



香港浸會大學

HONG KONG BAPTIST UNIVERSITY

SCIENCE & ENVIRONMENT CAMP

2-4 July 2008

*Exclusively Designed for
Form 1 & 2 Students*

Message from Organizer

The Science Faculty of HKBU is committed to the popularization of science among the public and especially students. Through the years we have organized many events for furthering this goal, the Eco-Environmental Science Camp 2007 was one of such activities. The Camp, designed to inspire junior secondary students' consciousness in environmental protection and understanding how science interacts with their daily lives, received enthusiastic response from both the participating schools and students alike. Built on this success, we are launching the second session of the Camp in summer 2008. The 2008 Science and Environment Camp will again be structured around main theme activities, hands-on experiments and small-group projects. I am confident the event will continue to fulfill its mission of nurturing students with scientific thinking, independent investigative ability and team spirit, all under the premise of "Fun With Science"!

Prof. Rick W.K. Wong
Dean of Science
Hong Kong Baptist University
October 2007



Organized by HKBU

Faculty of Science

Objectives

🍎 To prepare students to fully integrate into the future knowledge-based society, the camp is intended to nurture them with scientific thinking, independent investigative ability and team spirit.

☀️ Against the backdrop of Environmental Protection and Fun Science as the two core areas of study, the camp will provide young students with a variety of inducible learning environments aimed at arousing their curiosity to the wonders of our world.

🌳 Participants would in their own discovery track acquire ways to exercise stewardship to our natural environment.

🌸 Through discussion, small group research and project presentations, participants can sharpen their communication skills and their ability to use information technology.

👉 To complement the focused activities, group games and fun time will also be organized, providing participants with a well-rounded enjoyable three-day programme.



Co-organized by:
Baptist Chemists
(Association of HKBU Chemistry Alumni)

Steering Committee

Prof. Cai Zong Wei (Adviser)
Head, Department of Chemistry

Prof. Chan Wing Hong (Chair)
Professor, Department of Chemistry

Prof. Ricky M. S. Wong
Professor, Department of Chemistry

Dr. Martin M. F. Choi
Associate Professor, Department of Chemistry

Dr. Kelvin S. Y. Leung
Lecturer, Department of Chemistry

Ms Agatha L. S. Siu
Senior Scientific Officer, Department of Chemistry

Ms Mok Sin Hing
Chairperson, Baptist Chemists

Features

☀️ **Focus on Three Major Themes:** all activities will centre around the three prime areas of science and environmental studies -- Understanding the Natural World; Solid Waste Reduction; and Renewable Energy.

🌸 **Knowledgeable Lectures with Demonstration:** all related to the three main themes and delivered by university professors, using simple day-to-day examples and vocabulary.

🌳 **Abundant Hands-on Experiments:** extraction of colored ingredients from readily available natural materials; construction of simple solar cell; recycling of plastic wastes... and more.

👉 **Extensive Investigative Studies:** students will work in groups on an assigned environmental/science topic, and then present the findings of their investigation; excellent training for teamwork and interpersonal skills.

🍎 **Engaging in Environmental Issues:** guided by facilitators, participants will be exposed to current environmental issues facing the Hong Kong community, through reading and discussion on newspaper/magazine cuttings.

☀️ **Relaxing Fun Time:** plenty of fun time -- singing, games, role play, artistic appreciation and competitions -- throughout the three-day event to reinforce students the concept that Science is never boring.

What the Students Say...

Results of Survey among participants of 2007 Science Camp:

👉 Over 97% of the respondents enjoyed staying on campus and have a glimpse of University life.

👉 79.6% of the respondents came to realize the importance of recycling in our daily life.

👉 Most respondents (71%) agree that the concept behind each theme activity has been clearly presented.

👉 The majority of the respondents (over 80%) agree that the lecturers helped them understand the theme activity materials well.

👉 67% of the respondents agree that the in-charged scientific officer of each theme activity was instrumental and cheerful.

👉 70% of respondents will recommend the Science camp to their friends.

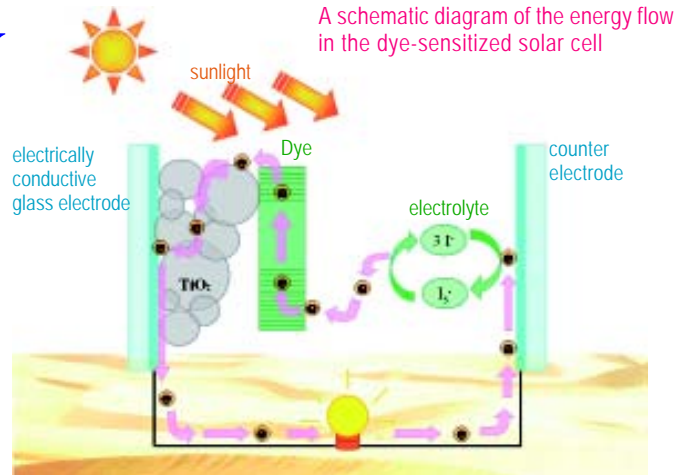


RENEWABLE ENERGY

At present the vast majority of the energy consumed by the world is obtained from conventional fossil fuels and nuclear power. However, the limited reserves of fossil fuels and problem of global warming lead to a huge need of developing alternative energy sources.

Solar cell, which is a device that converts the solar energy into electricity, is regarded as one of the key technologies towards a sustainable energy supply.

In this workshop, students will make their own solar cells and explore the photogeneration of electricity using dye-sensitized titanium dioxide.



Lecture by Professor



Interactive Activities:

- Games
- Discussion



Hands-on Experiments



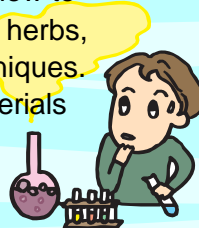
NATURAL PIGMENT

We all like to see colorful things and enjoy colorful food. This is especially true for children. As people's demand for natural products grows, natural colorants will hopefully replace synthetic colorants.

Natural pigments are principally used for foodstuff colorants and toners. For example monascus red is used for ham sausage. These natural pigments are totally safe to eat and have no side effects.

Hands-on Experiments :

In this workshop, students will learn how to extract natural pigments from natural herbs, food and flowers using different techniques. Pigments extraction from natural materials eg. herbs, tomatoes and flowers



Artistic Competition :

Hand-made souvenirs



Interactive Activities :

- Group discussion
- Ways to design a product from the color extracts

Event Specifics

- Target Participants : F.1 and F.2 students
 Date : 2 – 4 July 2008
 Venue : Hong Kong Baptist University, Kowloon Tong
 Accommodation : Hong Kong Baptist University Student Hostel
 Fee : HK\$2,000 per person (schools with more than 5 students enrolling are eligible to HK\$200 reduction per pax)
Early-Bird Offer: schools which register before 1 May 2008 can enjoy the preferential fee of \$1,800 per pax
 Maximum In-take : 90 students; applications will be processed on a first-come first-serve basis. Schools are advised to register early.
 Certificate : All participants who have completed the full 3-day programme will receive a certificate.

Preliminary Programme

Day 1 (2 July)

Morning

- ⇒ Registration
- ⇒ Opening Ceremony
- ⇒ Grouping & Briefing
- ⇒ Group Project: Assigning Topic & Reading Materials

Afternoon

- ⇒ Theme Activity 1 (in Groups)
- ⇒ Sharing & Fun Night

Day 2 (3 July)

Morning

- ⇒ Morning Exercise
- ⇒ Theme Activity 2

Afternoon

- ⇒ Theme Activity 3
- ⇒ Talent Show

Day 3 (4 July)

Morning

- ⇒ Dialogue with Professors
- ⇒ English for Science

Afternoon

- ⇒ Oral Presentation of Group Project
- ⇒ Closing Ceremony & Award Presentation



Enquiries: Call ☎ 3411 7077 Miss Siu
 Or Email ✉ sc2008@hkbu.edu.hk
 Website: www.hkbu.edu.hk/~sc2008

Remarks

1. **Actual contents** subject to final programme scheduling.
2. **Theme Activities:** Colorful World; Renewable Energy; Managing Solid Waste
3. **Group Presentation:** A topic on environment/ general science will be assigned to each of the groups. Under the facilitation of the group leader (an undergraduate/postgraduate in Chemistry discipline from HKBU), the group will prepare a 20-min Power-Point presentation and deliver this on the last day of the camp.

REPLY FORM

Please return by fax to 3411 7348 on or before November 30, 2007

To: Prof. Chan Wing Hong
 Chair of Steering Committee
 Science & Environment Camp, HKBU

From: _____

 (Please state name of school here)

Please tick the appropriate box.

- Our School is interested in promoting the “Science & Environment Camp” to our F.1 and F.2 students, please
- send us the application forms and promotional leaflets, a total of _____ copies is needed.
 - arrange for a representative to present the programme to the school principal/teachers.
 - arrange for a representative to present the programme to parents of the students.
 - Others (Please specify : _____)
- Our School is not interested in promoting the “Science & Environment Camp” to our students.

Name of contact person : _____

Contact telephone no. : _____ Contact email : _____