



# CMA UNDERWATER EXPERT Ltd.

School name : CMA Secondary School in Hong Kong, China

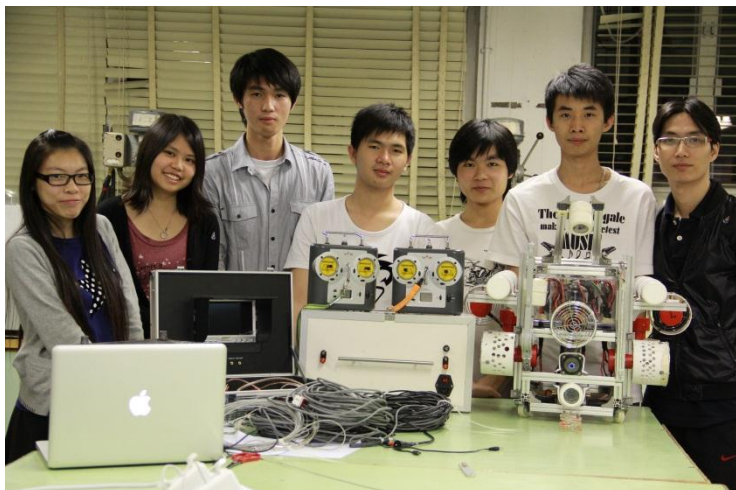
Club name : Design and Applied Technology Club

Distance required to travel to the International Competition: 14129 kilometers

Competition History :

CMA-ROV has participated the MATE HK Regional contest with fifth times.

This is first time participating in the MATE International competition.

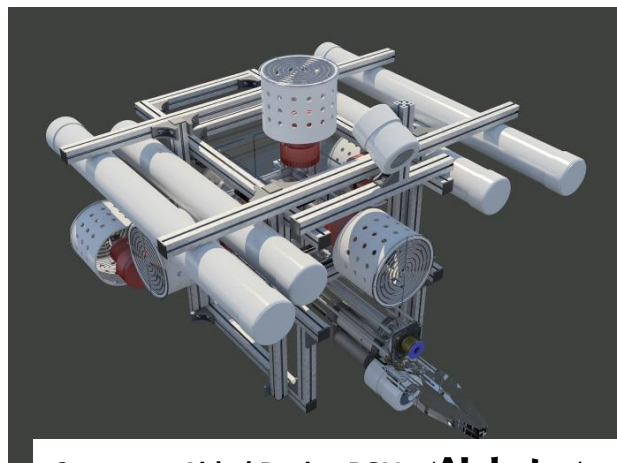


Team photo (From left to right)

| Team Member Name        | (Form, Role)                  |
|-------------------------|-------------------------------|
| Yeung Suet Yee, Queenie | (7, Secretary)                |
| Poon Wing Kee, Kimberly | (7, CEO)                      |
| Chen Sen Chang          | (6, Electrical Engineer)      |
| Dang Quoc Vuong         | (3, Research and Development) |
| Chan Cheung Hin         | (6, System Engineer)          |
| Leung Shun Kuen         | (4, Mechanical Engineer)      |
| Cheung Man Yuen         | (Technology Teacher, Mentor)  |

## ROV SPECS

|                  |   |   |
|------------------|---|---|
| CMA - ROV Name   | : | <b>Alphatar</b>   |
| Total Cost       | : | HK\$ 10,680   |
| Primary material | : | 30mm X 30mm Aluminum beam, Acrylic, PVC                       |
| Dimensions       | : | Length - 80cm<br>Width - 45cm<br>Height - 50cm                |
| Weight           | : | 18 kg   |
| Speed            | : | Horizontal Speed - 0.58 m/sec.<br>Vertical Speed -0.75 m/sec. |



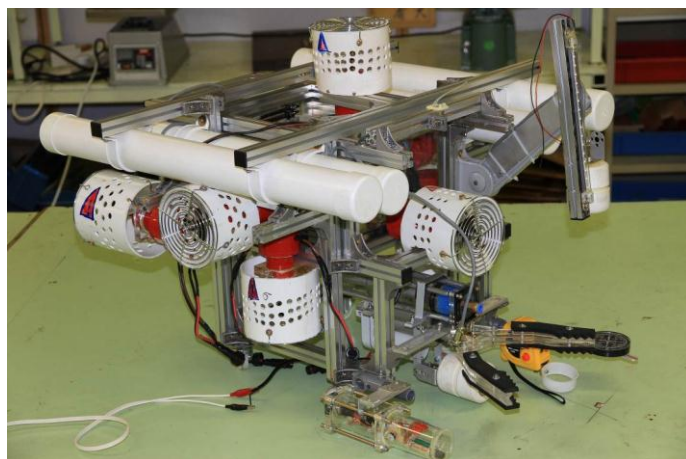
Computer Aided Design ROV '**Alphatar**'

Safety Features :

- Clearly labeled moving parts
- 20A fuse in place
- No sharp edges
- Current limiter

Special Features :

- Custom waterproofed control box design
- Custom manipulator arm design
- Custom modular frame design
- Custom current limiter design
- Replaceable module design
- Electronic metal detector
- Rapid installation



Hong Kong Regional - Ranger Class Champion  
CMA - ROV '**Alphatar**'