mohd Nor (RedR Malaysia). The two speakers emphasized on the need to stay alive before one can be able to provide help in any disaster. After a disaster, things are disorganized; a surveyor needs adequate charges and power supplies to recharge their equipments in order to carry out any job. When it happened, everybody wants to help but surveyors must be well organized because some people may take advantage of it. Surveyors can be deployed as a rescue worker, relief worker or recovery worker, project manager or rehabilitation worker as protocol may be observed.



Figure 15 Ir Mohd Adnan of RedR Malaysia delivering his speech and presentation

Session 1B: Laser Scanning



Dr. Ivo Milev (Bulgaria) introduced a brief history of the laser scanner technology and its area of applications in Civil Engineering, Geodesy and Aerial Photography. The instrument being used was RIEGL VZ1000 laser measuring device. The technology was also said to be interactive with other platform of digital data capture (e.g IMU, digital cameras and GNSS device). The operational modes are Terrestrial in static mode and Mobile mode (when mounted on trolleys, railways, cars, UAV etc). The device can be used for clearance rectification, maintenance and monitoring of constructions, heritage site monitoring, pavement analysis and slope deformation. At the end of the session, a demonstration was conducted to capture and process data using the laser scanner.

Figure 16 Activities during Workshop 1B



Session 2A: Surveying the Mobile App Market



Figure 17 Activities during Workshop 2A



Paul Giessen (Netherlands) and Lau Wee Lik (Malaysia) talked about the uses, challenges and future of mobile surveying. Ease of use, low cost, free open source, accuracy and precision is the major challenge which may also hinder the future use. But the speakers and YS hope that this will be addressed in the nearest future. Group discussion was carried out after the lectures. Groups were given an assignment to create and present their view on the use, future and challenges on mobile surveying application at the end of the session.

Session 2B: Setting Up a Young Surveyors Network



Donmarl Camua (Philippines): The speaker talked about bridging the gap between the YS and the older ones in his country. Effort has been made towards bridging the gap by reaching out to students in schools and talking to them to major in surveying and growing in the profession. He also mentioned that at the first instance, the older surveyors in their country perceived the young professionals as a threat to their professional practice which is an impression that is being corrected now. The latest election of their national association was well carried out and the new president is more comfortable working with young professionals.

Yusuf Aro-Lambo (Nigeria): Nigeria has over 2,500 YS members. The YSN started in with few people and then grew into a committee of 12 members in 2012. Zone coordinators were appointed for the six geopolitical zones as well as the state coordinator for all the states in Nigeria. Their functions were to get information from the centre to their zones and to take information from the zones to the centre. Funding for the network in Nigeria is sourced from bodies like OSGOF, SURCON, NIS, private companies and sometimes individuals.



Jonathan Gustafson (USA): Spoke about challenges faced so far in setting up a USA chapter of YSN. He special mentioned of thanks to the FIG YSN, thanking them for supporting the first North American YSN conference.

## Report on 2<sup>nd</sup> FIG Young Surveyors Conference

At the end of the presentation, a lively open discussion was made to get feedbacks and pointers on setting up a YSN.



Figure 18 Activities during Workshop 2B

### Session 3A: Young Surveyors and the Definition of Surveying? Devising an action plan for the Way Ahead

The session was organised as a platform to report back to the recent FIG Commission 1 event and ask YS to think critically about positioning YS profession for the future. The session was moderated by Tom Champion (Australia).



Figure 19 Tom Champion leading the Workshop 3A

SURVEYORS  
MALAYSIA

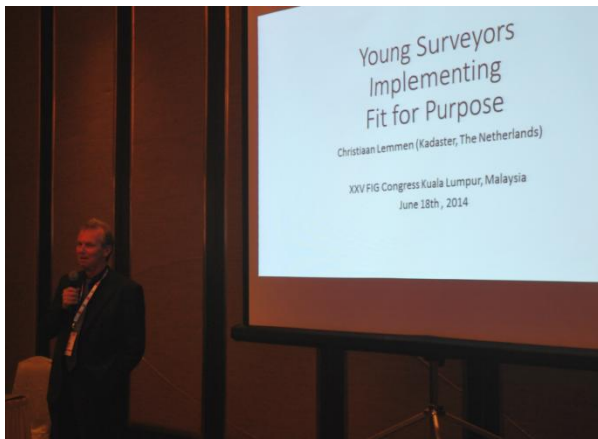
Outcome of the discussion during the workshop were:

1. Focus on the final product not the technology because technology is a tool which is always changing. Don't be slave to the technology.
2. More involvement from YS in the definition process as they are the future leaders of the profession. They are more open to environmental, social and ethical issues and factors.
3. Regulation is hard to incorporate into definition as it varies greatly across jurisdictions. However it must be recognised as a means to protect the public and community interest.
4. Ongoing education and professional development must accommodate various needs and requirements of local jurisdictions. It is critical that a culture of professional development be built into young professionals. It is critical to have a culture of professional development amongst young surveyors.
5. Underrepresented groups in the profession such as women and some cultural groups perhaps need more awareness as to what the surveying profession is and what it offers. Inspiration and local language may be key.



Figure 20 Activities during Workshop 3A

Session 3B: Young Surveyors Implementing Fit-for-Purpose



Christiaan Lemmen (Netherlands) was the speaker of the session and started his presentation with series of pictures taken from different countries (Ethiopia, Namibia, Rwanda, Lesotho) and at different steps of the implementation of the “Fit-for-Purpose” concept. Mr. Lemmen introduced his speech with raising awareness on the fact that:

1. We do not get more land but we get more people that need to be fed and the food requires land;
2. The expansion of informal settlement; and
3. 70% of the land is not documented at all.



**Figure 21 Top: Christiaan Lemmen delivering his presentation, Below: activities during Workshop 3B**

Those are the reasons behind the idea of the “Fit-for-Purpose” land administration concept. Lemmen highlighted, with providing real examples of study cases, the procedure to apply the fore-mentioned concept using a satellite or aerial image as a support and without any survey; collecting data in the field, geo-referencing in the office and establishment of the titles.

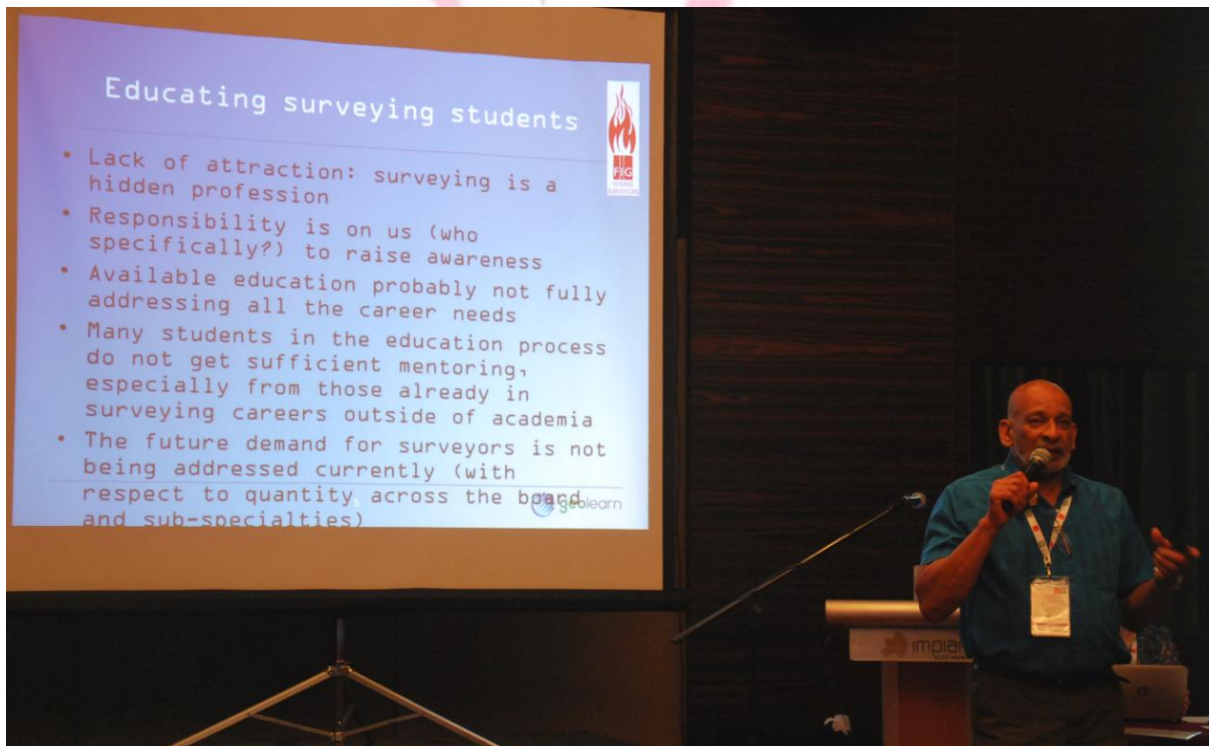
The Speaker stressed the benefits of this approach since it is well understood by the population (participatory approach), very fast to apply and the textual data collected are more complete and accurate (includes all objects and persons: men and women). Furthermore, the role of the “Digital Pen” as a very important tool in the data collection was presented, since it can be used in difficult circumstances (rain, if there is no electricity). YS who attended the workshop drafted their own ideas about this concept focusing on low cost high technology and general boundaries.

**Day 3 - 19 June 2014**

Day 3 of 2<sup>nd</sup> YSC continued the concept of parallel workshops but with a plenary session prior to the closing in the afternoon.

Session 4A: Surveying Education – Are We Meeting the Needs of The Present and Future?

The objective of the workshop was to provoke YS to discuss new educational paradigms to meet the needs of the future surveying profession. YS was expected to draft a statement and plan of action from the workshop. The speakers for this workshop were Liza Groenendijk (The Netherlands) and Joe Paiva (USA) and YS Emily Tidey (New Zealand) and Odil Akbarov (Uzbekistan).



**Figure 22 Top: Liza Groenendijk and YS paying attention to the presentation, Below: Joe Paiva delivering his presentation.**

## Report on 2<sup>nd</sup> FIG Young Surveyors Conference

The main discussion points of the workshop were:

1. Educating Surveying Students;
2. Supporting and Promoting Successful Young Academics;
3. Providing access to continuing professional development.

The following were the action statements and ideas generated from the workshop:

1. Increased awareness of surveying, starting from high school "pre-young surveyors!", ideas such as promotion videos proposed.
2. Identification of local needs which are different in each country.
3. Relevant ToT; relevant to current technology developments
4. Alumni – need to remain involved after graduating.
5. Academia – Enterprise links and support from professionals in many ways; guest lectures, funding, supervision, mentoring, internships.
6. Make technologies available for universities in developing countries.
7. Increased use and support of open software.
8. Facilitate academic partnerships to support international exchange programs for mobility of teaching staff and students in surveying.
9. To realize potential of YS and support through funding and scholarships for education and CPD.
10. To analyze the CPD programs available in each country and further develop these.
11. Webinars and online facilities for CPD and education, led by FIG Commission 2.



Figure 23 Activities during Workshop 4A

### Session 4B: Can We Value Informal Settlements?

Kate Fairlie (Australia) opened the workshop with an introduction about the FIG Commission (Valuation and the Management of Real Estate) and FIG Vice President Pengfei Cheng gave a short message to the participants.

A group discussion was later led by Chandan Das (Nepal). Participants were divided into three (3) groups and were tasked to discuss one question each. Each group subsequently sent their respective representatives to share the result of their discussions, especially on valuing settlements outside the formal land sector.



Figure 24 FIG Vice President Pengfei Cheng supporting the 2<sup>nd</sup> YSC activities



Figure 25 Activities during Workshop 4B

The questions assigned were as follows:

1. How prominent is informal settlement in your countries?
2. How can YS help informal settlements?
3. How you think can informal settlements be valued?

Kate Farlie then shared in closing the presentation entitled "Informal Settlements Real Estate Market Need For Good Land Administration and Planning".

### Session 5A: World Hydrography Day and the Blue Economy



This workshop started with a video presentation with the title of "Hydrography as A Career". Subsequently, Rear Admiral Mustafa Iptes (Director, IHO) shared his experiences in hydrography and the importance of hydrography as a field to measure and describe the physical features of oceans, seas, coastal areas, lakes and rivers for safety of navigation, protecting the marine environment, and other marine activities including economic development, security and defense as well as scientific research. Apart from that, he also addressed on the marine spatial infrastructure which are needed for marine cadastre management.

Gordan Johnston (FIG Representative of IBSC) later addressed on the Blue Economy. He emphasized on the return of investment (ROI) which can be made in this field. He highlighted that each \$1 invested by government in hydrography, will get \$10 in returns.

During this session, the speaker also highlighted that currently IHO has 82 member states and encourages more participations from non-member states to join the IHO family. Besides that, an announcement was made to attract participants to join the incoming IHO Category A Hydrographic Surveying Course at University of Southern Mississippi (USM), USA. 7 seats will be sponsored by IHO under the capacity building programme and YS are encourage to apply it.



Figure 26 Left: Activities during Workshop 5A, Right: A number of YS taking pictures with the speakers.

Session 5B: National Association Session



Figure 27 YS and Presidents of National Associations concentrating on the workshop

This session created a discussion platform for the Presidents of National Associations and YS to think together about how national survey associations and the profession can grow sustainably in the future.

The 2<sup>nd</sup> YSC was pleased to have the President of FIG Foundation, Presidents of National Association from Malaysia, Australia, Austria, Denmark, Germany, Japan, Nepal, Netherlands, Norway, Portugal, Sweden, United Kingdom etc. to be in the workshop. These National Association representatives spoke about the position and the work YS are doing in relation to the National Association.

The session had a fruitful discussion and mainly focused about the problems and possible solution in different countries and regions. All the association representatives encouraged and supported the YS. There was the good discussion about how to increase young people coming into surveyors' profession.



Figure 28 Lively discussion between Presidents of National Associations and YS



YS Plenary Session 3



Figure 29 YS paying attention during the 3<sup>rd</sup> Plenary Session

The 3<sup>rd</sup> plenary session on "Surveying and the Global Agenda: Young Surveyors Role" took place immediately after the afternoon coffee break. It was chaired by Zurairah (Malaysia) and the speakers were Greg Scott (UN-GGIM), Danilo Antonio (UN-Habitat GLTN), Paul Munro-Faure (FAO) and Keith Bell (World Bank). The session provided a broad, global overview of the surveying profession. It has inspired YS to think of their actions within the global context. It had also provoked discussion on how YS can position the profession in the future. Among the key issues highlighted were YS as agent of change, empowerment, embrace technology and changes, participate in global voluntary works and failure is just another step for a great success.



Figure 30 Speakers from left to right: Danilo Antonio, Paul Munro-Faure, Greg Scott and Keith Bell

Closing Remarks: Young Surveyor Open Mic and Tweet-off

The session started with quick recap of the three (3) days conference. A review of best tweets and photos took place and the best 2<sup>nd</sup> YSC tweets were announced where all winners were given prizes from ESRI. Eva-Maria (Incoming FIG YSN Chair) delivered her Closing Remarks followed by Zurairah (Malaysia), and thanked all who have participated, supported and showed interest in all the activities organised during the 2<sup>nd</sup> YSC.



Figure 31 YS stay connected!



Figure 32 Tweet off!

In conclusion, the 2<sup>nd</sup> YSC was indeed a huge success and a lot of lessons learnt by YS be it for general or technical knowledge. It has provided the opportunity for peer to peer engagements (YS to YS and FIG/ Surveying Industry Partners to YS) to exchange, share and discuss current and in-country challenges and opportunities related to YS. It has also allowed interactions among YS and prominent FIG/ Surveying Industry personnel to enhance the significance and relevance of YS in the surveying profession. Networking and communication skills has indeed being brushed up by YS throughout the conference. Furthermore, a new bond of friends from various backgrounds, countries and cultures were formed, if not all by most YS during the conference. It is hope such event may continue under the flagship of FIG and FIG YSN with more integrated and seamless programs between the two to encourage participation by both parties for the benefit of the surveying profession.



Figure 33 A number of YS doing Gangnam style as their group photo

## **ACKNOWLEDGEMENT**

The 2<sup>nd</sup> YSC participants are very thankful and acknowledged the supports and contribution given by all parties who have enabled YS to participate such a successful and fruitful conference in Kuala Lumpur, Malaysia:

1. FIG President, Teo Chee Hai;
2. FIG Foundation President, John Hohol;
3. FIG YSN, Kate Fairlie (Chair), Eva-Maria Unger (Incoming Chair) and Paula Djikstra;
4. TRIMBLE;
5. ESRI;
6. Persatuan Jurukur Tanah Bertauliah (PEJUTA), Malaysia; and
7. Young Surveyors Network Malaysia (Zurairah, Kelvin, Faz, Praba, Dexter, Hazida, Yusri, Fairuz, Wan, Yusniman, Yuhasle, Suraya, Shah, Fitz, Zarey, Faidzah, Fish and Izzati)

