

Aspire UGRA 7/12-16
&
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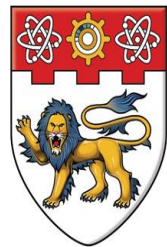
2.3 Findings

1.1 About Aspire Undergraduate Research Academy

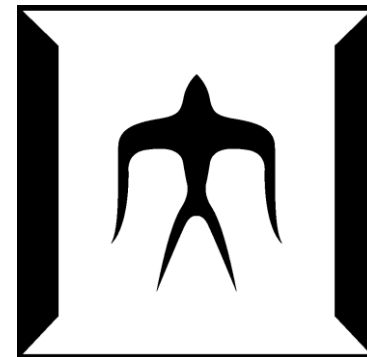
Purpose of Aspire UGRA

Enrichment program for undergraduate students who are conducting research projects in the areas of energy and sustainability at the five ASPIRE League member universities.

A total of 23 students participated in UGRA, including three students from HKUST, and five students each from KAIST, Tokyo Tech, Tsinghua and NTU



NANYANG
TECHNOLOGICAL
UNIVERSITY



1.2 Activity

| Sunday, 12 July 2015 | |
|----------------------|--|
| Time | Programme |
| 12:00 – 17:00 | Registration Arrival and Check in to NTU Hall of Residence |
| 17:00 – 18:00 | Welcome – by Prof Er Meng Hwa NTU Video Virtual Tour and Introduction to ERI@N – by Prof Chan Siew Hwa UG Research Academy Programme Briefing + Q&A |
| 18:30 – 19:30 | Ice – Breaking Activities |
| 19:30 – 20:30 | Dinner |
| 20:30 | Free & Easy |
| Monday, 13 July 2015 | |
| 08:30 – 09:30 | Breakfast |
| 09:30 – 11:00 | Lecture #1: Island Energy Transitions: Pathways for Accelerated Uptake of Offshore Renewables By Dr Narasimalu Srikanth, Program Director, Senior Research Scientist, Energy Research Institute @ NTU Lecture #2: Fuel Cell – The Clean Electricity Generator By Professor Su Pei-Chen, Assistant Professor, School of Mechanical & Aerospace Engineering |
| 11:00 – 11:15 | Tea Break |
| 11:15 – 12:45 | Lecture #3: Materials for Energy Devices By Professor Lee Pooi See, Associate Chair (Faculty), School of Materials Science & Engineering Lecture #4: Passive Cooling for Buildings – A Tropical Perspective By Professor Wan Mun Pun, School of Mechanical and Aerospace Engineering |
| 12:45 – 13:45 | Lunch |
| 14:00 – 17:00 | Tour of NTU campus and labs: <ul style="list-style-type: none"> Fuel Cell Laboratory Demonstration Unit Innovation Lab @ MAE ERI@N labs at CleanTech Park and Research Techno Plaza |
| 17:30 – 19:30 | Dinner |
| 19:30 – 21:30 | Enjoy a ride on the Singapore Flyer ferris wheel |
| 21:30 | Return to NTU Hall |

| Tuesday, 14 July 2015 | |
|-----------------------|--|
| 08:00 – 09:00 | Breakfast |
| 09:00 – 12:50 | Students' Presentations + Q&A (with tea break in between) |
| 12:50 – 13:30 | Lunch |
| 14:30 – 16:30 | Tour of REC's Manufacturing Plant (with refreshments provided) |
| 17:00 – 19:00 | Visit Garden by the Bay Two Conservatories: Flower Dome and Cloud Forest (Free and Easy) |
| 19:30 – 21:30 | Dinner at Makansutra Gluttons Bay followed by Free and Easy time |
| 21:00 | Return to NTU Hall |

| Wednesday, 14 July 2015 | |
|-------------------------|--|
| 08:00 – 09:00 | Breakfast |
| 09:00 – 13:35 | Students' Presentations + Q&A (with tea break in between) |
| 13:35 – 13:40 | Voting for Most Friendly/Sociable Award |
| 13:40 – 14:30 | Lunch + Closing (with presentation of awards and certificates) |
| 15:30 onwards | Free & Easy at Universal Studios Singapore in Sentosa <i>Students to make own way back to NTU (provided with 1 ez-link card and MRT/ Singapore Map)</i> |

| Thursday, 16 July 2015 | |
|------------------------|-----------------------|
| 08:00-09:00 | Breakfast & check out |
| 12:00 | Departure |

1.2 Activity

Necessary preparation before UGRA

- Every student must hold 10 minutes research presentation and 5 minutes Q &A
 - To progress my research to the extent I can show brief results
 - To make presentation understandable for student who don't study the field
- I prepared the presentation about “Mechanism of bulk cargo containerization”

1.2 Activity

Research presentation by students

- Each of 23 student need to do presentation about their own research within 10 minites
- There are various kinds of topic
- All research is related to sustainable environment society



1.2 Activity

REC's Solar panel Plant visit

- Researcher at REC lectured on solar panel
 - Solar panel is rather inefficient in the area with extremely high temperature
- To visit solar panel factory
 - Every process is automated
 - Human work is just final check of solar panel



1.2 Activity

Sightseeing



1.2 Activity

Social



1.3 Findings

- To be highly inspired by students from other countries through student presentations and conversation with them
 - The same age foreign students work so hard in engineering field
 - They are also heavily interested in politics, economy and other social issue
- To understand difficulty in explaining your research to people who don't study the field through student presentation
 - To try not to use terminology in explanation
 - To confirm whether or not audience can catch up with the explanation

2.1 About Genève Study Tour

Purpose of Geneva Study Tour

-To understand the detail function of each organization and necessary ability to work for UN through discussion with people who are actually working for UN

12 people from Tokyo university of foreign studies, 2 people each from Kyoto, Ochanomizu and Nagoya university, 1 people each from Hitotsubashi, Titech, Kobe, Osaka, Tohoku and Seishin women university participated in this program.



2.2 Activity

| Tuesday, 17 Nov 2015 | | |
|------------------------|-------------|------------|
| 午前 | | |
| | 12:00 | Departure |
| 午後 | 18:00 | Arrival |
| | 19:00 | Check in |
| Wednesday, 18 Nov 2015 | | |
| 午前 | 9:00~10:00 | ITU |
| | 10:30~12:30 | ICRC/IFRC |
| 午後 | 12:45~13:30 | 国連事務局 |
| | 15:30~16:30 | UNOCHA |
| Thursday, 19 Nov 2015 | | |
| 午前 | 9:00~11:00 | WMO |
| | 11:30~14:30 | ILO |
| 午後 | 14:50~16:10 | UNAIDS/WHO |
| | 16:30~18:00 | IMO |

| Friday, 20 Nov 2015 | | |
|-----------------------|-------------|-----------|
| 午前 | 9:00~11:00 | 日本代表部 |
| | 11:30~14:30 | WTO |
| 午後 | 14:50~16:10 | UNHCR |
| | 16:30~18:00 | WIPO |
| Saturday, 21 Nov 2015 | | |
| Sightseeing, Genève | | |
| Sunday, 22 Nov 2015 | | |
| Sightseeing, Annecy | | |
| Monday, 23 Nov 2015 | | |
| 午前 | 9:00~11:00 | OHCHR |
| | | |
| 午後 | 16:00 | Check out |
| | 18:00 | Departure |
| Tuesday, 24 Nov 2015 | | |
| 午前 | | |
| | | |
| 午後 | 17:00 | Arrival |
| | | |

2.2 Activity

Necessary preparation

- Every student take charge of one or two UN organizations
 - To study the basic function of the organization and make a document
 - To summarize questions we ask at discussion with UN worker
 - To facilitate the discussion

- I took charge of International Labor Organization
 - ILO is the organization for labor right
 - ILO tries to eradicate child labor, sweat shop, etc.



International
Labour
Organization

2.2 Activity

Discussion with UN worker

- 1-2hour for each organization
- First half is the presentation given by UN workers
- Latter half is the discussion with them



2.2 Activity

Sightseeing



2.2 Activity

Social



2.3 Finding

- To be highly inspired by students from other university
 - They are so eager for working for UN in the future
 - They major in language, law, culture ... very different from engineering
- To understand the necessary ability to work for the UN
 - Language ability as prerequisite and deep knowledge in specific academic field
 - Flexibility to adapt to various kinds of environment
- To realize the important act in discussion
 - Meaningful story isn't voluntarily given, we need to ask them to tell