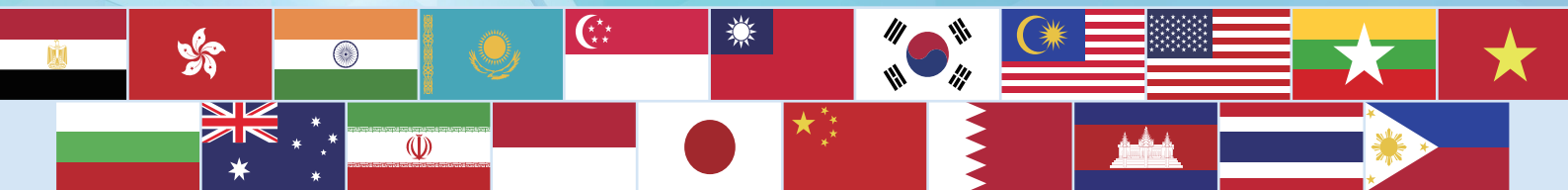




# The 10th Anniversary World Mathematics Team Championship

November 29 to December 3, 2019  
In Korea

WMTC Organizing Committee



[www.wmtc.international](http://www.wmtc.international)

## Time Schedule

### Competition & Award Ceremony Day

Title	Date	Schedule
Competition Day	Nov 30 Sat. - Sat	9:30~11:30 Team Leaders/Coaches Proctors meeting  11:30~12:30 Lunch  13:00~14:00 Preparation for the Competition  14:00~15:20 Individual Round  15:35~16:20 Relay Round  16:20~16:50 Rearrange Tables for Team Round  16:50~17:30 Team Round  18:30~19:30 Dinner  19:30~21:00 Special Lecture & Gift Exchange  20:00~23:00 Grading
Award Ceremony Day	Dec 2 Mon.	6:00~7:30 Breakfast  09:00~10:00 Bus to Ramada Hotel Davinchi Hall  10:00~13:00 Award Ceremony  13:00~14:00 Lunch at Ramada Songdo Hotel  15:30~21:00 COEX, Seoul

<http://wmtc.international/competition>

## Scoring & Rules

	Rounds	Problems	Time	Points problem /set	Points each Round	Method Team Score	Max Team Total
Individual	2	15/6/2	60 min. 1 Round: 20 min. 2 Round: 40 min.	2/4/8	70	(Team Total) ÷6	70
Relay	3	2/2/2	24 min.	20/15	60	(Team Total) ÷3	60
Team	1	14	40 min.	5	70	× 100%	70

### <Individual Round: 60 minutes>

Round 1 - 20 minutes. 15 easy to medium level problems, 2 points each, total 30 points.

Round 2 - 40 minutes. 6 medium level and 2 difficult level problems, 4 points for each medium and 8 points for each difficult problems for a total of 40 points.

### <Relay Round: 24 minutes>

Each team divides into 3 groups with 2 persons in each group

Each team divides into 3 groups with 2 persons in each group.

8 minutes each round for 3 rounds. 3 rounds.

Each round has 2 problems as a set for each group to do relays.

For each set, only the answer from the second member of the relays group will be counted.

5-minute answers worth 20 points, 8-minute answers worth 15 points.

Total possible points for each group is 60.

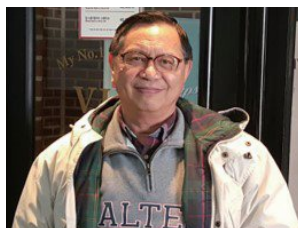
Points count toward team score equal to the average score of 3 groups in a team.

### <Team Round: 40 minutes>

40 minutes to solve 14 problems, 5 points per problem, total 70 points.

Discussion is allowed. Each team submits one answer sheet.

Points count toward team score equal to the total score of the team round.



It is WMTC's 10th anniversary. For a competition that is non-profit, targeting for diversity and not just a large participating population, and non-government sponsored or subsidized, it is really a small wonder that WMTC had lasted 10 years. WMTC differs from many other competitions not just in its format and content but in its basic philosophy toward educating our students.

1. Winning is important. However, WMTC believes it is more important to get students to participate, to work and cooperate with their teammates, to learn and to appreciate different cultures by interacting with students from other regions, to discover that learning mathematics can be fun and useful, to be able to deal with and to learn from not winning, to understand why they did not win and what they can do so they can be closer to or actually win in the following years, to know that hard work and being passionate in what you do play a bigger part in your success than brain and being “smart”, and finally, to learn mathematics better by understanding how students from other regions learn mathematics. One thing that kept WMTC going and growing is our insistence in keeping our original objective which is to cultivate the interest of mathematics for our students regardless of their race, gender, or origin. Our goal is to let our students, and in many cases their parents, to discover that mathematics and the logic used in mathematics can be fun, useful, and a good way to make friends. Our goal is not to differentiate and select the top mathematics students. We do award prizes to our top scorers but it has more to do with using these awards to encourage and to incentivize them to open their eyes and mind to mathematics. One thing that prevents many students around the world to try to show interest in mathematics is the fact that being good in mathematics is commonly considered as “abnormal” or “socially awkward or inept.” We believe doing mathematics in a team setting can help our students feeling more acceptable and less “out of place.” It is also a good way to make friends and to make good friends who have similar interest.

2. Unlike many other competitions, WMTC's organizing committee is an integral part of WMTC. It is truly a working committee and not just a window dressing or rubber stamp. Committee members, who are professionals from about 20 regions all over the world, actually meet at the end of each competition to discuss and to vote on important issues concerning current and future competitions. During ongoing year, members also comment and vote via internet on any important matters that need to be resolved. The success of WMTC depends on contributions made by our committee members.

3. Also, unlike most other events that are operated by one and the same organization every year, WMTC gives each region a chance to gain experience by playing host to an international event. In 2015, WMTC was held in Beijing, China. Subsequently, 2016 was in Seoul, South Korea, 2017 was in Bangkok, Thailand, and 2018 was in Varna, Bulgaria. Each event was different with different emphasis that highlighted each region's specialties and culture.

In 2019, the cosmopolitan city of Seoul, Korea will be hosting our special 10th anniversary WMTC. Not only Seoul symbolizes the international spirit of WMTC, the city also has a very long, special, and rich tradition. This is the second time Seoul serves as our host. With its great success in 2016, WMTC is much honored to have South Korea serving as our host again for this special 10th anniversary milestone.

A handwritten signature in black ink, reading 'Quan K. Lam'.

November, 2019

**Quan K. Lam**

Chairman

World Mathematics Team Championship





## Welcome back to Korea!

I still vividly remember the excitement that I felt with 10 Korean students in 2011. It is a great honor to host the WMTC for the second time since 2016. As WMTC celebrates its 10th year, so does KGSEA. In 2011, Korean participants were only ten in total, but we have grown much since thanks to increasing student participation and assistance from people in various fields. For this year, we have some 160 participants from Korea alone.

Just like other Asian countries, Korea is another nation that team-based mathematics is hard to experience. However, it only takes one team-based math competition, like WMTC, to realize the importance of the process to produce results. I sincerely hope that all the students who are here for this contest will produce better outcome while learning to appreciate the process.

A team-based competition surely is a challenge that is not easy to tap on in the beginning. However, once the door opens, it will teach you about the importance of communication and cooperation, and be another factor that will motivate you in excelling in math. Do not be afraid. Just remember to have fun.

Let me extend my deepest respect and gratitude for the leaders and teachers of different countries who have always supported WMTC. Your affection for your students has been conveyed to them through the process of sacrifice and patience not known to everyone. Thank you to the country team leaders who are here today with us for making this event all the more meaningful and to the teachers who unfortunately could not be here but still cheer for their students.

In preparation for the WMTC that commemorates its 10th anniversary, I looked up what I wrote in the Welcome Message in 2016. It went like this: "I had one goal as I organized the competition in Korea. It was to make sure all could feel comfortable during their stay in Korea as if it was their home. I truly hope the time you spend in Korea will be a meaningful and unforgettable experience."

It goes the same this year. I will try my best and cheer for you so that every one of you can take great memories home with you.

Let me conclude by sending my sincere gratitude to those who have contributed to the successful organization of this event. Your support was a great source of motivation throughout the process. Thank you.

Sincerely,

November, 2019

**Patrick Yoo**

2019 WMTC, Korea Host

WMTC Organizing Committee Members

# Students Special Event – Open School

## Teaching is Learning! Students are Lecturers!

The series of Student's Open Lectures this evening are part of the Open School Program, a series of monthly lectures sponsored by the Korean Gifted Students Evaluation Association (KGSEA) and led by members of the KGSEA Math Circle. The Open School Program aims to provide passionate students interested in science or math with an opportunity to provide social community service for younger learners by sharing and explaining their recent discoveries. In particular, tonight's event represents a substantial step forward for the program and its mission of sharing and disseminating mathematical and scientific knowledge to a broader international audience.

Today's session will consist of 5 student lecturers, each covering a different mathematical topic for approximately 10-15 minutes. We hope that you will not only enjoy the lectures but also acquire valuable mathematical knowledge throughout the evening.



**YoungJun Lee** 11th grade  
Chadwick International School



**YunSu Han** 11th grade  
Bugil Academy GLP



**Taehyung Kang** 11th grade  
Korea International School Pangyo



**DongKyun Lim** 12th grade  
Chadwick International School



**Min Jae Kim** 12th grade  
Bugil Academy GLP

## Teaching is Learning! Students are Lecturers!

Topics	Lecturer	Field	Summary
Warm up your Brain	Taehyung Kang	Easy Quiz	Ex> 1, 2, 4, 6, 10, 12, 16, 18, ?
Introduction to Functions	Dongkyun Lim	General Mathematics	What is exactly is a function? This lecture is a basic introduction to the concept of functions, discussing the definition of a function, inverse functions, and function transformations.
K-means Clustering	Yunsu Han	Coding (Artificial Intelligence)	This interactive presentation discusses the K-means algorithm, a method of unsupervised learning for artificial intelligence. The presentation's code is in Python, and it will go through the process of computing and visualizing data clusters.
Propositional Logic	MinJae Kim	Formal Logic	This lecture is an introduction to 0th order propositional calculus. It deals with the basic notation and syntax of this logic system as well as the ten foundational rules of derivatio.
Summations in Probability	YoungJun Lee	Counting and Probability	How do we calculate the probability of rolling a 6 with a six-sided die? This presentation goes more in depth into the meaning as well as the derivations of formulae, especially those with infinite sums, behind probability calculations.

10 mins per each session

See you on Nov 30 7:30PM ~ 8:50PM  
2nd Floor dinning hall, Golden Tulip Hotel

The Open School program welcomes lecturer applications from students interested in math and science throughout the world. All lectures should be formatted for a target audience between Grades 6 and 9.

If you wish to apply for an Open School lecturer position, submit your lecture topic, content and personal information through google form application. Lectures should be around 30 minutes long, and supplementary materials (e.g. presentation slides, note documents, appendices, etc.) are highly recommended. Some lecture notes may be selected for publication, and should thus be formatted according to the stated style guidelines posted on the website. Lecture slides should be submitted separately to [openschool@kgsea.org](mailto:openschool@kgsea.org)

If you have any further questions, please contact

[openschoool@kgsea.org](mailto:openschoool@kgsea.org)

# WMTC Organizing Committee

## Junior Division Team List

Group Number	Team Number	Nationality	Division	Team Name
0001	J01	India	Junior	Aditya Birla World Academy
0001	J02	India	Junior	Aditya Birla World Academy
0003	J03	Vietnam	Junior	Vietnam A
0003	J04	Vietnam	Junior	Vietnam B
0003	J05	Vietnam	Junior	Vietnam C
0003	J06	Vietnam	Junior	Vietnam D
0003	J07	Vietnam	Junior	Vietnam E
0005	J08	Indonesia	Junior	IPH Schools
0008	J09	Myanmar	Junior	T & H Math Centre
0009	J10	Philippines	Junior	Asian Math Sci
0011	J11	Taiwan	Junior	The Chinese Mathematics Association(OLPCs)
0013	J12	Taiwan	Junior	Taiwan Math&Science Circle
0013	J13	Taiwan	Junior	Taiwan Math&Science Circle
0015	J14	China	Junior	Zhengzhou Aixue Education
0015	J15	China	Junior	Zhengzhou Aixue Education
0020	J16	Bulgaria	Junior	Sofia High School of Mathematics
0003	0101	Vietnam	Junior	Vietnam_Alternate
0007	0101	Australia	Junior	Citipointe Christian College_Alternate
0015	0101	China	Junior	Zhengzhou Aixue Education_Alternate
0017	0101	Cambodia	Junior	Cambodia_Alternate
0002	0102	Australia	Junior	Penrhos College_Alternate
0006	0102	Malaysia	Junior	E Math Olympiad_Alternate
0013	0102	Taiwan	Junior	Taiwan Math&Science Circle_Alternate

## Intermediate Division Team List

Group Number	Team Number	Nationality	Division	Team Name
0001	I01	India	Intermediate	Aditya Birla World Academy
0002	I02	Australia	Intermediate	Penrhos College
0003	I03	Vietnam	Intermediate	Vietnam A
0003	I04	Vietnam	Intermediate	Vietnam B
0003	I05	Vietnam	Intermediate	Vietnam C
0003	I06	Vietnam	Intermediate	Vietnam D
0003	I07	Vietnam	Intermediate	Vietnam E
0004	I08	Japan	Intermediate	Japan
0005	I09	Indonesia	Intermediate	IPH Schools
0007	I10	Australia	Intermediate	Citipointe Christian College
0007	I11	Australia	Intermediate	Citipointe Christian College
0009	I12	Philippines	Intermediate	Asian Math Sci
0010	I13	Qatar	Intermediate	Qatar

## Intermediate Division Team List

Group Number	Team Number	Nationality	Division	Team Name
0011	I14	Taiwan	Intermediate	The Chinese Mathematics Association(OLPCs)
0011	I15	Taiwan	Intermediate	The Chinese Mathematics Association(OLPCs)
0011	I16	Taiwan	Intermediate	The Chinese Mathematics Association(OLPCs)
0011	I17	Taiwan	Intermediate	The Chinese Mathematics Association(OLPCs)
0012	I18	Indonesia	Intermediate	Indonesia A
0012	I19	Indonesia	Intermediate	Indonesia B
0013	I20	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I21	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I22	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I23	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I24	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I25	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I26	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I27	Taiwan	Intermediate	Taiwan Math&Science Circle
0013	I28	Taiwan	Intermediate	Taiwan Math&Science Circle
0014	I29	China	Intermediate	China A
0015	I30	China	Intermediate	Zhengzhou Aixue Education
0015	I31	China	Intermediate	Zhengzhou Aixue Education
0015	I32	China	Intermediate	Zhengzhou Aixue Education
0016	I33	Iran	Intermediate	Math Home of Tehran
0016	I34	Iran	Intermediate	Math Home of Tehran
0016	I35	Iran	Intermediate	Math Home of Tehran
0016	I36	Iran	Intermediate	Math Home of Tehran
0016	I37	Iran	Intermediate	Math Home of Tehran
0018	I38	USA	Intermediate	USA A
0020	I39	Bulgaria	Intermediate	Sofia High School of Mathematics
0021	I40	South Korea	Intermediate	ATHENA
0021	I41	South Korea	Intermediate	CTMW_Global Vision Christian School Mungyeong Campus
0021	I42	South Korea	Intermediate	GSISMS_Gyeonggi Suwon International School
0021	I43	South Korea	Intermediate	GVCS_Global Vision Christian School Mungyeong Campus
0021	I44	South Korea	Intermediate	MSTigers_Seoul International School
0021	I45	South Korea	Intermediate	Tigers_Seoul International School
0021	I46	South Korea	Intermediate	Intermediate_Alternate
0002	O103	Australia	Intermediate	Penrhos College_Alternate
0006	O103	Malaysia	Intermediate	E Math Olympiad_Alternate
0015	O103	China	Intermediate	Zhengzhou Aixue Education_Alternate
0017	O103	Cambodia	Intermediate	Cambodia_Alternate
0003	O104	Vietnam	Intermediate	Vietnam A
0007	O104	Australia	Intermediate	Citipointe Christian College_Alternate
0008	O104	Myanmar	Intermediate	T & H Math Centre_Alternate



# WMTC Organizing Committee

## Advanced Division Team List

Group Number	Team Number	Nationality	Division	Team Name
0004	A01	Japan	Advanced	Japan A
0009	A02	Philippines	Advanced	Asian Math Sci
0010	A03	Qatar	Advanced	Qatar A
0011	A04	Taiwan	Advanced	The Chinese Mathematics Association(OLPCs)
0011	A05	Taiwan	Advanced	The Chinese Mathematics Association(OLPCs)
0014	A06	China	Advanced	China A
0016	A07	IRAN	Advanced	Math Home of Tehran
0016	A08	IRAN	Advanced	Math Home of Tehran
0016	A09	IRAN	Advanced	Math Home of Tehran
0019	A10	USA-BCA	Advanced	Bergen Count Academy A
0019	A11	USA-BCA	Advanced	Bergen Count Academy B
0019	A12	USA-BCA	Advanced	Bergen Count Academy C
0019	A13	USA-BCA	Advanced	Bergen Count Academy D
0020	A14	Bulgaria	Advanced	Sofia High School of Mathematics
0021	A15	South Korea	Advanced	Cornerstone_Cornerstone Collegiate Academy of Seoul
0021	A16	South Korea	Advanced	Decerte
0021	A17	South Korea	Advanced	Euler A_CheongShim International Academy
0021	A18	South Korea	Advanced	Euler B_CheongShim International Academy
0021	A19	South Korea	Advanced	GSISMS_Gyeonggi Suwon International School
0021	A20	South Korea	Advanced	HAFS M4 TEAM A_Hankuk Academy of Foreign Studies
0021	A21	South Korea	Advanced	HAFS M4 TEAM B
0021	A22	South Korea	Advanced	Hamsters_IVY COLLEGIATE SCHOOL
0021	A23	South Korea	Advanced	K.Kung_Global Vision Christian School Mungyeong Campus
0021	A24	South Korea	Advanced	KGSEA Math Circle
0021	A25	South Korea	Advanced	KMLA MSZD_Korean Minjok Leadership Academy
0021	A26	South Korea	Advanced	KMLA PanG_Korean Minjok Leadership Academy
0021	A27	South Korea	Advanced	Math Master
0021	A28	South Korea	Advanced	MG Brothers_Global Vision Christian School Mungyeong Campus
0021	A29	South Korea	Advanced	NLCS_North London Collegiate School Jeju
0021	A30	South Korea	Advanced	RYU_Global Vision Christian School Eumsung Campus
0021	A31	South Korea	Advanced	St. Paul Mathletes_Saint Paul Preparatory Seoul
0021	A32	South Korea	Advanced	Team KMLA_Korean Minjok Leadership Academy
0021	A33	South Korea	Advanced	TGY_Global Vision Christian School Mungyeong Campus
0021	A34	South Korea	Advanced	Advanced_Alternate
0021	0105	South Korea	Advanced	Advanced_Alternate
0013	0105	Taiwan	Advanced	Taiwan Math&Science Circle_Alternate
0018	0105	USA	Advanced	USA Alternate
0020	0105	Bulgaria	Advanced	Sofia High School of Mathematics_Alternate
0006	0106	Malaysia	Advanced	E Math Olympiad_Alternate
0011	0106	Taiwan	Advanced	The Chinese Mathematics Association(OLPCs)_Alternate
0005	0106	Indonesia	Advanced	IPH Schools_Alternate



# Discover Australia

Penrhos College is a leading girls' boarding school in Perth, on the beautiful west coast of Australia. From the girl in pre-kindergarten to the young woman in Year 12, we inspire our students to strive for the highest and achieve their personal best.

Our award-winning Maths Mentor Program is designed to inspire, challenge and inform students of the wonder of mathematics.

Each year, more than 80 girls in Secondary School have a unique opportunity to follow a rigorous extension course, designed by the Australian Mathematics Trust, to become better problem-solvers and critical thinkers in line with our emphasis on 21st century learning skills.

***"Inspiring girls to achieve their maximum academic potential through varied learning experiences that engage, excite and challenge". Strategic Directions 2010.***

Award-winning teacher Peter Chandler and his team are honoured to be sharing in the experience of the World Mathematics Team Championship.

Visit [penrhos.wa.edu.au/boarding](http://penrhos.wa.edu.au/boarding) or contact Mr Peter Chandler on tour at [chandp@penrhos.wa.edu.au](mailto:chandp@penrhos.wa.edu.au) to learn more about opportunities to study abroad at Penrhos.

PENRHOS COLLEGE

6 Morrison Street, Como 6152 Western Australia

[penrhos.wa.edu.au](http://penrhos.wa.edu.au)



# World Mathematics Invitational

2019 in Fukuoka



# KUALA LUMPUR

July 17-21 2020







# WELCOME

## Contact Us

 +886 903 832 732

 olpctop

 [wmiregister@gmail.com](mailto:wmiregister@gmail.com)



WMI CHAIRMAN  
Kun Lung Tsai

李坤龍



**August 21-25**  
**TAIWAN**



COME TOGETHER. OVER LOVE FOR MATHEMATICS.

# ISMC 2019

We're excited! Primary students from all over the world will again put on their thinking caps solving challenging problems. This will be another great learning experience for all!

1

## INTERNATIONALIZATION

INTERNATIONAL EXAM EXPERIENCE AND BE ON PAR WITH OTHER ESTABLISHED COUNTRIES.



## DISTINGUISHED PORTFOLIO

CERTIFICATION AND RECOGNITION FROM AN INTERNATIONALLY PROMINENT EDUCATIONAL BODY.

2

3

## GLOBAL BENCHMARK

MEASURE YOURSELF AGAINST WORLD'S BEST AND GET THE GLOBAL RANK.



## CURRICULUM COMPATIBILITY

STUDENTS CAN COMPETE WITHOUT ADVANCED KNOWLEDGE OR ANY SPECIAL TRAINING.

4



## INTERESTING QUESTIONS

PROBLEMS ARE DESIGNED BY INTERNATIONALLY RENOWNED MATH EDUCATORS.





# Discover

## Qatar Foundation.

Qatar Foundation (QF) is a non-profit organization that focuses its efforts on education, research, and community development. As part of our mantra to unlock human potential, we have established schools that serve the individual needs, interests, and talents of our diverse student population.

The students in our schools also have the unique opportunity to gain real-world experiences by participating in the conferences, lectures, and events offered by our world-class partner universities. We've created a unique and dynamic community of people from all over the world, coming together to learn, discover, and engage in all we have to offer: from art exhibitions to global summits, sports competitions to research conventions—QF is hosting a vibrant ecosystem for knowledge and discovery at all levels.

**9,000+**  
students

**13**  
schools

**9**  
universities

ONE FOUNDATION

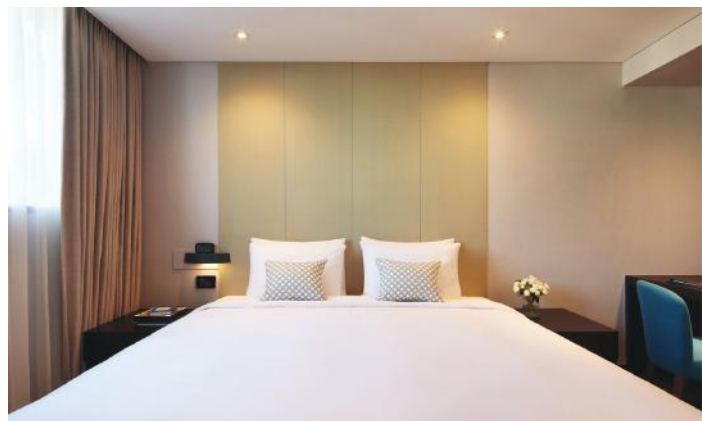


# Howard Johnson Incheon Airport

Offering relaxed spaces, refined and sophisticated services and assorted facilities, Howard JohnsonIncheon Airport does the best tomake every moment meaningful and memorable.

## Guestrooms

Our 402 guestrooms, including 10 suites, range from standard rooms to family spaces and premium suites, combining the perfect break with quietly efficient selection of amenities and services.



## Features and Services

- Free wired/wireless Internet
  - In-room safe
  - Multinational and cable TV
  - Complimentary 2 bottles of water
- Work desk and chair
  - Mini refrigerator, electric pot
  - Bidet, hair dryer, bathrobe, and bathroom amenities

## Restaurant & Bar

Rise & Dine restaurant and Daybreak coffee shop & bar provide variable menus and beverages from breakfast, lunch, dinner buffet to à la carte menu, sandwich & lunch box, coffee, draft beer, and organic wines.









## Facilities - The Island 7

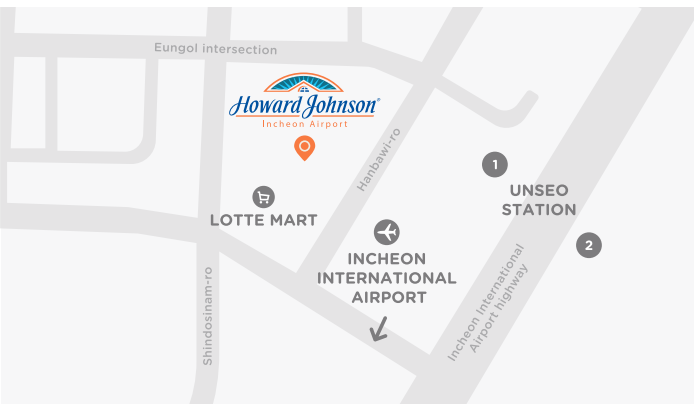
- Fitness Center
  - Sauna
- Kid's Zone
  - Billiard Zone
- Indoor Pool
  - Amenity Shop
- Music Zone

## Meeting & Event

Megastar, our flagship 323m<sup>2</sup> event space, is the ideal venue for diverse events and parties with state-of-the-art sound and video equipment and premium services from experts.

Capacity by Room Style		Round	U-Shape	Hollow	School(Seminar)	Board Room	Theatre
Ball Room	Scale						
A + B	Size: 25.3*12(m) Height: 2.85(m) Area: 323(m <sup>2</sup> )	210	-	-	180	130	- 350
A	Size: 18*12(m) Height: 2.85(m) Area: 216(m <sup>2</sup> )	150	-	-	100 120	80 90	- 250
B	Size: 7.3*12(m) Height: 2.85(m) Area: 88(m <sup>2</sup> )	60	25 30	25 31	60	50 25 30	80 100

## Location



- Incheon International Airport:** Approx. 15 minutes
- Airport Railroad:** Approx. 300m from Unseo Station, exit 1
- Bus:** Unseo Station, #203, 223  
(Hotel ↔ Incheon International Airport Terminal 1)
- Taxi:** One-way, approx. 15 minutes  
(Hotel ↔ Incheon International Airport)
- Hotel Shuttle Bus:** 06:00 ~ 22:20  
(Hotel ↔ Incheon International Airport Terminal 1)

## Local Attractions

- BMW Driving Center (approx. 10 minutes)
  - Muuido & Silmido (approx. 20 minutes)
  - Yeongjong Seaside Rail Bike (approx. 20 minutes)
- Sky 72 Golf Club (approx. 15 minutes)
  - Yongyudo (approx. 20 minutes)





臺灣數學/科學圈

Taiwan Math / Science Circle

**The Taiwan Math/Science Circle(TWMC)** is a program for motivated students in Taiwan. It aims at drawing kids to both mathematics and science, teaching them to accept failures, preparing them for competitions, and introducing them to the fun of solving challenging problems and studying more difficult materials.

### **Circle Sessions: Knowledge for Every Level**

Circles sessions often concentrate on problem solving techniques applicable in many areas. Sample circle topics include: symmetry, the pigeon – hole principle, divisibility, counting, probability, invariants, graphs, induction, plane geometry, or inversion in a circle. Teachers would encourage the students to think and would not be satisfied unless there is a rigorous solution to every problem.

### **TWMC Camps**

The camps will allow the students to explore the concepts of math and science in fun and creative ways. The students will be exposed to many different materials that will allow them to grow greatly. These camps will bring out student's self-confidence and interest for both both of these subjects.

### **Contests**

TWMC members will be encouraged to attend many different competitions, in and out of the country. These competitions provide a myriad of opportunities for them: a platform for students to demonstrate your talent and a stepping-stone to achieving greater things in life. They represent unconventional but effective ways of securing internships, scholarships, jobs and exposure to real-world issues. Students will also be able to connect to other talented youths and experience the joy of competing! TWMC is very grateful of the information about camps and competitions that were provided by various schools and organizations.

**Taiwan Math/ Science Circle**

**[www.taiwan-mathcircle.org.tw](http://www.taiwan-mathcircle.org.tw)**

**TEL: +886-4-2243-1519**

**FAX: +886-4-2243-4727**

**Email: [twmc.adm@gmail.com](mailto:twmc.adm@gmail.com)**

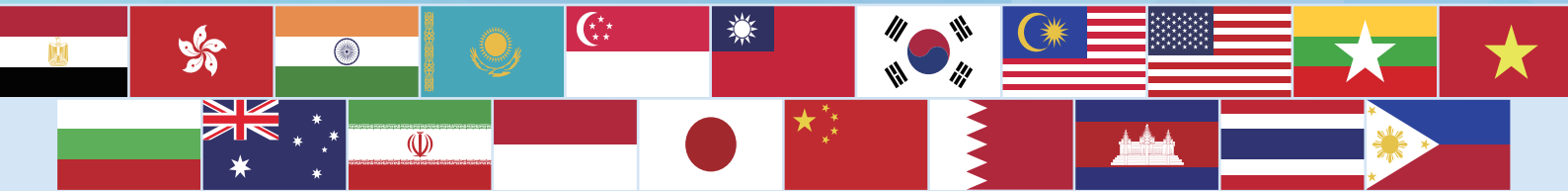
**2F., No.390, Beitun Rd., Beitun Dist., Taichung City 406, Taiwan (R.O.C.)**

# The 10th Anniversary World Mathematics Team Championship

**740** Participants

**103** Teams

**21** Countries



## SPONSORS

**WMTC**  
(United States of America)

Korean Gifted Students  
Evaluation Association  
(KGSEA)

## Hotel Information

### Howard Johnson Incheon Airport

6, Shindosinam-ro 142bungil, Jung-gu, Incheon, 22371, Korea  
Tel +82 32 772 0000

### Golden Tulip Hotel

8, Huinbawi-ro, 59 bungil, Jung-gu, Incheon, 22371, Korea  
Tel +82 32 232 2000

<http://wmtc.international>