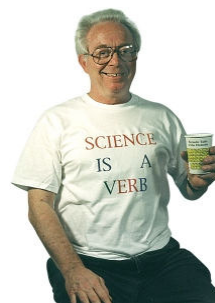


22 July 2008

The Principal
All Secondary Schools & Junior Colleges
Attention: HODs of Science



Dear Sir/Madam

"Science Teachers' Creative Teaching Workshop"
by Prof Irwin Talesnick of Canada

The Agency for Science, Technology and Research (A*STAR) and the Science Centre are pleased to inform that we will be organising a "Science Teachers' Creative Teaching Workshop" from 2 – 4 September 2008. This workshop is one of the many exciting activities lined-up for science.08.

The Science Teachers' Creative Teaching Workshop aims:

- To inspire science teachers to come up with creative and innovative strategies for effective teaching.
- To enlighten and expose science teachers on the trends in science teaching.
- To demonstrate a number of hands-on experiments and demonstrations that teachers can use in their lessons.
- To provide opportunities for interaction and sharing among science teachers.

We are privileged to have with us, Professor Talesnick from Toronto, Canada, a well-known consultant in science communication to conduct the workshop. Prof Talesnick has more than 40 years experience in science communication, ranging from teaching school pupils of all ages to many TV performances. He has previously conducted this workshop in 2006.

This workshop is open to all Science teachers of Secondary schools, Junior Colleges and Centralised Institutes (**Chemistry, Physics, Biology and General Science**). There is no limit to the number of applicants from each institution. As applications will be processed on a first-come-first-served basis, schools are encouraged to apply early to avoid disappointment. The closing date for registration is **Tuesday, 26 August 2008**.

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The workshop will consist of a **compulsory half-day introductory morning session on 2 September 2008 from 9:30 – 13:00 hours**, together with a **half-day session of your preference** from the following timeslots:

Date	Day	Session
2 September 2008	Tuesday	PM (2pm – 5pm)
3 September 2008	Wednesday	AM (9.30am – 12.30am)
		PM (2pm – 5pm)
4 September 2008	Thursday	AM (9.30am – 12.30am)
		PM (2pm – 5pm)
5 September 2008	Friday	AM (9.30am – 12.30am)

Participating teachers will be given a comprehensive teacher's guide and will be provided with a teacher's kit to work through various experiments at the hands-on workshop. The fee chargeable for the workshop is as follows:

S\$100 per person only (inclusive of 7% GST)

The workshop is subsidised under the science.08 programme but the chargeable fee covers the cost of the materials, refreshments and equipment. The structure of the programme provides lots of opportunities for interactions with fellow attendees as well as Prof Talesnick.

Please send us your registration form together with the cheque (made payable to "Science Centre Board") by **Tuesday, 26 August 2008** to Science Centre, Attention: Finance Department/Science Upstream Group. Schools can also choose to pay through Interbank-Giro to Science Centre where payment is made upon billing.

For further information, please e-mail Ms Jamilah at upstream@science.edu.sg. We look forward to your school's participation.

Thank you.

Yours faithfully

Kamaria Bte A Ghani (Miss)
Assistant Director (Science Upstream Group)



Science Teachers' Creative Teaching Workshop
by Prof Irwin Talesnick from Canada

Demonstrations and Classroom Experiments in Chemistry, Physics, Biology and General Science

The workshop will feature a number of Hands-On experiments and demonstrations for teachers of all sciences. The take home kits and handouts are designed to create an exciting classroom atmosphere in the participants' "home" classrooms.

During the session the participants will perform, observe and discuss at least 25 experiments in electrical circuitry, electrochemistry, equilibrium, mass spectrometry, density of gases, thermometry, gas laws and more.

The session will commence with a carton of orange juice being used as an energy source to start and operate a clock. Participants will proceed to ask a number of questions and then design and describe at least 20 different experiments to answer the questions that they posed.

All experiments will include discussions related to safety, testing and evaluation, and use in the classroom setting. The session will continue with demonstrations in electrochemistry, battery construction, characteristics of life, and electrical circuits using inexpensive and readily obtainable materials. Each of the experiments will involve concepts that are familiar to the participants, but the presentation pattern will be unique.

The role of inquiry in teaching and learning will be emphasized during each of the activities. An example of the questions that will be dealt with (experimentally) in the workshop will be "How do we know that electrons are neither created nor consumed in chemical reactions?"

In all cases the demonstrations will be performed with safety kept in the forefront. Teachers will return to their classrooms armed with new and exciting ways to combine teaching and student evaluation using simple and inexpensive materials and equipment. Handouts will be provided with thorough recipes and teaching tips.

Information on timing of workshops

Science Teachers' Creative Teaching Workshop

by Prof Emeritus Irwin Talesnick of Canada
Tuesday, 2 September 2008

Venue: Science Centre

PROGRAMME FOR INTRODUCTORY SESSION (COMPULSORY)

0915 - 0930 h	Registration
0930 – 1030 h	Introductory session for all participants
1030 - 1100 h	Tea Break
1100 - 1300 h	Introductory session for all participants (continued)
1300 – 1400 h	Lunch

PROGRAMME FOR WORKSHOP SESSIONS FOR 2 – 5 SEPTEMBER 2008 (CHOOSE ONE DAY)

Venue: Fermi/ Planck Labs, Level 3, Science Centre

AM Session

0915 - 0930 h	Registration
0930 – 1030 h	Hands-on session with teacher kits
1030 - 1100 h	Tea Break
1100 - 1300 h	Hands-on session with teacher kits

PM Session

1345 - 1400 h	Registration
1400 – 1500 h	Hands-on session with teacher kits
1500 - 1530 h	Tea Break
1530 - 1730 h	Hands-on session with teacher kits

Science Teachers' Creative Teaching Workshop

REGISTRATION FORM

1. Participants can choose to make payment through the following (please tick): -

Cheque payment

Interbank Giro

2. Cheques and Registration Forms must reach the Science Centre **by Tuesday, 26 August 2008**.

3. Cheque must be issued to "**Science Centre Board**".

4. Please mail the cheque(s) with a copy of the Registration Form to:

Finance Department
Science Centre Singapore
15 Science Centre Road
Singapore 609081
Attention: Science Upstream Dept

5. All registrations will receive an e-mail acknowledgement.

6. The workshop fee is **S\$100 (inclusive of 7% GST) per person**.

7. One receipt will be issued for each cheque received.

8. For cheques issued by institutions, the name and address of the school must be indicated on the reverse side of the cheque.

9. For personal cheques, the name of the participant and the name and address of the school must be indicated on the reverse side of the cheque.

10. All enquiries should be via email to **upstream@science.edu.sg**.

Details for Interbank Giro

(Please complete the following form in order for Science Centre to bill directly to your school)

Name of Teacher/s:

Name of School:

Billing Address (School's Address):

Attention to: _____ Total to bill: _____

The following teacher/s are applying to attend the compulsory morning introductory session on **2 September 2008** (0930h – 1300h) and another half-day session as follows (please write legibly in **BLOCK letters** to help ensure accuracy of spelling in the receipts):

	Title / Name of Teacher	Main Teaching Subject	Session Preferred (for 2nd half day session) Please Circle
1			2 Sept PM 3 Sept AM/ PM 4 Sept AM/ PM 5 Sept AM
2			2 Sept PM 3 Sept AM/ PM 4 Sept AM/ PM 5 Sept AM
3			2 Sept PM 3 Sept AM/ PM 4 Sept AM/ PM 5 Sept AM
4			2 Sept PM 3 Sept AM/ PM 4 Sept AM/ PM 5 Sept AM
5			2 Sept PM 3 Sept AM/ PM 4 Sept AM/ PM 5 Sept AM

Please include more sheets if necessary.

Enclosed is Cheque No: _____ (Bank: _____) for the amount of \$ _____ made payable to "Science Centre Board"

Name of * Principal / HOD Science
** delete whichever inapplicable*

Signature

Name of School / School Stamp

Date