



SPACE GENERATION
ADVISORY COUNCIL

*workshops,
speakers &
panels*

FOR YOUNG
PROFESSIONALS
AND STUDENTS



DELEGATE HANDBOOK

Middle East Space Generation Workshop
14th & 15th December 2019

Istanbul Aydin University, Istanbul, Turkey



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Welcome to The First Space Generation Workshop

Dear ME-SGW Delegates,

For the first time this year, SGAC will be organising its first Middle-East Space Generation Workshop (ME-SGW) in Istanbul, Turkey. Over the past few years, the SGAC network has grown tremendously in the region and the first ME-SGW promises to be one of the key events for the next generation of outer space professionals in the Middle-East. The event draws in delegates from across the region, heads of space agencies, and high-profile representatives from government, industry, and academia in the region.

The first ME-SGW is an excellent opportunity to share your ideas and experience, initiate collaborative projects, and network with like-minded people in the space sector. The discussions and recommendations over the two days of the event will be presented at the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS) sub-committee meeting in February 2020. This is your chance to have your opinions and ideas heard on an international platform.

Over the past 6 months, the ME-SGW Organising Team has put in endless hours of volunteer time to the development and planning of the 1st SGAC regional workshop in the Middle-East. I would particularly like to acknowledge the ME-SGW Manager, Deputy Manager and Organising Team for their outstanding contributions to what we believe will be an engaging ME-SGW programme.

I would also like to acknowledge the support of all our sponsors that make it possible for SGAC to host the annual ME-SGW, and their commitment in advancing tomorrow's space sector leaders to grow their network in Middle-East.

Please take advantage of a broad range of experts attending the ME-SGW, network with your peers, be pro-active in your working groups and make the best out of this experience.

Regards,

A handwritten signature in dark ink, appearing to read 'Clementine Decoopman', with a long horizontal flourish extending to the right.

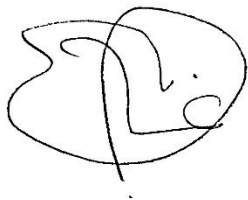
Clementine Decoopman

SGAC Executive Director

Welcome from The Middle East Regional Coordinator

In the background of promising and expanding space activities in the Middle East, the SGAC will be organizing the first ME-SGW in Istanbul, Turkey. The last few years, the SGAC network has been expanding dramatically in the Middle East Region. The first ME-SGW is a platform of discussion, where the youth in the Middle East can share their ideas and dreams. The SGAC will then act as a platform representing the voice of the youth from the Middle East region in the United Nations. The ME-SGW is also a unique environment to link the future space leaders from the Middle East.

On this occasion, I would like to thank the sponsors who supported the first ME-SGW. I would also like to thank the event managers, the organizing team and the wider SGAC network who spent the time and efforts to make the ME-SGW a reality.

A handwritten signature in black ink, consisting of a stylized, cursive 'G' followed by a series of loops and a final flourish.

Ghanim Alotaibi

Middle-East Regional Coordinator

Welcome from the ME-SGW 2019 Team

Space Generation Advisory Council has been organizing space generation workshops during which current space-related hot topics and challenges have been discussed particularly from a regional perspective. Several areal workshops have been successfully held in Europe, Asia Pacific, South America, Central America and Africa in the past.

Building on the success of the regional workshops around the world, we are thrilled to be organizing the very first edition of the Middle East Space Generation Workshop (ME-SGW) in Istanbul, Turkey on 14-15 December 2019. This two-day regional event will help connect university students and young professionals with experts, academia and movers and shakers of the industry.

Our organizing team have prepared a fascinating program in which 15+ space experts and enthusiasts will participate as lecturers and panellists. The program consists of keynote speeches, International Space Laws and Policies Panel and four different working groups.

We are looking forward to welcoming you in Istanbul to be a part of the exciting discussions and meet space experts and Space Generation fellows coming from all over the world!



Beste Ilke Şahin
Event Manager



Neda Şentürk
Event Manager

Sponsors & Partners



About Space Generation Advisory Council

Space Generation Advisory Council (SGAC), in support of the United Nations Programme on Space Applications, is a non-governmental organisation that aims to represent university students and young space professionals to the United Nations, space agencies, industry, and academia. SGAC was conceived at the Third United Nations Conference on the Exploration and Peaceful Uses of Space (UNISPACE III) in Vienna in 1999 and has permanent observer status in the United Nations Committee on the Peaceful uses of Outer Space (UN COPUOS).

SGAC's focus is on pragmatic space policy advice to policy makers based on the interests of our worldwide network of university students and young professionals, roughly between the ages of 18 and 35. Our international network represents more than 15,000 members and alumni in more than 150 countries; it is the largest of its kind and grows annually.

SGAC serves to act as a forum to hone the voice of the next generation of space sector leaders and share their perspectives with current decision leaders. In addition to policy advice, members of our volunteer network create groups to carry out a range of projects including: the Space Technology for Earth Applications group, Space Medicine and Life Sciences, Youth for Global Navigation Satellite Systems (YGNSS) group, Space Technologies for Disaster Management group, the Near Earth Object group, Space Safety and Sustainability project group, Small Satellites group, Space Law and Policy group, Space Exploration and Commercial Space project groups.

For more information please visit: spacegeneration.org

About the Middle-East Space Generation Workshop



Building on the success of the regional workshops around the world, the first edition of Middle East Space Generation Workshop (ME-SGW) will be organized in Istanbul, Turkey on 14-15 December 2019 in Istanbul Aydin University.

ME-SGW is a two-day regional event which aims to gather university students, young professionals, experts, academia and industry representatives from the Middle East all together. Thanks to Turkey's strategic location connecting Europe and Asia and paving the way to the Middle East and Northern Africa, this 1st ever ME-SGW will provide the participants with an unprecedented opportunity to strengthen the regional network and will prepare the ground for discussions about how to enhance the space industry in this region.

The two-day regional event will bring together Bachelor's, Master's and Doctoral degree candidates, young professionals, experts, academia, space agencies and industry representatives to participate through a series of workshops, panels and guest speakers.

Logistics/ Venue

The ME-SGW will be held at **Istanbul Aydın University** which is located at *Besyol Mah., Inonu Cad., 40 Sefakoy, Kucukcekmece, 34295, Istanbul, Turkey*. The Venue can be easily accessed by using **metrobus** as it is just 10 minutes walking distance from the **Besyol Metrobus Station (Beşyol Metrobüs Durağı)**.



Accommodation

There is no contracted hotel that provides discounted amount to the delegates and all participants are advised to make their own accommodation arrangements in Istanbul as soon as they purchase their tickets for the ME-SGW.

You may consider booking your room from hotels nearby to Taksim Square, as shuttles will leave at 7.00 am from Taksim Square to the Venue, for which our recommendations are as follows:

- Taksim V plus
- Hutsuite Hotel
- Misafir Suites 8
- Fitas Oda Beyoglu
- Pera Center Hotel
- Hotel Naumpasa Konagi
- Residence Hotel Istanbul

Airbnb is also quite common to resort to in Istanbul and you can book your room at:

[https://www.airbnb.com.tr/s/%C4%B0stanbul--Turkey?listing_types\[\]=1](https://www.airbnb.com.tr/s/%C4%B0stanbul--Turkey?listing_types[]=1)

Practical Information

Traveling to Istanbul

Istanbul is one of the easiest cities to access in the region, with two international airports: **New Istanbul Airport (IST)** in the European side of the city and **Sabiha Gokcen Airport (SAW)** in Kurtkoy in the Asian side.

Public Transportation

Public transportation can be handled via boats, subways, buses and trams. To use public transport, you will need “ISTANBUL CARD” which can be obtained from small kiosks near all metro stations, piers, and also bus stations.

Transfer from the Airport

From **New Istanbul Airport** to **Taksim**: You need to take the line **IST 19: New Istanbul Airport – Beşiktaş – Taksim** and you get off at the last stop, in front of the Point Hotel, close to Taksim Square.

The shuttle fare per person is 18 TRY, one way, luggage included. Trips approximately take 80-100 minutes.

You can check the lines and timetables on the official website at: <https://hava.ist/en/new-timetables>

From **Sabiha Gokcen Airport** to **Taksim**: The shuttles are white coloured and parked in front of the terminal building arrivals level exit ready to take you to Taksim for a fee of 15 TRY. Shuttles' Taksim departure point is across Taksim Divan hotel, in front of the Point Hotel.

You can check the lines and timetables on the official website at:

<https://www.sabihagokcen.aero/passengers-and-visitors/transport-and-parking/transportation/havabus-en>

Visa

Participants depending on their nationalities may have to obtain an entry visa in order to visit Turkey.

All visa applicants are required to possess a passport valid not less than 6 months after visa expiration.

It is possible to obtain e-Visa online. <https://www.evisa.gov.tr/en/>

Insurance

Life and major health insurance are the responsibility of each participant. SGAC and ME-SGW organizers will not take any responsibility for life and major health insurance. Delegates and their accompanying guests are strongly advised to purchase adequate travel insurance for the duration of their stay in Turkey.

Electronics

Any adapters you may need for your electronic equipment the electrical system used in Turkey as 2-pin round plugs and 220 volts.

Language

The working language of the workshops is English.

Social Events

Gala Dinner – Saturday, 14 December 2019

Place of the Gala Dinner will be decided and announced depending on the number of attendees.

Currency

The currency in Turkey is Turkish Lira and except extremely touristic areas no other currency is accepted. It is, therefore, advisable for you to exchange either at the airport or at the exchange offices in the city. You can also withdraw money from ATMs which can be found easily almost every neighbourhood.

Accepted cards include Visa, MasterCard, American Express, Diners Club and Japan Credit Bureau.

Emergency Services

In case of emergency, dial “**155**” or “**112**” to be connected with police and medical emergency, respectively.

ME-SGW Staff Contact Information

Beste Ilke Şahin (Event Manager): +39 349 159 74 02

Neda Şentürk (Event Manager): +90 533 818 16 97 (local number)

Mohaddese Daryabari (Delegates Team): +98 919 75 15 882

Programme

Day 1

Time	Saturday, 14 December 2019
07.00	Bus leaves*
08.00 – 09.00	Delegate Arrival and Registration
09.00 – 09.15	Welcome from Event Managers
09.15 – 09.30	Welcome from IAU
09.30 – 10.00	Dr.Tamer Özalp – RESEARCHTURK SPACE
10.00 – 10.30	Nassim Bovet - ISU
10.30 – 11.00	Dr. Holger Krag - ESA
11.00 – 11.30	Coffee Break
11.30 – 12.30	International Space Policies and Laws <i>Dimitra Stefoudi, Hamza Hameed, Mohammad H. Ouji</i>
12.30 – 13.30	Lunch
13.30 – 15.00	Working Groups
15.00 – 15.30	Coffee Break
15.30 – 17.00	Working Groups
17.00 – 18.00	Speed Networking
18.00 – 18.30	Closing Remarks
19.00 – 23.00	Gala Dinner

* Bus leaves from Taksim Square in front of Atatürk Cultural Center, AKM, at 07.00 am. Additional shuttles from different locations may be provided depending on the number of attendees. If you would like to take the bus, please inform the Event Managers by **2 December 2019 at the latest**, or otherwise no place can be guaranteed.

Day 2

Time	Sunday, 15 December 2019
07.00	Bus leaves*
08.00 – 09.00	Delegate Arrival
09.00 – 09.10	Welcome and Review
09.10 – 09.30	Prof. Dr. Bilge Demirköz – Middle East Technical University
09.30 – 11.00	Working Groups
11.00 – 11.30	Coffee Break
11.30 – 11.45	Aslı Pınar Tan – ISU Alumnus
11.45 – 12.00	Assistant Prof. Koki Ho – Georgia Institute of Technology (Telecon)
12.00 – 12.30	Dr. Reut Sorek Abramovich – D-MARS
12.30 – 13.30	Lunch
13.30 – 15.00	Working Groups
15.00 – 15.30	Coffee Break
15.30 – 17.00	Working Groups
17.00 – 18.00	Working Group Presentation
18.00 – 18.30	Closing Remarks
19.00 – 23.00	Free Time

* Bus leaves from Taksim Square in front of Ataturk Cultural Center, AKM, at 07.00 am. Additional shuttles from different locations may be provided depending on the number of attendees. If you would like to take the bus, please inform the Event Managers by **2 December 2019 at the latest**, or otherwise no place can be guaranteed.

Important Programme Notes

Registrations

Registration will take place on Saturday, 14th December 2019, between 08.00 am – 09.00 am at the registration desk. Please do not forget to get your name tag.

Please note that a government ID (e.g. passport) will be required every single day to access the Venue!

Your ticket includes the following:

- Use of shuttles from/to Taksim Square and the Venue for the Event
- Catering onsite (2 Lunches and 4 Coffee Breaks)
- Gala Dinner
- Free WiFi at the venue

Dress Code

The dress code for the ME-SGW is business casual.

The Gala Dinner is an exception where either business formal attire or a formal dress from your culture will be expected.

Event Attendance

Please note that punctual attendance is required for all sessions. This requirement is to show respect for the speakers, moderators, and other delegates.

Networking

Networking can be daunting for those not familiar with it or those who are more introverted. Please check out [this post](#) for some tips for people who find large groups overwhelming. In addition, mastering the proper event etiquette can be an art, check out [this website](#) for some tips and tricks. We recommend that you always carry business cards and write notes on the back quickly (how you met them, how you will follow-up, who to connect them with) as you'll meet too many people to remember well. This way you will be able to write a personal follow-up note.

Working Groups

WG1 – CubeSats Applications in the Middle East

The moderator of this working group is Sajjad Ghazanfarinia. The overall idea of the working group is given as follows:

CubeSats are gaining attention from countries around the world and the Middle East market is not an exception. This working group aims to discuss the applications of CubeSats that might be benefiting the ongoing challenges of countries in the Middle East. Due to its low cost, CubeSats are a great capacity building projects for space missions design in general. The following points can be discussed during the workshop:

- Current CubeSat missions in the region, and how they are important
- SmallSats
- Applications in the Middle East like Remote Sensing, Communications and GIS
- CubeSats as a capacity building space project
- Legal Arrangements and Challenges Concerning CubeSats such as Registration, State Responsibility, State Liability, Space Debris and Debris Mitigation, Radio Frequency Management and Insurance issues

There will be 5 working group sessions and each session lasts 90 mins. The selected topics will be covered both with moderator and guest speakers. At the end of this working group the delegates will discuss about a given topic and provide a summary of recommendations through an oral presentation and deliver a final report concluding the workshop.

14 December, Saturday

13.30 – 15.00: Introduction to CubeSat Applications (Prof. Dr. Alim Rüstem Aslan)

15.30 – 17.00: Space Debris – Space Situational Awareness (Dr. Holger Krag)

15 December, Sunday

09.30 – 11.00: SmallSats (Murat Süer)

13.30 – 15.00: Legal Aspects (Neda Şentürk)

15.30 – 17.00: Wrap up and Conclusions (Sajjad Ghazanfarinia)

WG2 – Space Applications in the Middle East Region: Cooperation vs. Competition

The moderator of this working group is Michalis Benakis. The overall idea of the working group is given as follows:

Accessing space provides practical and valuable information to all humankind. States benefit directly from the satellite technologies provided by private and public organizations. To assure the long-term sustainability of outer space and most benefits of space technologies to mankind, every member of the international community must work together. This working group aims to discuss regional cooperation in the Middle East to support the growth of technology and infrastructure by sharing costs and resources that promote space activities.

- Resources and capabilities available in the Middle East
- Capacity Building
- International Partnerships
- Barriers and Legal Challenges

There will be 5 working group sessions and each session last 90 mins. The selected topics will be covered both with moderator and guest speakers. At the end of this working group the delegates will discuss about a given topic and provide a summary of recommendations through an oral presentation and deliver a final report concluding the workshop.

14 December, Saturday

13.30 – 15.00: Country-specific capacity building in the Middle East (Dr.Tamer Özalp)

15.30 – 17.00: Reaching regional cooperation (Hamza Hameed)

15 December, Sunday

09.30 – 11.00: Current space applications (Prof. Dr. Bilge Demirköz)

13.30 – 15.00: Tools for space applications: Build Your Mission (OpenCosmos)

15.30 – 17.00: Conclusion and Future Plans (Michalis Benakis)

WG3 – Spacefaring Future of Middle East: The Role of Moon Missions

The moderator of this working group is Burak Yağlıoğlu. The overall idea of the working group is given as follows:

The Moon is considered as a logical step to take for creating a human settlement in space before directly going Mars. Establishing an infrastructure on the surface of the Moon or on a Lunar orbit provides a unique environment for testing new technology concepts, new research areas and even commercial opportunities. Since this workshop is supposed to be the first one in the Middle East and given the fact that there is still much progress to be made for the most countries located in this region, it is of crucial importance to start raising awareness of the so-called “most important feat of all time” and the following Moon Missions. This working group therefore aims to first give an overall view on the ongoing activities in terms of new Moon Missions and then to create room for further discussions on different aspects of space such as science, technology, economy, policy, and legal challenges. An answer will be sought to the questions of “how could the Middle East countries address to these issues and how such countries could be able to contribute to the exploration and economy of moon missions?”

- Legal aspects and economic value of Moon Missions
- Access to Moon through Small Satellite Missions and International Cooperation
- Scientific value of Lunar Exploration
- Commercial Moon Missions and Space Logistics

There will be 5 working group sessions and each session last 90 mins. The selected topics will be covered both with moderator and guest speakers. At the end of this working group the delegates will discuss about a given topic and provide a summary of recommendations through an oral presentation and deliver a final report concluding the workshop.

14 December, Saturday

13.30 – 15.00: The role of space resources utilization in the new era of lunar exploration: benefits and challenges (Dimitra Stefoudi, Antonino Salmeri)

15.30 – 17.00: Logistics of Lunar Missions (Assistant Prof. Koki Ho)

15 December, Sunday

09.30 – 11.00: Access to the Moon without Public Funds: A perspective of an Engineer from competitions to a start-up (Toshiki Tanaka)

13.30 – 15.00: Astrobiology Experiments around Moon (Dr. Reut Sorek Abramovich)

15.30 – 17.00: Wrap-up and Conclusions

WG4 – Space Education and Outreach in Middle East

The moderator of this working group is Halit Mirahmetoğlu. The overall idea of the working group is given as follows:

Space Capacity building involving space education and training is an important aspect of almost all Middle Eastern countries. Different capacity building program models were adapted. Some countries have already created space human capital, while other countries are still on the process. This workshop tries to identify and categories the different capacity building models. This means that the workshop will involve discussions about different models in a comparative manner to come up with lessons learned. These lessons learned should be important for countries already involved in the space sector as well as, important to space – aspiring countries in the Middle East. Topics may involve the following:

- Formal education opportunities in Space Science
- Capacity building programs in the Middle East Region
- Innovative Space Awareness Studies
- Social Media and Space

There will be 5 working group sessions and each session last 90 mins. The selected topics will be covered both with moderator and guest speakers. At the end of this working group the delegates will discuss about a given topic and provide a summary of recommendations through an oral presentation and deliver a final report concluding the workshop.

14 December, Saturday

13.30 – 14:00: Introduction to the Space Education and Outreach (Halit Mirahmetoglu)

14:00 – 15.30: Opportunities in the Space Sector (Aslı Pınar Tan)

Space Education through the eyes of a space lawyer (Mohammad H. Ouji)

16.00- 17:00: Social media and events for Space Society (Ksenia Synkova)

15 December, Sunday

09.30 – 11:00: Analog Missions (Liad Yosef)

13.30 – 15:00: Country Specific Capabilities and Cooperation (Dr.Tamer Özalp)

15.30 – 17:00: Wrap up and Conclusions

Organizing Team

Event Managers



Beste Ilke Şahin (Turkey)

Ilke is currently doing her MSc. in Space Engineering at Sapienza University of Rome. She is an International Space University alumnus from Space Studies Program 2018 in Delft, the Netherlands. She has been recently working on space debris modelling and estimation. She has been selected as one of the NPOCs for Turkey in April 2019. Ilke is super excited to organize the 1st ME-SGW and looking forward to welcome you in Istanbul.

Contact:

beste-ilke.sahin@spacegeneration.org



Neda Şentürk (Turkey)

Neda is a lawyer admitted to practice law in Turkey with the Istanbul Bar Association and an LL.M. graduate of Advanced Studies in Air and Space Law from Leiden University. She is currently working at a boutique law firm in Istanbul and dealing with aviation law related matters. Her main interest area in space law is the legal challenges concerning small satellites. She has been selected as one of the NPOCs for Turkey in April, 2019.

Contact:

neda.senturk@spacegeneration.org

Delegates & Communications Team



Mohaddese Daryabari (Iran)

Mohaddese is an undergraduate mechanical engineering student at Imam Khomeini International University and is currently focusing on CubeSat system engineering. She has been selected as one of the NPoCs for Iran in April, 2019.



Izem Yağlıoğlu (Turkey)

Izem is a senior student at Istanbul Bilgi University, in Communication and Design Management with a minor of Public Relations. She is interested in new media and currently doing internship in marketing department of the said university.

Supporters

Fredrik Samdal Solberg – Posters Design

Gökay A. Güneş – Logo Design

SGAC Team

Distinguished Speakers

Prof. Dr. Alim Rüstem Aslan

Prof. Dr. Bilge Demirköz

Dr. Holger Krag

Dr. Tamer Özalp

Dr. Reut Sorek Abramovich

Murat Süer

Liad Yosef

Aslı Pınar Tan

Nassim Bovet

Bahiya Sultan

Ksenia Synkova

Antonino Salmeri (Telecon)

Assistant Prof. Koki Ho (Telecon)

Toshiki Tanaka (Telecon)

Moderators

Sajjad Ghazanfarinia

Michalis Benakis

Burak Yağlıoğlu

Halit Mirahmetoğlu

International Space Policies and Laws Panelists

Dimitra Stefoudi

Hamza Hameed

Mohammad H. Ouji



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