Bangladeshi robots in "Robocon 2007, Hanoi" competition

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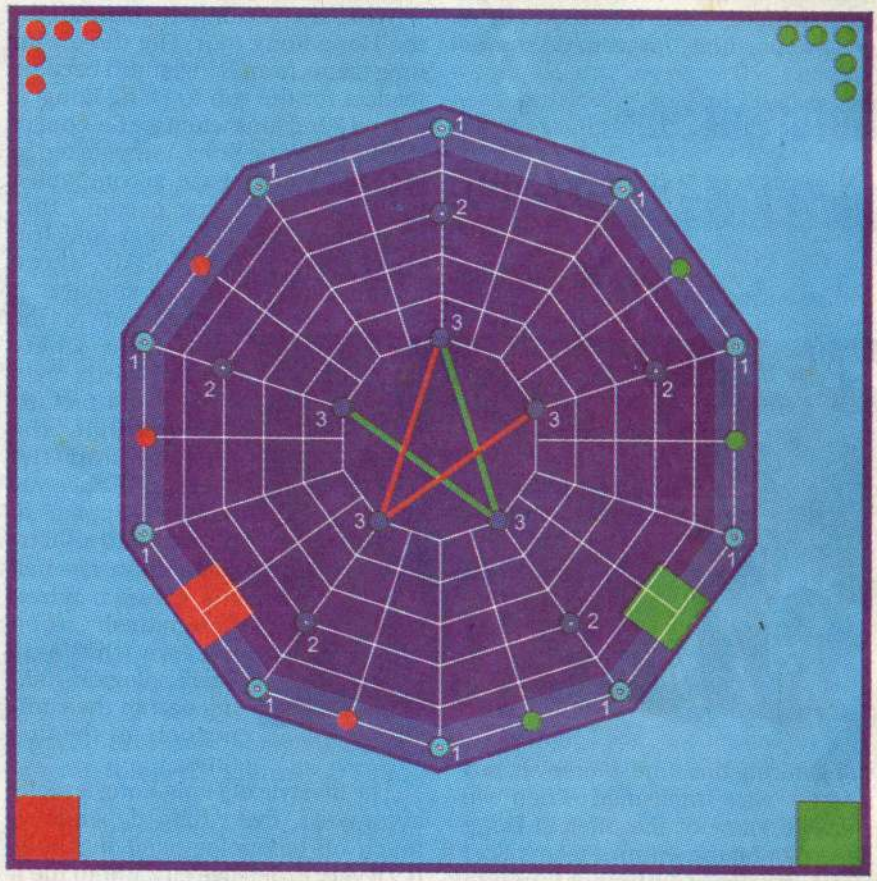
BANGLADESHI robots are set to compete with the robots of other technologically advanced Asian and Pacific countries. A team from Bangladesh University of Engineering and Technology (Buet) has left for Vietnam to participate in "Robocon 2007, Hanoi" competition.

Among a total of 18 participating countries including Japan, China, India, South Korea, Vietnam, Malaysia, Thailand, Egypt, Bangladesh will have to win against any of the two countries in the first round for stepping into the second round of the high-tech international robot games. It is an annual robot contest since 2002, limited within university, college and polytechnic students in the Asia-Pacific region. Under a common set of rules, participants will compete with their peers from other countries to create a robot using their creative and technological abilities in an open competition.

The contest aims to create friendship among young people with similar interests who will lead their countries in the 21st Century as well as help advance engineering and broadcasting technologies in the region. Asia-Pacific Broadcasting Union (ABU) organised the competition this year at the Quan Ngua Sports Palace in Hanoi, Vietnam. Bangladesh started participating in the competition from Robocon 2005, Beijing and won Panasonic Award. Last year the country also participated in the competition that was held in Kualalampur.

The thee-member Buet team under the supervision of Prof Md Zahurul Haq of Department of Mechanical Engineering of Buet left the capital on August 23. Members of team are Team Leader Muhammad



Yakut Ali, SGM Hossain Mamur and Hasnat Jamil.

Prof Haq said, "It is a contest to design and construct robot that can perform certain tasks based on theme and rules." He said according to the set rules, they have completed construction of four advanced robots; three of them are intelligent mobile robots and the rest one is manually controlled at the Mechanical Engineering Department's laboratory, working since first week of May. These robots have been sent to Hanoi last week.

For the construction of the robots, they have bought some materials such as motors from Dholaikhal and Nawabpur; they also used second hand materials to marginalize the construction cost. Advanced controllers, chips and hardware have been imported from the USA. "We don't hope to step into the second round of this extremely tough competition, as we are yet to be capable enough to defeat all the countries. At this stage we can defeat countries likeSaudi Arabia or Sri Lanka, but we are not technically capable to defeat countries like Thailand or Japan. This is a matter of honour that Bangladesh is one of the elite members of the hi-tech group along with other

countries who are most advanced in the arena. The most important thing is we are regular participants in the competition."

This year's competition:

This year's competition theme is: "Halong Bay Discovery" that comes from a legend of Vietnam, according to an official website. The legend of Ha Long has it that: 'Once upon a time, soon after the Viet people established their country, invaders came from across the borders. The Jade Emperor sent Mother Dragon and her Child Dragons down to earth to help the Viet people fight against their enemy. Right at the time invaders' boats were rushing to the shore, the dragons landed on earth. The dragons immediately sent out from their mouths a lot of pearls, which then turned into thousands of stone islands emerging in the sea like great walls challenging the invaders' boats. The fast boats couldn't manage to stop and crashed into the islands and into each other and broke into pieces. After the victory, Mother Dragon and Child Dragons didn't return to heaven but stayed back on earth at the place where the battle took place. The location where Mother Dragon had landed is nowadays called Ha long Bay and where Child Dragons descended is now known as Bai Tu Long."

The game is played on a square Game Field (14000mm x 14000mm), which is surrounded by a wooden fence (100mm height-30mm thick). The floor of the Game Field is made of 20mm thick plywood, and is fully coated with emulsion paint.

The rules of Robocon 2007 are built basing on this legend of Ha Long. A team of robots (symbolizing dragons) will carry the blocks having the shape of cylinder (symbolizing pearls) to build various kinds of islands symbolizing 'Ha Long'; and 'Bai Tu Long'. The first team to complete the building of 'Victory islands' (in the shape of letter V in the centre of the Game Field) will be the winner. Duration of the game is three minutes.

Red team and Green team will operate Manual Machines (symbolizing Mother Dragons) and Automatic Machines (symbolizing Child Dragons) to put the 'Pearls' on the 'Islands'. The team which puts the 'Pearl' on top of an 'Island' gets the 'Island'.

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The first team to complete the shape of letter V with the 'Islands' at the centre of the Game Field is considered 'VICTORY ISLANDS!' and will be the winner. In the case neither team accomplishes 'VICTORY ISLANDS!', the team that scores more points wins.

Each team must design and construct by itself Manual and Automatic Machines to compete in the contest. For each match, the number of Automatic Machine(s) is no more than three and only one Manual Machine is allowed for each team.

There is a size limit (1000mm L x 1000mm W and 1500mm H) for the Manual Machines at the Manual Machine Start Zones when the game starts. All of the Automatic Machines should fit within the size of 1000mm L x 1000mm W and 1500mm H at their Start Zones before starting. All teams are encouraged to decorate the machines in their own style using the symbol of a dragon. Only hand-made machines are allowed in the contest.

Prizes shall include awards for the winners, runner-ups, best idea, best technology, and best design and ABU Robocon award, Sponsors' awards.