

# UNISEC-BANGLADESH

Progress and Future plans

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RAJSHAHI

DHAKA

**BANGLADESH**

KHULNA

BARISAL

CHITTAGONG

SYLHET

# Current Formation of UNISEC Bangladesh

- Advisor Panel
  - Dr. G M Tarekul Islam, Professor, Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET)
  - Dr. Md. Khalilur Rhaman, Acting Chairperson & Associate Professor, CSE Department, BRAC University.
  - F.R. Sarkar , General Secretary, Bangladesh astronomical society
  - Tilok Kumar Das, Lecturer, Department of Mechanical Engineering, Chittagong University of Engineering and Technology
  - Shifur Rahman Shakil, Research Assistant, BRAC University

# Current Formation of UNISEC Bangladesh

- Student Members
  - Abdulla Hil Kafi, Student, BRAC University. (Country Student representative)
  - Maisun Ibn Monowar, Student, BRAC University. (Country Student representative)
  - Raihana Antara, Student, BRAC University
  - Munir Maruf, Student, BRAC University
  - Nafisa Islam, Student, Bangladesh University of Engineering and Technology

# What have we done so far?

- Publishing a concept paper in Aero Earth Conference
- Set up a research collaboration with Kyushu Institute of technology
- Set up our goals
- Observe World Space Week, etc

# Annual Meeting 2014

- Bangladesh became member of UNISEC on September, 2014
- UNISEC-BANGLADESH is also formed on 2014
  - List of founder members:
    - Dr. G M Tarekul Islam, Professor, BUET.
    - Dr. Md. Khalilur Rhaman, Associate Professor, BRACU.
    - F.R. Sarkar, General Secretary, Bangladesh astronomical society.
    - Dr. Arifur R. Khan, Assistant Professor, KyuTech. (via skype)
    - Tilok Kumar Das, Lecturer, CUET (full name). (via skype)
    - Shifur Rahman Shakil, RA, BRACU.
    - Abdulla Hil Kafi, Student, BRACU. (via skype)
    - Maisun Ibn Monowar, Student, BRACU. (via skype)
    - Raihana Antara, Student, BRACU.
    - Munir Maruf, Student, BRACU.

# Annual Meeting 2014, UNISEC-Bangladesh



From the right: Dr. Md. Khalilur Rhaman, Dr. G M Tarekul Islam, Mr. F.R. Sarkar, Mr. Shifur Rahman Shakil, Mr. Munir Maruf, Ms. Antara

# Annual Meeting 2014, UNISEC-Bangladesh

- Outcome of the meeting of UNISEC-BANGLADESH
  - Formulation of plan for the upcoming year
    - Continuation of promotion of Space Science through Science Festival, Water Rocket, Sky observation for kids.



# Hover Exhibition 2014



First National Hover Exhibition 2014, organized by Engineering Student Association in Independent University Bangladesh.



First National Aero-Model design and exhibition in Military Institute of Science and Technology.



A team from MIST placed 4th (Payload category) in SAE Aero design competition



*Presents this Certificate of Recognition to  
Team IUT Astronaut of Bangladesh  
for their selection as Honorable Mention in the Inspiration Mars  
Design Contest*

*April 1, 2014*



*Dr. Robert Zubrin  
President of the Mars Society*



BRAC University's "Chondrobot 2" team secured 12th place in NASA Lunabotics Competition 2012.

# Annual Meeting Decisions (continued)

- Bangladesh was recognized as UNISEC member in September, 2014.
- Annual meeting of UNISEC-BANGLADESH was held on 2nd November, 2014
  - Formulation of plan for the upcoming year
    - Continuation of promotion of Space Science through Science Festival, Water Rocket, Sky observation for kids.
    - Seminars on cansat, nanosat for undergraduate students

# Funding

- Mostly volunteering
- Corporate and Government funding for promotional activities
- International funds for larger events

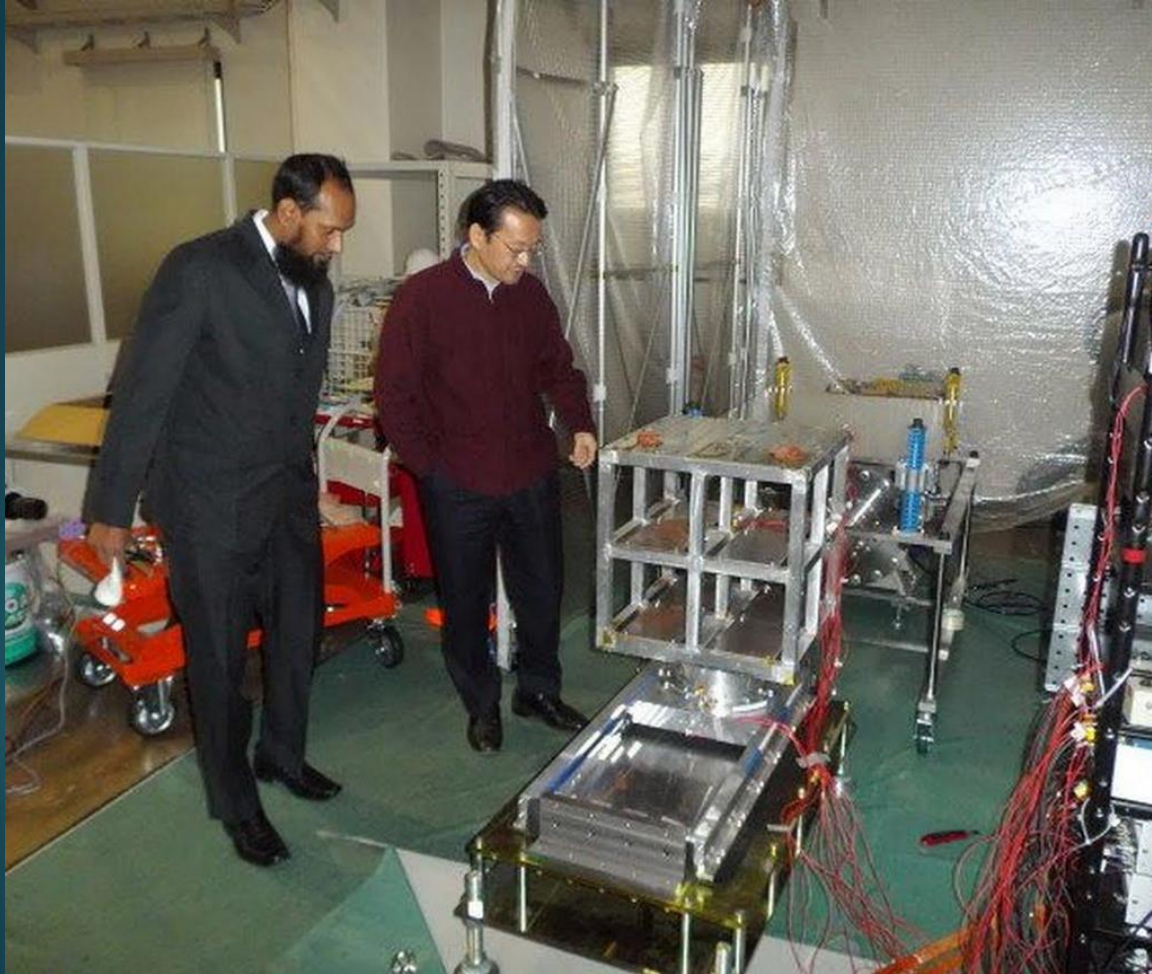
# Research Collaboration among Kyushu Institute of Technology and BRAC University

- Technical support
- Faculty visit





Seminar entitled "Satellite Research Activities in KIT" by Dr. Arifur R. Khan at BRAC University. The event news was published in a [national newspaper](#) on 25 of August, 2013.



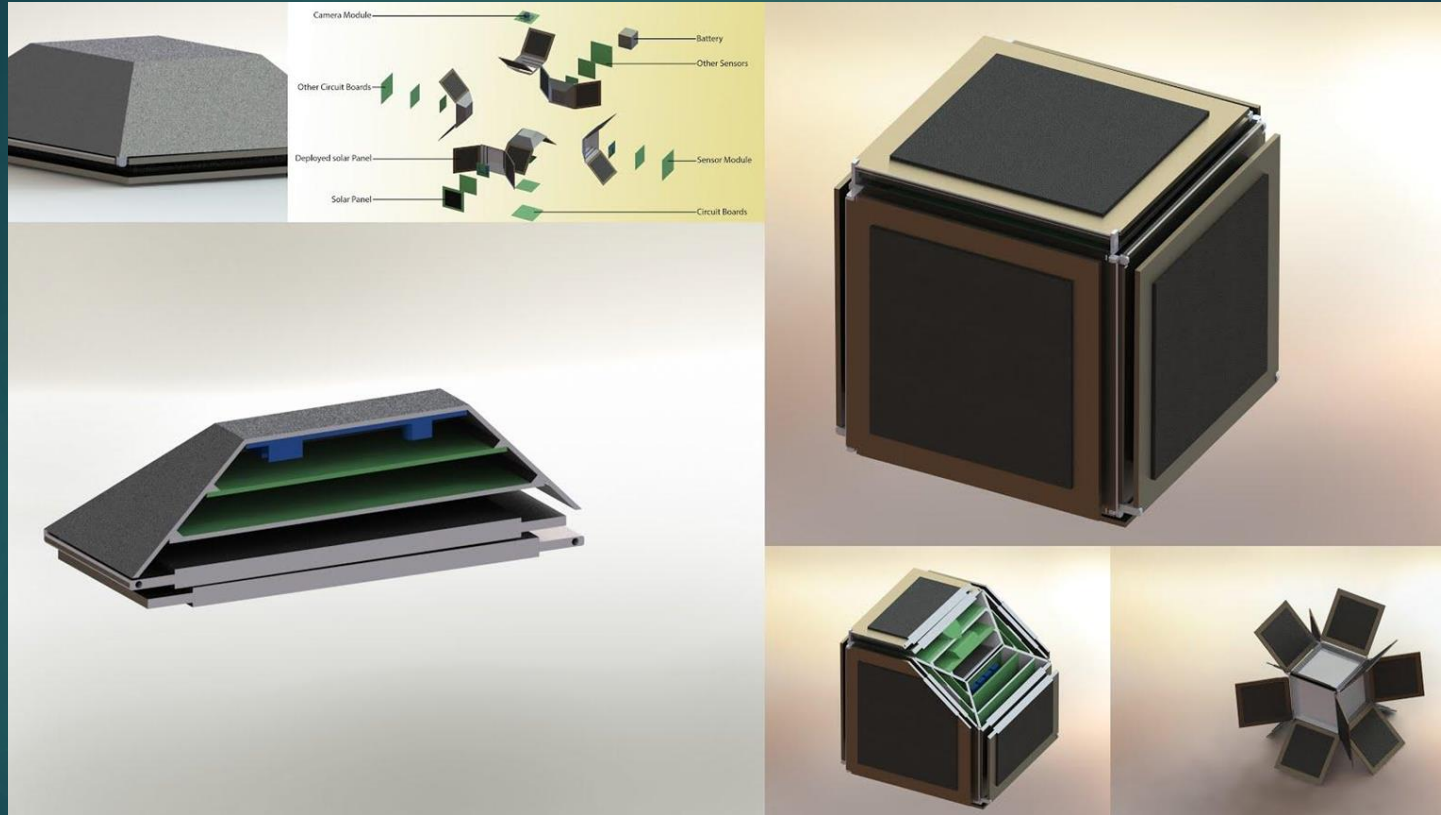
Pictures were taken during Dr. Khalilur Rhaman's visit to Kyushu Institute of Technology, January, 2014



# Research Collaboration with KyuTech

- Student exchange
- Research collaboration
- Setup up a team on Nano Satellites / CubeSats in 5 years
- Launch a Nano Satellite / CubeSat in 10 Years (Approximately)

# Concept Paper in Aero Earth Conference



Graphical representation of the concept model. The paper can be viewed at <https://dl.dropboxusercontent.com/u/105973635/aero%202014.pdf>



# **World Space Week (4 - 10 October) 2014 in Bangladesh**

<http://www.worldspaceweek.org/news/world-space-week-2014-bangladesh/>



Observation of World Space week in Enayetpur, Bangladesh.



Some more picture from observation of World Space Week

# Ongoing Activities

- Collaboration with Bangladesh Space Research and Remote Sensing Organization (SPARSO) and National Science Project
- Introducing Space Science Education in Bangladesh



# Short Term Plans ( 2014 - 2016 )

- Getting experience and meeting the current demand and future activities through participation of international program
- Making a bigger space loving group through internal activities and conference with other universities and companies
- Negotiating with government for research funding and active participation
- Space related course implementation for engineering students
- Public awareness and motivation more school students in space field. etc.

# Long Term Plans ( 2014 - 2020 )

- Making a nano-satellite and launch
- Developing companies for space related products
- Having graduates from Engineering Universities working for space related companies
- Convincing Universities in Bangladesh to introduce curriculum in Space Science
- Formulate an organization like NASA/JAXA.
- Developing international collaboration both in Government and private sector. etc.

*Thank You*



# Acknowledgements

I would like to add a special note to thank the people below who have helped me to prepare this presentation.

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- Dr. Arifur Rahman Khan, Assistant Professor, Laboratory of Spacecraft Environment Interaction Engineering, Kyushu Institute of Technology, Japan.
- F.R. Sarkar, General Secretary, Astronomical Society, Bangladesh.
- Abdulla Hil Kafi, Student, BRAC University, Dhaka, Bangladesh.
- Usama Islam, Student, Islamic University of Technology, Gazipur, Dhaka, Bangladesh.
- Moinul Islam, Student, BRAC University, Dhaka, Bangladesh.
- Shadman Shahriar, Student, Military Institute of Technology, Dhaka, Bangladesh.