

Annual Report On Activities Of National Cheng Kung University Chapter



National Cheng Kung University,

Department of Photonics

January, 2015 — December, 2015

February, 2016

Member:

Teachers:

Guo, Tzung-Fang

Hsu, Hsu-Cheng

Lin, Chun-Hung

Students:

Chua-Zu Huang

Yu-Han Hung

Cheng Yeh Chen

Chapter Activities:

4th Optical Electronics Camp

Date: Jan 29 to Feb 4, 2015

Participants: 100(senior high students) + 62(students of DPS, NCKU)

This camp by exploration activities and program both in the form of providing high school students to experience college life, and to explore the field of optoelectronic simple terms associated with everyday life, and thus to attract high school students into the photonics related departments, the talk which entitled Photonics in Nanoscale, is one of the important part of camp activities, other programs of the remaining part is about principles of daily phenomenon descriptions (e.g. How to generate a rainbow), and other is laboratory visiting.



Fig.1 photo of “Hands-on play optical path” in this camp. It’s used to let the high students learn and observe the phenomenon of aberrations from lens, interference, diffraction and grating.



Fig.2 photo of invited speaker: Prof. Chien-Chung,Lin(林建中), who introducing “the Photonics in Nanoscale”, which is one activity of the year of light.



Fig.3 photo of invited speaker: Prof. Chien-Chung,Lin(林建中), who introducing “the Photonics in Nanoscale”, which is one activity of the year of light..

United presentations week of college of science

Date: March 9 to March 13, 2014 (Photonics day is Mar 9)

Participants: 83(audience) + 10(Staff) (Mar 9)

In order to improve the relationships between 5 departments in college of science and explore the view of our classmates, we held this united presentations week in March 9 to March 13. It contains 5 topics in 5 different fields that are: photonics, physics, chemistry, earth science and math. The reason that we pick up this topic is to know what the relation between photonics and the glasses is.

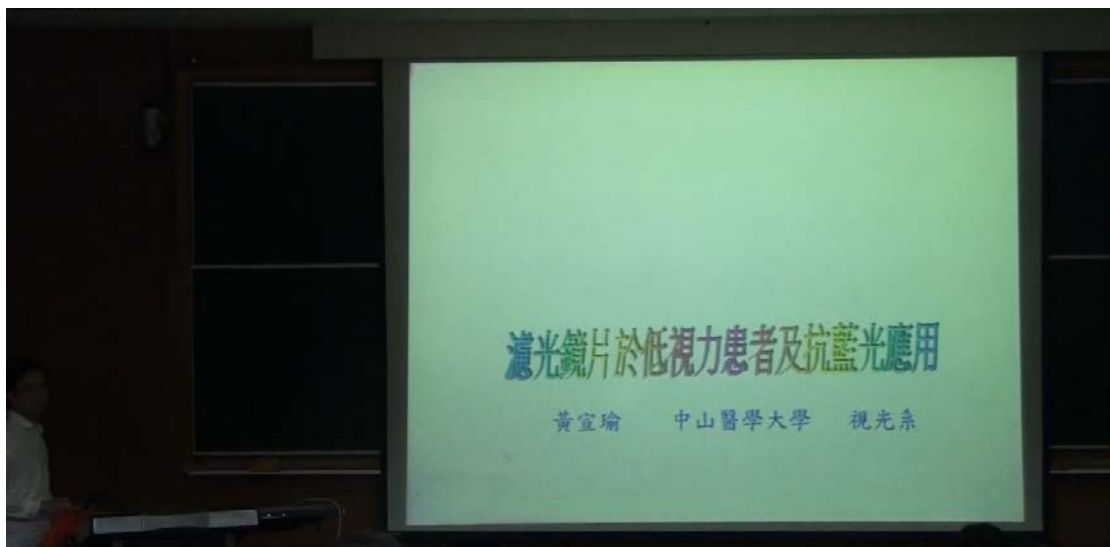


Fig.4 photo of invited speaker: Prof. Huang, Shuan-Yu (黃宣瑜), who introducing the filter film application of anti-blue.



Fig.5 photo of invited speaker: Prof. Huang, Shuan-Yu (黃宣瑜), who introducing the filter film application of anti-blue.

Lab tour in NCKU department of photonics

Date: March 11, 2015

Participants: 53(student of department of photonics, NCKU) + 23 (master/Ph.D students)

In the third year of DPS, there will be a project in photonics that list for one year or longer. To choose the lab that students interested in, we held this lab tour so that they can choose the right lab to plan their project.

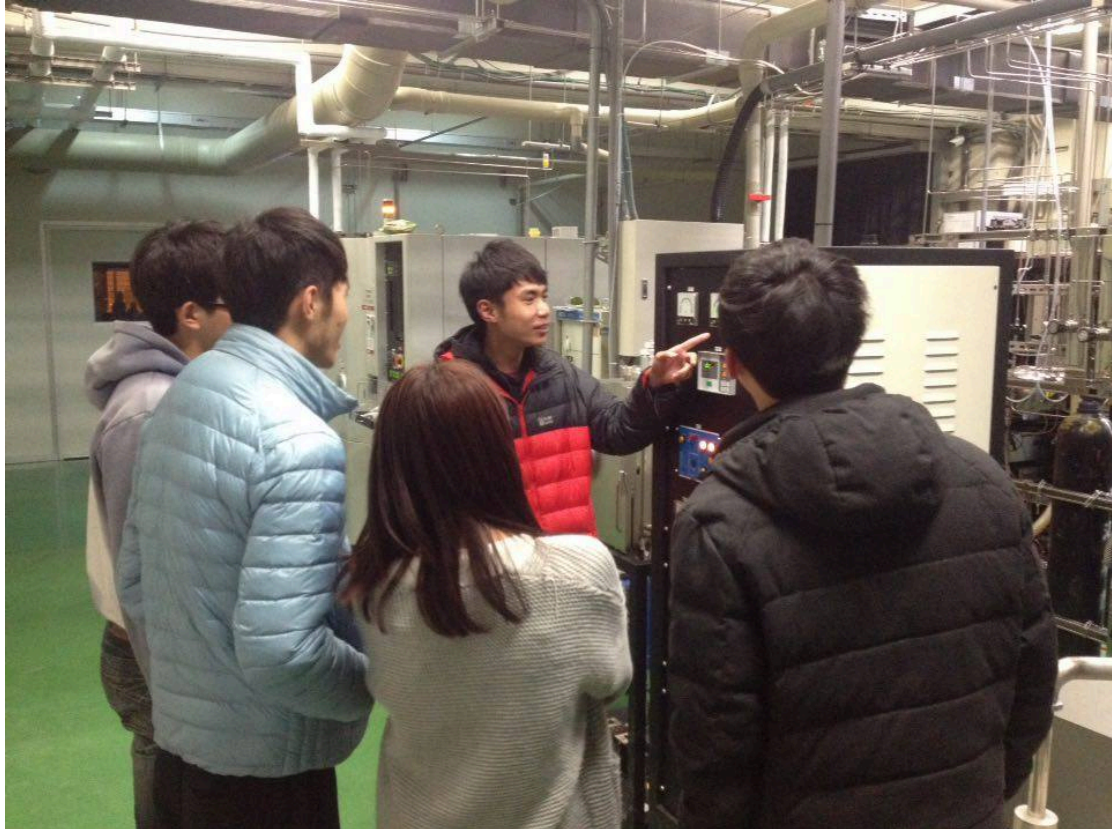


Fig.6 photo of the guiding in the process lab. The machine in this photo is used to evaporation and annealing of the LED producing process.

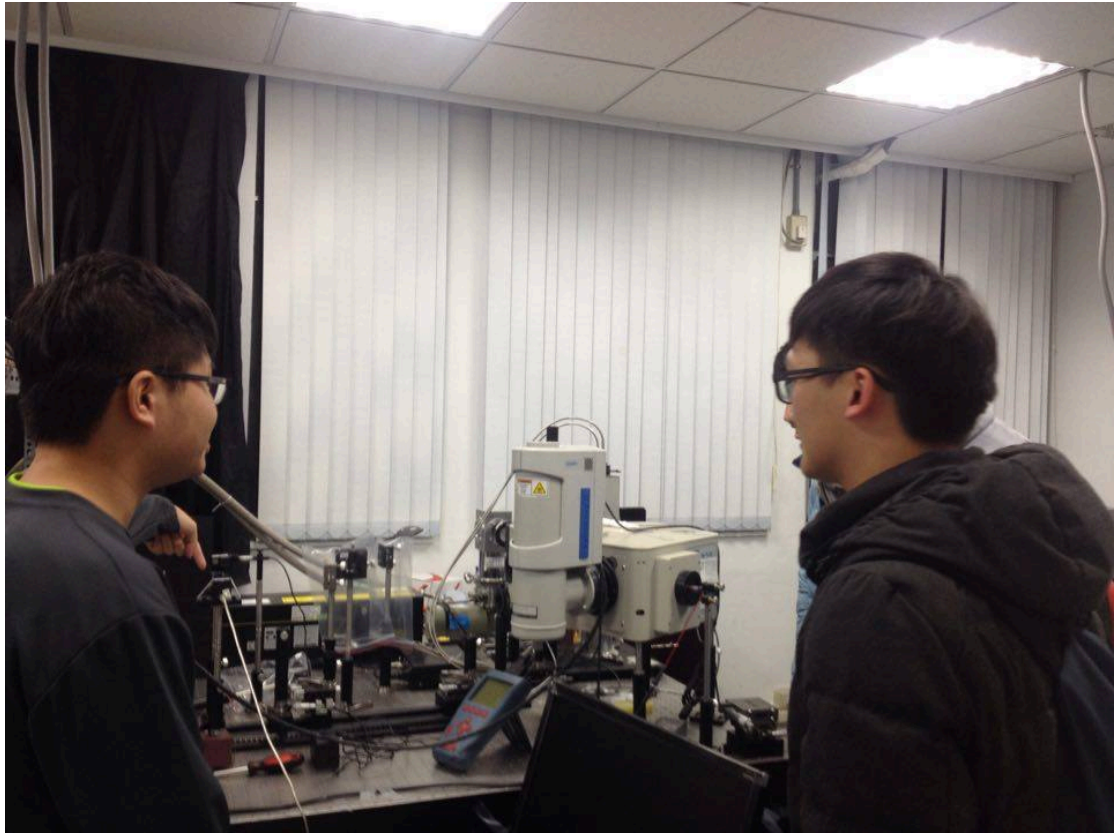


Fig.7 photo of the guiding in the nanophotonics characterization lab. There is a micro photoluminescence system, includes a He-Cd laser, an objective lens, a x-y translational stage, a CMOS camera and a spectrometer. The photoluminescence and electroluminescence spectra of the micro devices can be observed. The Raman scattering measurement can be obtained in the same system as well.

Foreign exchanging experience sharing

Date: October 29, 2015

Participants: 60

To explore the view of students in our department, we invite the older classmates: 鄭嘉勳、廖昱揚& Professor Hsu-cheng, Hsu to share their experiences on volunteer exchanging and experimental cross-border cooperation program.



Fig.8 photo of the audience.



Fig.9 photo of the speaker 鄭嘉勳 sharing his experience of the volunteered teaching in Indonesia.

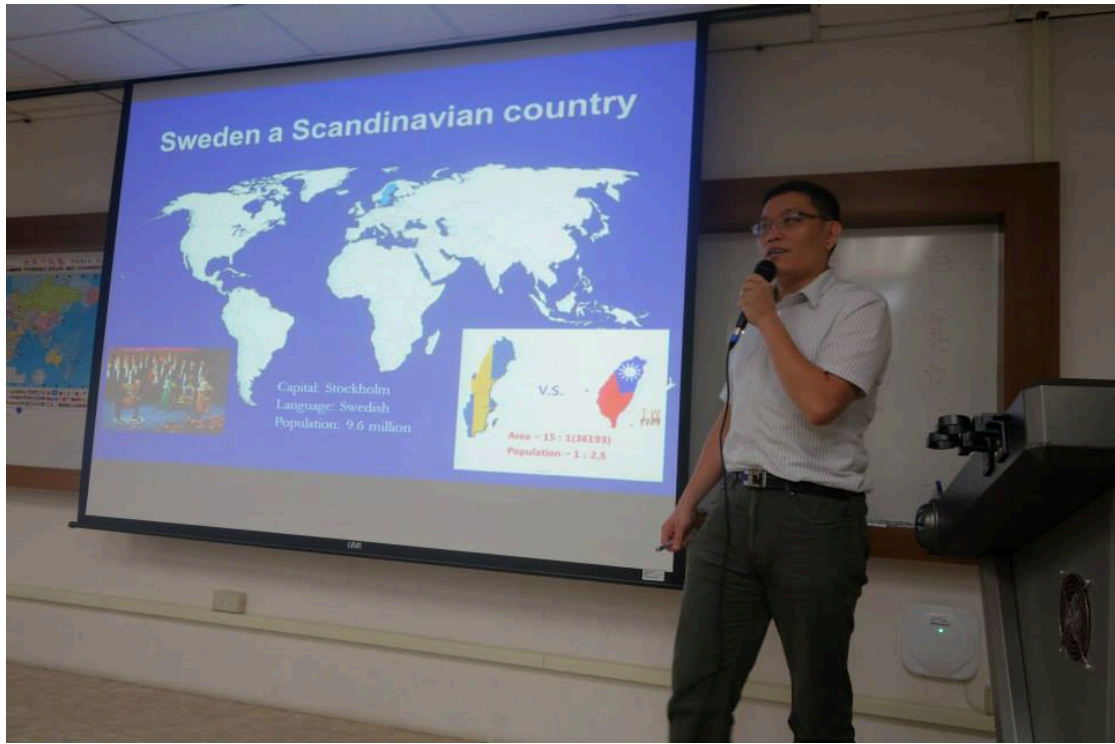


Fig.10 photo of the speaker Professor Hsu-cheng, Hsu sharing his experience of the experimental cross-border cooperation program in Sweden.

Visiting of the Affiliates Senior high school of National Kaohsiung Normal University

Date: Dec 31, 2015

Participants:60(student from affiliates senior high school of national Kaohsiung normal university) + 10 (student from DPS, NCKU)

To stimulate high school students to learn about our department and truly learning environment, the teachers in Affiliates Senior high school of National Kaohsiung Normal University arrangements for a trip to NCKU on a trip to visit our department for their students. The short courses included an introduction to the department, as well as the actual operation of the optical laboratory experiments in teaching lab and experience the processes and working instrument of process engineers in processing lab.



Fig.11 photo of the guiding in the process lab. This is an independent space that contains liquid crystal, lithography and some techniques on producing the LEDs and OLEDs.



Fig.12 photo of the guiding in the nonlinear optics lab. This laboratory associated with fiber-optic communications.



Fig.13 photo of invited speaker: Prof. Guo, Tzung-Fang, who introducing our department.

Fund:

Income:

Beginning balance: \$0

Funds from Department of Photonics, National Cheng Kung University: \$300

Funds from Office of Student Affairs, National Cheng Kung University: \$150

Funds from other supports: \$50

Funds from SPIE: \$0

Total income: \$500

Cost:

4th Optical Electronics Camp: \$350

(Include handout copy, electronic materials and some necessary office supplies.)

United presentations week of college of science: \$70

(Include transport allowance, snacks & drinks for participants and speaker)

Lab tour in department of photonics, NCKU: \$50

(Include the pizza & drinks in coffee break.)

Foreign exchanging experience sharing: \$30

(Include snacks & drinks for participants and speaker.)

Visiting of the affiliates senior high school of national Kaohsiung normal university: \$0

Total cost: \$500

Total balance: \$0