



Project website: <u>http://birds.ele.kyutech.ac.jp/</u> All back issues are archived at this website.

BIRDS Project Newsletter

Issue No. 6 (12 July 2016)

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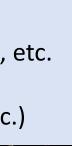




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1. BIRDS Project described during 2016 COPUOS Meeting in Vienna

In this photo you can http://www.unoosa.org/oosa/en/ourwork/copuos/technical-presentations.html#copuos2016 see the flags of the BIRDS nations. UNITED NATIONS Office for Outer Space Affairs Our Work -Benefits of Space -Space Object Register -About Us 🔻 Information for... 🝷 Events -Do COPUOS 2016 > Technical Presentations 2016.06.1 Technical Presentations made at the Committee on the Peaceful Uses of Outer Space On 10 June 2016, George Maeda (the editor of this newsletter, The following presentations were made at the sessions of the Committee on the Peaceful Uses of Outer Space. pictured above) delivered a *Technical Presentation* during the 2016 COPUOS Meeting in Vienna. The presentation file can be Friday, 10 June 2016 easily downloaded from the web link shown in **brown** above. **Open Universe Initiative**

P. Giommi (Italy)

BIRDS Project is mentioned in this presentation.

UN/Japan Long-term Fellowship Programme on Nano-Satellite Technologies G. Maeda (Japan)

Click on this title to download the presentation file.

Education Under the United Nations/Japan (PNST) Program: Perspectives of a Graduate H. Almubarak (Sudan)

After Maeda's presentation, Hala (ISRA, Sudan) described her PNST experiences at Kyutech.



2. BIRDS Workshop: The Official Program (Agenda)

First International BIRDS Project Workshop and Critical Design Review

The Tobata Campus of Kyushu Institute of Technology (Kyutech), Japan

Monday, June 27, 2016, DAY 1

09:30	Greeting
09:45 - 11:00	Introduction of Kyutech Space Engineering
	Research and Education, by Prof. M. Cho.
11:00 - 11:15	Coffee Break
11:15 - 12:15	Tour of facilities, Part I.
12:15 - 13:15	Lunch
13:15 - 14:15	Tour of facilities, Part II
14:15 - 14:40	Coffee Break
14:40 - 16:10	Presentation by each BIRDS project partner
10 minutes brief present	ation from each project partner (ANUC, NUM,
FUTA, BRAC, KMUTNB, N	CKU) about the future plans for space research
and education, and othe	r relevant topics. 5 minutes Q&A
16:10 - 16:40	Break & Photo
16:40 - 18:10	Discussion on Cross-border Inter-University
	Collaboration on Space Research and
	Education
18:30	Bus departure for reception
19:15 -	Reception (informal dinner for everyone to
	chat and socialize); Venue: THE BLUE
	https://www.the-blue-riverwalk.com/ (Kokura)
	09:45 - 11:00 11:00 - 11:15 11:15 - 12:15 12:15 - 13:15 13:15 - 14:15 14:15 - 14:40 14:40 - 16:10 10 minutes brief presenter FUTA, BRAC, KMUTNB, N and education, and other 16:10 - 16:40 16:40 - 18:10

Tuesday, June 28, 2016, DAY 2

09:00 - 10:30	Critical Design Review, Part I.
10:30 - 10:45	Coffee Break
10:45 - 12:00	Critical Design Review, Part II.
12:00 - 13:00	Lunch
13:00 - 15:30	Critical Design Review, Part III
13:00 - 15:30	Optional tour of Kyutech campus facilities on
	non-space related research and education
15:30 - 16:00	Coffee Break
16:00 - 18:00	Meeting between students and professors from
	their home institutions.
16:00 - 18:00	Technical Discussion on ground station network

Wednesday, June 29, 2016, DAY 3

09:30 - 10:30	Preparation and briefing on press conference
10:30 - 12:00	Press conference (Horyu Kai Kan)
12:00 - 13:00	Lunch
13:00 - 13:15	Signing of Letter of Intent
13:15 - 14:30	Discussion on AOB (Any Other Business) and
	Wrap-up



3. Overseas guests arrive (random sample)



President of NUM, Prof. Bat-Erdene Regsuren, red tie, arrives at Kyutech.



The first coffee break (Nakamura Memorial Hall)



Mr Bonsu welcomes Dr Carlene Kyeremeh (vice president, ANUC, Ghana) at Kitakyushu Airport with flowers.



Dr Huda and Dr Idnin, UiTM, Malaysia.

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Daily Newspaper Erdenetsetseg Khaltar



Mongolian journalist working in Osaka.



Prof. Jyh-Ching Juang of NCKU, Taiwan.

4. Tour of facilities





DAY 1 : Monday, 27 June, 2016.



Prof. Cho was the tour guide.













Ground Station Control Room

UHF/VHF steerable antenna



S-band parabolic antenna



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5. Afternoon of Day 1

A presentation was given by each participating BIRDS partner: Japan, Ghana, Mongolia, Nigeria, Bangladesh, Taiwan, and Thailand.



Lunch of Day 1 (café of Nakamura Hall)



Thailand Team (Dr Pom, Dr Ammarin, Apiwat)





President of Kyutech (Prof. Oie, far right)



Mr. Oikawa of JAXA.



Presentation by Thailand (Dr. Phongsatorn Saisujarit)



Presentation by BRAC (Prof. Rhaman calls in from Bangladesh)



Presentation by Taiwan (Prof. Jyh-Ching Juang)



Meeting Room (2nd floor of Nakamura Hall)



Discussion of the LOI (Letter of Intent) -- real time editing by Wakabayashi-san



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6. Official Group Photo of the workshop

The founding members of the "BIRDS Network" (June 2016, Tobata Campus)



This group photo was taken by Mr Wakabayashi (Kyutech, International Affairs Division) during the afternoon coffee break of Day 1 (27 June 2016) of the workshop. President of Kyutech is sitting dead center. The woman next to him is Dr. Carlene of ANUC, Ghana; the man next to him is Prof. Bat-Erdene Regsuren (red tie), President of the National Univ. of Mongolia. Prof. Cho is at the far right of this photo.



7. Workshop reception (in Kokura)











① Prof Cho explains Kokura Castle. 慶長7年(Yr.1602) 細川忠興公が築城した名城、小倉城。

- ② After Kyutech President Oie gave the toast, everyone gripped their glasses and said 乾杯!!
- ③ Ghana team: Joseph, Ernest, Dr. Carlene, Benjamin
- ④ Prof. Yamaguchi (Vice President of Kyutech) and Nana (journalist from Ghana).







More photos on next the page. BIRDS Proje

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The photos on this page are from Dr. Kim, Assistant Professor, LaSEINE. Kyutech.

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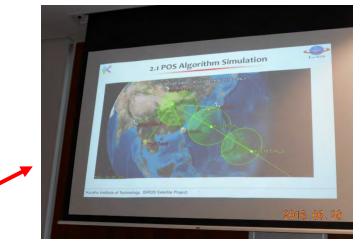
8. DAY 2 – Critical Design Review (CDR)

Each BIRDS student delivered a 15-20 minute presentation, one by one.









Ernest (Ghana) explains POS algorithm simulation – "POS" means position determination of each BIRDS satellite using the BIRDS ground station network. BIRDS carries no GPS.

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Special Session on Ground Station Network (16:00-18:00)







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9. DAY 3 – Press Conference

... preparation ...





TV station cameras



Continued on the next page



Dr Carlene and Prof. Kikuchi









Prof. Rhaman participates from Bangladesh.



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Above: *Main Panel* - Prof. Oie (President of Kyutech), Prof. Cho (PI of the BIRDS Project), and Taiwo (BIRDS Project Manager).





Sub-panel: Prof. Rhaman (Bangladesh), Dr Carlene (Ghana), Prof. Bat-Erdene Regsuren (Mongolia), Dr. Pom (Thailand), Dr Jyh-Ching (Taiwan), and Ogawa-san (JAXA, nearest to the camera).



Above: Taiwo delivers the main presentation (in English). Below: One of his slides.



Above and below: Many questions from Mainichi, Yomiuri, NHK, FBS, etc.



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Above: Special gift from Mongolia.





Above: Three mock-ups of the BIRDS satellites.

← NHK crew shoots a mock-up.



Final moments of the press conference

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10. "Letter of Intent" (LOI) Signing Ceremony

Right after lunch on Day 3



Kyutech President signs on behalf of Kyutech.



Kyutech Vice Pres. signs on behalf of Kyutech.





President of NUM signs on behalf of Mongolia.



Vice President of ANUC signs on behalf of Ghana.



This document formulates the start of the "BIRDS Network" – a human network of all BIRDS entities.



BIRDS BIRDS



Prof. Jyh-Ching Juang signs on behalf of Taiwan.



Dr. Phongsatorn Saisujarit on behalf of Thailand.



Student Kafi signs on behalf of Bangladesh.

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11. Article by Yomi-uri on the day after the press conference





How newspapers are sold in Japan (in small shops all over the nation)



市戸 21日 年度までの

国・地域の留学生ら

小型衛星開発

技術学び各国の基礎に

2016年(平成28年)



運用技



12. Article by Mai-nichi on the day after the press conference





Basically these headlines say that Kyutech is implementing the **BIRDS Project** with grad students from Japan and six countries overseas. The targeted launch time is Fiscal Year 2017.



The Big Four newspapers of Japan

Yomi-uri

- Mai-nichi
- Nihon Keizai

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13. BIRDS Project presented on TV in Bangladesh

"Ekattor TV" telecast (2.5 min) on 9 July 2016 in Bangladesh.



A few words about the ISS



Assembly of the BIRDS satellite



Prof. Rhaman explains the goals



Working in the BIRDS clean room



Cubesat deployment from the ISS



Kafi, Antara, and Maisun

View the video here: <u>https://www.facebook.com/ekattor.tv/videos/1110417319030895/</u>

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14. Tobata Gion Oyamagasa Festival 戶畑祇園大山笠祭

July 22, 2016 - July 24, 2016

A tradition of the 200-year-old Tobata Ward, **Tobata Gion Oyamakasa** is a summer festival held at the end of every July by Tobata Hachimangu Shrine, Sugawara Shrine, and Nakabaru Hachimangu Shrine. During the day, the Nobori Yamakasa floats (which are said to be what all original Yamakasa floats looked like) are draped with beautiful gold and silver embroidered cloth and paraded through the streets in their magnificence.

At night, however, these decorations are taken down and replaced with 309 paper lanterns covering the 12tiered floats, transforming them into pyramids of light! Each of the 10 meter (about 33 feet) tall, 2.5 ton latern floats are shouldered by about 60 men who shout "Yoitosa, yoitosa!" to the rhythm of gongs and drums! Tobata Gion Oyamagasa Festival celebrated its 200th anniversary in 2003.

From: http://www.crossroadfukuoka.jp/en/event/?mode=detail&id=4 000000001255



Festivities are not far from Tobata Campus of Kyutech.

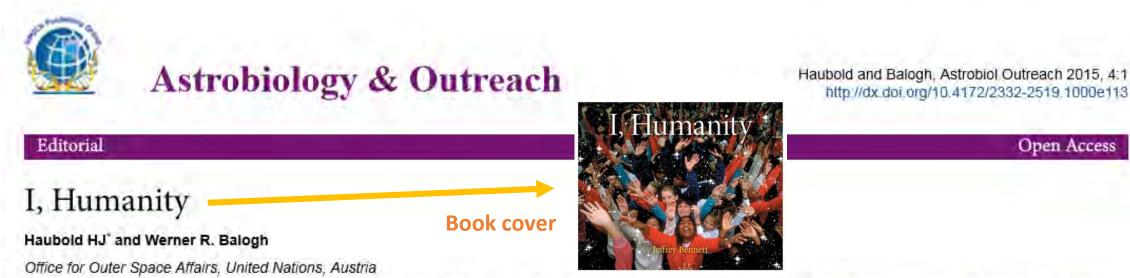


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15. UN supports Basic Space Science

A book review by Hans Haubold and Werner Balogh



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Editorial

On a continuing basis in the past twenty five years we have reported on the long-term initiative of the United Nations Programme on Space Applications of the Office for Outer Space Affairs of the United Nations, known under the term 'basic space science', covering the three pillars of research, education, and applications of fundamental knowledge for the benefit of human kind. The research part of this initiative was exercised through annual United Nations workshops, hosted and supported by member States and their respective space (http://www.unoosa.org/oosa/en/ourwork/psa/bssi/ agencies index.html). The education part was exercised through UN-affiliated Regional Centres for Space Science and Technology Education (http:// www.unoosa.org/oosa/en/ourwork/psa/regional-centres/index.html). The time range of this initiative extended from 1990 to 2015 with most recent activities hosted by Austria (http://www.unoosa.org/oosa/en/ ourwork/psa/schedule/2014/

austrian_symposium_space_science.html) and Japan (http://aas.org/ posts/news/2015/03/report-unjapan-workshop-space-weather).

To be released in November (2015) but already available for individual distribution is the book with the above title, written by a renowned researcher and educator in astronomy and astrophysics:

PNST is a beneficiary of UNOOSA support.

The beautifully illustrated, 32-page book tells the story of how humanity has gone from ancient conceptions of a small, flat Earth to our modern understanding that we live on one planet, orbiting one star, in a vast and amazing Universe. Using a first person narrative, the story is told in a way that will make every child of every culture feel that they are a part of this fantastic journey of discovery through history. In this sense, the book summarizes what the UN initiative has sought to achieve over a quarter century, building upon past dissemination efforts that have included thousands of ESA/NASA Hubble Space Telescope DVDs and comprehensive in-depth curricula for space science and technology education (http://www.unoosa.org/ oosa/en/ourwork/psa/regional-centres/study_curricula.html). Author/ astrophysicist Jeffrey Bennett will make available a limited number of free copies of this book through the Office for Outer Space Affairs of the United Nations. In addition, the book is scheduled to be launched in December to the International Space Station, where it will be read aloud by astronauts for the Story Time from Space program (http:// storytimefromspace.com), with the video reading posted freely on the web for educational use anywhere in the world. The book is also available in Spanish (both print and e-book) and Japanese (e-book only). Author Jeffrey Bennett also invites translations into other languages, as he can offer low-cost book production and donation of for educational copies use: contact him directly (jeff@bigkidscience.com) if you are interested in this possibility.

END OF ISSUE NO. 6

