



Land Surveying Division
Sr Paul Tsui LSD Council Chairman

2023 年京粵港澳測繪地理資訊學術交流會暨第十二屆京港澳測繪地理資訊技術交流會

為促進北京、廣東、香港和澳門四地測繪地理資訊科技交流，提升測繪地理信息科技水準，加強京粵港澳四地測繪科技工作者的友誼與合作，京粵港澳測繪地理資訊學術交流會暨第十二屆京港澳測繪地理資訊技術交流會於 2023 年 5 月 29 至 31 日在北京成功召開，參會者達三百多人，會議主題為“新時代測繪地理資訊技術與智慧城市建設”，由北京測繪學會主辦，廣東省測繪學會、香港測量師學會、香港理工大學和澳門特別行政區政府地圖繪製暨地籍局共同協辦。

土地測量組作為京港澳會議的創始單位之一，派出了六人的代表團參加是次會議，以下是代表團成員名單：

徐開源測量師	土地測量組主席
張裕仁測量師	土地測量組義務司庫
鄧康偉測量師	土地測量組前主席暨現任理事
梁佩兒測量師	土地測量組理事
徐玉儀測量師	香港測量師學會義務司庫
史文中測量師	土地測量組資深會員、香港理工大學講座教授、智慧城市研究院院長

大會開幕式由京粵港澳四地領導嘉賓致辭，港方由地政總署測繪處，助理署長（測繪事務），朱紹基測量師代表港方作視頻致辭。

特邀報告環節，土地測量組很榮幸邀請到香港大學講座教授暨中國科學院院士葉嘉安教授在會議上代表港方作特邀報告，報告主題為「3D 智慧城市 - 地理空間基礎設施」。

下午的主題報告環節，一共有 7 位來自京粵港澳的專家代表作主題報告，當中三位來自香港理工大學土地測量及地理資訊學系。

5 月 31 日大會安排了與會者參觀考察，參訪數瞰北京一測繪和空間大資料建設成果展，順訪北京城市規劃展覽館。

總結今次行程，土地測量組會員跟內地和澳門的同行及專家進行了具深度和建設性的交流，成果豐碩，也為來屆會議的籌備工作奠定了基礎。



大會主席團、講者、與會嘉賓和會議保障機構負責人合照



與會者大合照



香港測量師學會土地測量組與會會員合照

香港測量師學會土地測量組主席徐開源測量師致送紀念品給北京、廣東省、澳門和香港理工大學的代表



葉嘉安教授發表特邀報告

Conquering New Frontiers: Key Takeaways from the FIG Working Week 2023

LSD member Mr Mickey Ng attended the FIG Working Week 2023 on behalf of the HKIS. Please refer to the following content for his valuable experiences in Florida:

I was delegated by the HKIS to attend the International Federation of Surveyors (FIG) Working Week 2023 held in Orlando, Florida in the US from 28 May to 1 June and gave a keynote speech during its plenary session.

FIG, founded in 1878, is the premier international organisation for representing the interests of surveyors worldwide. It is a federation of national member associations and covers the entire range of professional fields within the global surveying, land management, land administration, geomatics, geodesy, and geo-information community. It provides an international forum for discussion and development that aims to promote the latest and best professional practices and standards.

FIG Working Week 2023 aimed to highlight the key role that surveying professionals – from the land, built, and natural environments, as well as the geospatial sectors – play in making sustainable development a reality. Its theme this year was ‘Protecting Our World, Conquering New Frontiers’, which was intended to inspire surveying and geospatial professionals and expand the influence of surveyors through technology, experiences, collaboration, and goodwill for a better tomorrow. As the world and climate change, surveyors aspire to leverage their knowledge base and tools to measure, monitor, and forecast how to improve the world’s outlook for future generations. This year’s theme was strategically aligned with the

United Nations’ 2030 sustainable agenda, as articulated in its sustainable development goals. It covered a variety of discussion platforms that reflected the FIG’s vision.

FIG Working Week featured a full slate of programmes, the highlights of which I will share here.

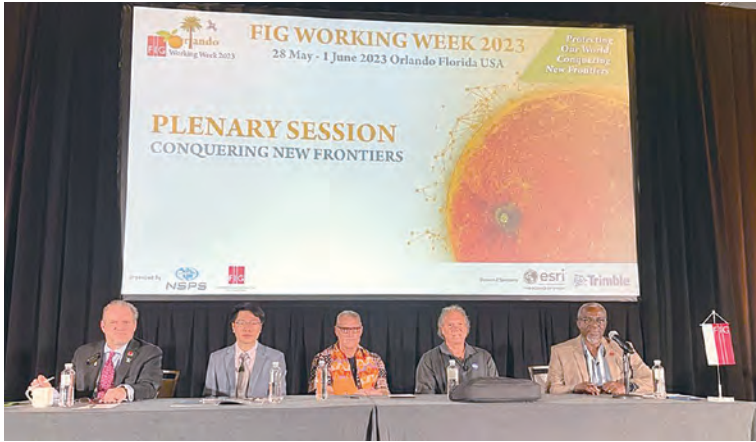
1. Disney World



Screen Capture of a Google Satellite Map Showing the Walt Disney World Solar Farm

Orlando is best known for Disney World, which presents itself as a magical place that has entertained the world for decades. Surveyors had a significant impact on Disney World’s creation as a result of a surveying venture known as “Project X,” which was mentioned during the opening ceremony by Beverly Hart Jones, PSM. Beverly told a story about her father, who was asked to prepare a survey of 12,450 acres (over 5,038 hectares) of land that became Disney World. This boundary survey was carried out by establishing boundary lines in the woods and swamps of Central Florida during the 1960s and became what was the largest private construction project in the United States at the time. Without the contributions of surveyors, a theme park of the scale and complexity of Disney World would not have been built and the world would not have been able to enjoy one of the most popular tourist destinations ever.

2. Presentation during the Plenary Session



All Speakers and the Moderator on Stage during the Plenary Session



Mickey delivers a keynote speech.

(L-R): Mickey and HKIS Past President/FIG Vice President Sr Prof Winnie Shiu

The conference theme drew upon the FIG's vision to serve people, the planet, and society. This was reflected in the three plenary sessions that set the tone for each of the three conference days. The sessions covered topics such as how to protect our planet, how surveying professionals can contribute to the new frontiers of space and technology, and why and how to tackle some of the challenges the world faces. It was my pleasure to be invited by FIG Vice President Sr Prof Winnie Shiu as one of the speakers for the plenary session, during which I gave a keynote speech entitled, 'Unlocking the XYZ Value: Smarter Working in Digital Transformation'. I explained that digital transformation had changed the way surveyors learn, think, and act. However, by leveraging their new skills and changing mindsets and identities, they can solve complex problems by providing accurate geospatial data that inform decision-making and promote sustainable development. There is always an opportunity

for surveyors to chart a path forward as they recognise the endless demand for accurate and rich geospatial services.

Besides, I was honoured to share the plenary session with Russell Romanella of NASA, Bryn Fosburgh of Trimble, and Timothy Burch of Get Kids into Survey. The insightful messages these esteemed experts presented were not only thought-provoking, but also crucial in guiding surveyors to conquering new frontiers in their fields. I also appreciated the truly engaged and active responses from participants, which made the plenary session meaningful and impactful.

3. Young Surveyor Conference



Working Week contained some pre-conference events including the Young Surveyor Conference, which I joined. It was a fantastic opportunity to connect with like-minded individuals from around the world who were new to and passionate about the surveying profession. The conference was specifically organised by and designed for young professionals and students in the surveying field.

As a participant, I found the conference to be incredibly engaging and insightful because I had the chance to meet and network with other young surveyors from different countries and backgrounds. It was inspiring to hear them describe their experiences and perspectives. The conference also featured keynote speeches from industry leaders who shared their insights and provided guidance on how to succeed in the surveying profession.

In addition, I had the opportunity to join different social events such as the Gala Dinner and Bowling Event, where I met more young surveyors. I believe that events like these are crucial for the future of the surveying profession, as they help foster a sense of community and encourage collaboration among young surveyors from around the world.

4. Selected Technical Talks

The Working Week provided a diverse range of technical talks and theses-sharing across the globe. I was privileged to attend some particularly informative and interesting discussions. One was 'Accessing the Quality of Photo Imageries from UAVs for Cadastral Purposes in Indonesia'. The speaker discussed the policies and framework behind the use of unmanned aerial vehicles (UAVs) to collect high-resolution images to support cadastral mapping and land registrations for an entire region. Another talk that caught my attention was 'Geospatial and AI Technologies for Cadastral Mapping and Land Registration in Saudi Arabia'. The speaker highlighted the dedication of conducting the first registration activities for every plot of land in the country by 2030. He also covered a high-level design of the geospatial operations and management in Saudi Arabia's real estate registrations in order to achieve its target. Last, I attended a talk by a national oil company representative, 'Securing Surface Rights for Oil and Gas Field Development Using State-of-the-Art GIS Technology'. The speaker discussed the use of GIS technology and applications to ensure the accurate and efficient management of land rights for oil and gas exploration and development. Overall, attending these talks was enlightening for me, as I gained valuable insights into the practices and considerations of other countries. They should serve me well as I continue to develop my surveying career.

5. The NOAA Aircraft Operations Center



Technical Tour of the NOAA's Aircraft Operations Center

The National Oceanic and Atmospheric Administration's (NOAA) Aircraft Operations Center serves as the main base for its fleet of nine specialised environmental data-gathering aircraft including the agency's three 'hurricane hunter' planes. During the technical tour of the center, guests had the opportunity to witness the data collection platform that helps the world better understand the planet it calls home. The center operates NOAA's fleet of specialised aircraft, which are equipped with advanced sensors and instruments that gather data on weather patterns, climate change, and natural disasters. The delegation was impressed by the NOAA team's level of expertise and dedication to its work, the high standards of which ensure that the data collected are accurate and reliable. It was truly inspiring to see how such data are used to inform decisions and policies and ultimately contribute to the betterment of the planet and humanity.

6. Conclusion

As I reflect on this week, I can't help but notice the increasing demand for surveying services and the lack of surveyors to meet this demand. It's a challenge that the surveying profession faces around the world. Additionally, it's worrying to see a lack of interest among young people in surveying as a career. However, I am also encouraged by the fact that the surveying profession has adapted to the changing times by leveraging technology and digital transformation to increase efficiency and accuracy in its work. Surveyors have also actively engaged with schools and universities to promote surveying as a viable and rewarding career choice.

As the profession moves forward, it's important for surveyors to continue their work to address these challenges and ensure that the profession remains relevant and sustainable. It's crucial that the industry attracts and retains talented individuals who will form the next generation of surveyors by equipping them with the skills and knowledge necessary to meet the needs of this changing world. To know more, please join the upcoming CPD!

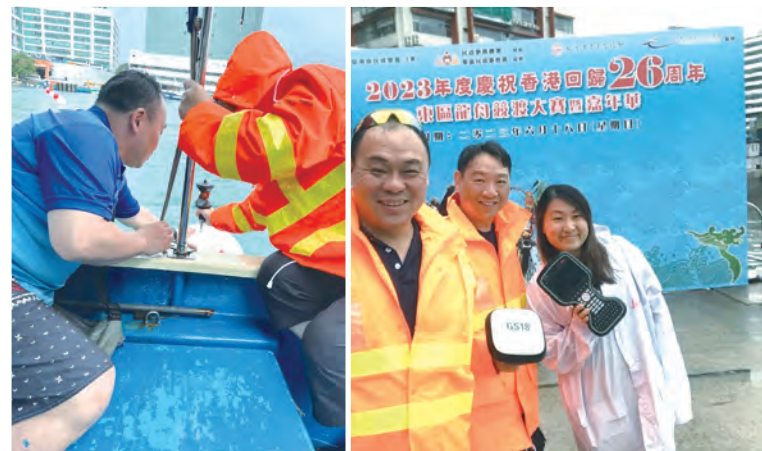
Supporting the 2023 Eastern Dragon Boat Race cum Carnival to Verify the Race Course's Distance

On 18 June, LSD Council Member Sr Michael WONG led his team in the 2023 Eastern Dragon Boat Race cum Carnival to verify the race course's distance by using GNSS technology and LS professional knowledge. The event attracted over 1,700 paddlers from 70 teams, which competed for seven titles and drew

scores of visitors and supporters along the Chai Wan Cargo Basin promenade. It was a good opportunity to promote the surveying profession by entertaining the public.



Race Organiser and Chairman of the Chai Wan Fisherman Recreation Association Mr WONG Gun Chai thanks Michael and his team.



Michael surveys the race course's distance by using GNSS technology and LS professional knowledge.