

IET MATE HONG KONG
UNDERWATER CHALLENGE 2021

Event Day

- Contest day: 12 Jun 2021 (Sat)
- Format of competition: Remote through Zoom
- No Registration Fee for Hong Kong Regional Competition
- Registration Fee for MATE International Competition is required.
- Registration Deadline: 5 Jun 2021 (Sat)

Competition Format

- Technical Documentation Submission + online presentation
 - Technical Documentation include Technical report, specification sheet, Company Safety Review and SID. Submission of JSA is optional.
- Submission Date for Technical Documentation & Poster:
- On or before 23:59 on 10 June 2021

- The submission documents will follow the rules of MATE ROV competition + poster pdf.
- Checklist will be sent out later.

Online Presentation

- Format: Zoom presentation.
- Total : 30 minutes / team
- Rundown per team: (All in English)
- 10 minutes (MATE Technical Presentation : follow MATE Rules, no ppt/video)
- 10 minutes (Real ROV on land showcase/demo : can use ppt/video)
- 10 minutes Q&A

Scoring

- Technical Documentation : follow MATE score sheet
- Safety checking: follow MATE safety checking documentation score sheet
- Poster : follow MATE score sheet
- Presentation:
 - MATE technical presentation: follow MATE score sheet
 - REAL ROV on land showcase/demo: convert MATE mission score sheet, judges will evaluate the effectiveness and possibility for each of the tasks the student mentioned in 5-point scale (0-5).
- Total Score will be the sum up of all the items.

Example

Task # 1: The Ubiquitous Problem of Plastic Pollution (up to 90 points)	Points				Example		
Judges' Notes: Companies must complete the steps of task 1.1 "Seabin - Cleaning up our ocean one marina at a time" in order. The other tasks may be done in any order.					5-point scale	Mapped score	
1.1 up to 45 points – Seabin - Cleaning up our ocean one marina at a time 5 points – disconnecting the older power connector to the Seabin 10 points – removing a previously installed Seabin's mesh catch bag 10 points – installing a new mesh catch bag into the Seabin 20 points – reconnecting a new power connector to the Seabin	0	5	10	10	4	$4 / 5 \times 5 = 4$	
					2	$2 / 5 \times 10 = 4$	
					4	$4 / 5 \times 10 = 8$	
					1	$1 / 5 \times 20 = 4$	
1.2 up to 45 points - Remediation: Removing plastic pollution from top to bottom o up to 15 points – removing floating plastic debris from the surface 15 points – remove all 6 pieces of debris 10 points – remove 3 to 5 pieces of debris 5 points – remove 1 to 2 pieces of debris 0 points – remove 0 pieces of debris	0	5	10	15	0	$0 / 5 \times 15 = 0$	
o up to 20 points – removing a ghost net from midwater 10 points – pulling a pin to simulate cutting the ghost net free 10 points – removing the ghost net (and pin) from the water	0	10			4	$4 / 5 \times 10 = 8$	
					5	$5 / 5 \times 10 = 10$	
o up to 10 points – removing plastic debris from the bottom 5 points each, 10 points total – removing plastic debris from the bottom	0	5	10			3	$3 / 5 \times 10 = 6$
Total Task # 1 (out of 90)					Total	44	

Presentation Judging panels through Zoom

- Judges from IET + 1 moderator
- Depends on the no. of participating teams, multiple panels will be set up.
- The presentation judges will also act as the mission evaluation judges

Requirement

- Every team must submit the technical documentations + poster
- Every team must showcase their ROV on land during the presentation
- The presentation will be conducted in English only
- Late submission will result in score penalty