



Sea Level Measurement
Device Design Competition
海平面量度裝置設計比賽

Competition Briefing
比賽簡介

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Organizers 主辦單位

- Faculty of Engineering, The University of Hong Kong
香港大學工程學院
<http://engg.hku.hk>
- Hong Kong Observatory
香港天文台
<http://www.hko.gov.hk>
- Hong Kong Meteorological Society
香港氣象學會
<http://www.meteorology.org.hk>
- Supported by HKU Knowledge Exchange Fund
香港大學知識交流基金資助
<http://www.ke.hku.hk>

Objectives 目的

- To enhance participants' understanding of meteorological instrumentation and application of information technology;
推廣學生在資訊科技應用及氣象測量的認識；
- To promote the realization of novel designs and innovative ideas
鼓勵學生實踐創新科技及創意設計的意念。

Categories 參賽組別

- Junior and Senior 初級組 及 高級組
- We do not categorize the teams using class level or age. Whether a team is Junior or Senior is determined by whether the sea level measurement device can automatically record the data
不是以班級或年齡來區分參賽組別，而是以所設計的海平面量度裝置能否自動收集和處理數據來決定。
- The group is only required to specify which category they are in during **final submission**, which depends on the sea level measurement device they have designed and implemented
報名時隊伍無需決定參賽組別，隊伍只須於**提交作品**時根據參賽作品決定組別。

Requirements 作品要求 R-01 R-02

- R-01 The sea level measurement device should be capable of automatically (senior teams) or manually (junior teams) measuring the sea level.
海平面量度裝置需能自動（高級組）或經人手（初級組）量度海平面。
- R-02 There is no restriction on the choices of materials for the sea level measurement device. The cost for the design and fabrication of the device, excluding computers (for data archival and analysis, if applicable), should be **less than HKD 1500**. There will be **no subsidy** from organizers for making the sea level measurement device.
製造海平面量度裝置的材料並沒有限制，所需費用應**少於港幣1500元**（電腦設備等除外）。主辦單位並**不會給予金錢上的補助**。

Requirements 作品要求 R-03

- R-03 The report should be concise, preferably with a length of **no more than 10 pages** (cover page excluded, diagrams included). Submission of soft copy-only report in PDF format is encouraged, and should be included in the CD-ROM or DVD-ROM containing other deliverables. In case a hard copy report is produced, it should be printed on A4-sized paper.

文字報告宜言簡意賅，**不可多於十頁**（包括圖表,不包括封面頁）。主辦單位鼓勵提交PDF格式的報告,可存於CDROM或DVD-ROM內。如欲遞交列印本,請列印於A4紙上。

Requirements 作品要求 R-04 R-05

- R-04 Digital photos of the sea level measurement device should be delivered, on CDROM or DVD-ROM, together with the report, before the deadline of submission.
提交報告時亦需提交參賽作品之照片，請存於CDROM或DVD-ROM內遞交。
- R-05 Submission of deliverables should be sent to the specified address, otherwise it will not be entertained.
作品需提交到指定收集地點。主辦單位不會於其他地點收集作品。
- Hong Kong Observatory Headquarter,
134A Nathan Road, Kowloon
九龍尖沙咀彌敦道134號A 香港天文台總部

Requirements 作品要求 R-06

- R-06 Each group is required to attend the **project exhibition**. Judging will be held during the exhibition. At least one team member of the group must attend the exhibition. They are expected to answer questions raised by the judges and visitors.

參賽隊伍需出席**作品展覽**。展覽當天將進行評審，展覽期間參賽隊伍需派至少一位隊員介紹作品，並回答評判及參觀人士的提問。

Requirements 作品要求 R-07 R-08

- Senior teams only 高級組附加要求
- R-07 The sea level measurement device should be completely **autonomous** in operation
海平面量度裝置應能全自動操作。
- R-08 The system should be capable of storing the sea level readings onto **digital storage media**.
量度得的海平面數據可儲存在數碼儲存媒體內。

Submission 提交作品

- Sea level measurement device 海平面量度裝置
- Report 文字報告
- Photos of the designed sea level measurement device
作品照片CD-ROM或DVD-ROM
- Deliverable submission form 提交作品表格
- Software 軟件
- Submission Deadline 提交作品限期:
2015-04-24[Fri] 17:00

Judging Criteria 評審準則

- J-01 **Research 報告內容**
Content of report, data collection and testing methodologies.
報告內容、數據搜集及測試方法。
- J-02 **Innovation 創意**
How innovative ideas have been applied in the design of the sea level measurement device.
海平面量度裝置的創意。
- J-03 **Accuracy 準確度**
How the sea level measurement device give readings with reasonable errors under different situations.
海平面量度裝置的準確度。
- J-04 **Appearance 外觀**
Does the instrument look sleek, neat and tidy?
海平面量度裝置的外觀。
- J-05 **Presentation 介紹技巧**
Performance in the project exhibition.
參賽隊伍的介紹技巧。

Project Exhibition, Judging and Award Presentation

作品展覽、評審及頒獎典禮

- All participating teams are required to attend the Project Exhibition.
參賽隊伍需出席作品展覽。
- Judging will be done in the morning. The results will be announced in the afternoon, and awards will be presented.
評審將於上午進行，比賽結果將於下午作品展覽完結前公布，並頒發獎項。
- Open to the public. Parents, teachers and students are welcome.
作品展覽將開放給公眾參觀，歡迎家長、老師及同學出席。
- All the visitors can vote for the "My Favourite Sea Level Measurement Device" Award winner
入場人士將投票選出「我最喜愛之海平面量度裝置」的得獎隊伍。
- 2015-05-02[Sat] / 2015-05-03[Sun] (Tentative 暫定)
09:30 - 17:30
- At least one team member of the group must attend the exhibition.
展覽期間參賽隊伍需派至少一位隊員介紹作品。

Awards 獎項

- Champion 冠軍
- First runner-up 亞軍
- Second runner-up 季軍
- The Most Innovative Sea Level Measurement Device Award 最佳創意獎
- The Most Attractive Sea Level Measurement Device Award 最優外觀獎
- The Most Accurate Sea Level Measurement Device Award 最高準確獎
- The Best Presentation Award 最佳演繹獎
- My Favourite Sea Level Measurement Device Award
我最喜愛之海平面量度裝置

Upcoming events 活動預告

- 2014-11-22[Sat]
Session 1: 09:30-11:30
Session 2: 13:00-15:00
Workshop on “Scene Analysis” 「影像分析」工作坊
- 2014-12-06[Sat]
Workshop on “Circuit Design and Analysis”
「電路設計及應用」工作坊
- 2015-05-02[Sat] / 2015-05-03[Sun] (Tentative 暫定)
09:30 - 17:30
Project Exhibition, Judging and Award Presentation
作品展覽、評審及頒獎典禮

Links 連結

- Competition website 比賽網頁
<http://www.cs.hku.hk/~sealevel/>
- Facebook page  Like
<https://www.facebook.com/SeaLevelCompetition>
- Facebook group
<https://www.facebook.com/groups/446467115494615/>
- Email 電郵
sealevel@cs.hku.hk

THANK YOU

Questions?

