

# ***The First International Robot Competition in RVSP (IRC-RVSP2011)***

## **A. Participants**

To Comprehensive the creative and technique for robot, The First International Robot Competition is organized. Four or less students study in college and one advisor can participate as a team. Each student can only apply one team of each competition.



## **B. Registration**

The registration will be opened from October 10th to November 5th, 2011.

Please send the registration form to email address "[rvsp11@bit.kuas.edu.tw](mailto:rvsp11@bit.kuas.edu.tw)".

Please also compress all related files into a single file and upload it onto our submission system at:

([http://bit.kuas.edu.tw/~ecnovelty/submission/login.php?conf\\_alias=rvspContest11](http://bit.kuas.edu.tw/~ecnovelty/submission/login.php?conf_alias=rvspContest11)).

## **C. Competition date**

IRC-RVSP2011 will be held on Nov. 22, 2011.

## **D. Competition place**

IRC-RVSP2011 will be held at Han-Hsien International Hotel  
No. 33, Sihwei 3rd Road, Kaohsiung, 802, Taiwan

## **E. Competition: The competition is composed of two parts, including Innovative Racer (InnoRacer) and Creative Robot (CrRobot)**

### **E-1. Innovative Racer (InnoRacer)**

#### **Regulations on robot materials and racing field**

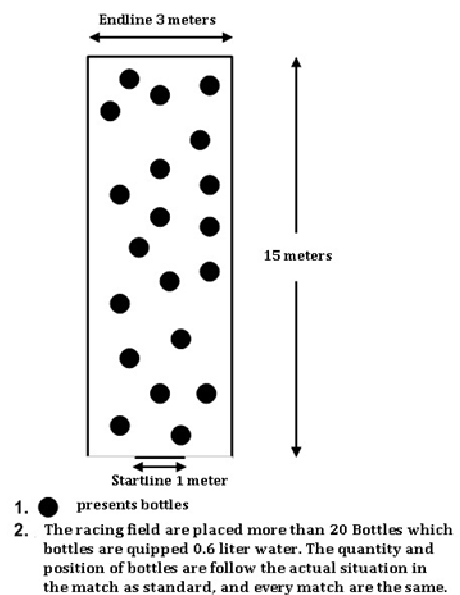
1. The size of InnoRacer must be within 40cm X 40cm X 40cm in stationary state but the weight is not limited.
2. LEGO<sup>®</sup> should not be the materials to develop robots.
3. A desk (180cm X 45cm) and power supply (110VAC) are provided for Contest manager.

## Rule

1. A general description of the runway is given as follows,
  - a. The racing distance is 15 meters.
  - b. The start line and end line are marked by black tapes.
  - c. In the racing field, there are more than 20 bottles filled with water. The quantity and position of bottles are announced before the competition in for all InnoRacers.
  - d. The distance between end lines is marked at both side of the racing road.

The runway is shown in Figure 1.

2. The race order is determined by a draw before racing.
3. Each team assigns a player to control their InnoRacer.
4. All the InnoRacers should be at the position specified by the Contest manager before racing. When your team is permitted to run your InnoRacer, the control player shall operate by the remote controller to take their own InnoRacer to the starting line.
5. Player shall start his InnoRacer located at the start line after a referee's whistle
6. After the InnoRacer are started, the control player of team is NOT either allowed to touch the InnoRacer or control the InnoRacer by any way. If any violation, the team shall be expelled out of the runway and the result is not recognized.
7. All of the players should NOT make adjustment or replacement (including programs, batteries and circuit boards, etc.) and ask for a break after the competition starts.
8. When the InnoRacer either hits the wall or knocks down any bottle, the InnoRacer should stop at where it is. The walking distance of this InnRacer is his score.
9. The competition result is the time taken by an InnoRacer to complete the runway, and
  - a. All InnoRacers should be in 1 minute. The InnoRacer with short time to complete the runway will have higher score.



- b. If an InnoRacer can not complete the runway, then the distance between the front part of an InnoRacer and the end line of the runway is regarded as the result (in cm), the InnoRacer with a shorter distance will have higher score.
10. The InnoRacers with the same complete time will repeat the competition to determine who the final winner.
11. The runway is open on 9:00~12:00, Nov. 22, 2011.
12. The competition time is on 13:30~16:00, Nov. 22, 2011.

## **E-2 Creative Robot (CrRobot)**

1. Creativity and features of robots are the criteria of this competition, for examples, the most cheap and simple robot, the robot with more features and the robot with the value of commodity. Each robot shall be with wheel-type, robot arm, feet, or the similar movable mechanisms.
2. Each team should upload the system description (word, doc, docx) and 3-min brief video clip (MPG, AVI, RM/RMVB, WMV) . The delivery of the system description and video clip should be uploaded to the website of RVSP2011 ([http://bit.kuas.edu.tw/~ecnovelty/submission/login.php?conf\\_alias=rvspContest11](http://bit.kuas.edu.tw/~ecnovelty/submission/login.php?conf_alias=rvspContest11) ) and is due on 23:59, Nov. 14, 2011.
3. A desk (180cm X 90cm), a power outlet (110VAC) and a poster stand are provided by Contest manager. Every team shall design a poster to introduce the robot. The poster size is A0.
4. The installation time is on 9:00~10:00, Nov. 2011.
5. The evaluation time is on 10:30~12:00, Nov. 2011.
6. Score:
  - a. Creativity and Technology (40%)
  - b. Usability (25%)
  - c. Completeness (20%)
  - d. Report (15%)

## **F. Award**

Medals for winners will be awarded in RVSP2011 banquet on 18:30, Nov. 22, 2011

### **Innovative Racer (InnoRacer) part**

Award	Number	Reward
Gold Medal	3	A medal for each team and a Certificate for each member

Silver Medal	3	A medal for each team and a Certificate for each member
Copper Medal	3	A medal for each team and a Certificate for each member
Excellent work	few	a Certificate for each member

#### **Creative robot (CrRobot) part**

Award	Number	Reward
Gold Medal	3	A medal for each team and a Certificate for each member
Silver Medal	3	A medal for each team and a Certificate for each member
Copper Medal	3	A medal for each team and a Certificate per people
Excellent work	few	a Certificate for each member

© **Reward group described above counts the quality that the sponsor must look at the works and adjusts it.**

#### **G. Registration fee**

The Registration fee is NTD 500 for each team. Please wire the registration fee according to the bank information as follows,

##### **G-1.**

<b>Bank information</b>	
<b>Beneficiary Account Name</b>	<b>Ubiquitous International LLC.</b>
<b>Beneficiary Account No.</b>	<b>534-851233-838</b>
<b>Beneficiary Bank name</b>	<b>MONG KOK Branch, HSBC HONG KONG</b>
<b>Beneficiary Bank address</b>	<b>1 Queen's Road Central, Hong Kong</b>
<b>Swift Code</b>	<b>HSBCHKHHHKH</b>
<b>Bank Code</b>	<b>004 (optional)</b>

Note: Please annotate "RVSP-2011" on your bank transfer sheet

**G-2. Please return the bank receipt by email or fax to**

Ms. Jo-Chun Huang

3F.-20, No.12, Fuxing 4th Rd., Qianzhen Dist., Kaohsiung City

80661, Taiwan

Fax: +886-7-9701866

Telephone: +886-7-9701855 #702

E-mail: [rvsp11@bit.kuas.edu.tw](mailto:rvsp11@bit.kuas.edu.tw)

**H. Competition website**

Competition website is available at

<http://bit.kuas.edu.tw/~rvsp11/> then click Robot Competition