



### **ARIEL ROBOTICS COMPETITION**

The aerial robot, developed by students of BITS Pilani at the Dubai campus won the first position in the International Aerial Robotics Competition (IARC) held recently in North Dakota, United States. The IARC's mission is to design and develop an autonomous indoor flying vehicle that can navigate through an unknown indoor environment, strewn with obstacles, and search the area to locate and retrieve the target: a 100-gram object. This winning aerial robot, contesting 28 universities, successfully accomplished its task of locating an independent target marked as the office of the 'Chief of Security' in under ten minutes without setting off laser barrier alarms.

Additionally, it employs a scanning laser range finder to detect any unknown indoor layout/ environment and infiltrate through a one-metre by one-metre window. It can navigate through walled structure and avoid obstacles with absolutely no human interference and can be modified to perform a variety of search, rescue and real-time tracking applications.