

9th Singapore National Crystal Growing Challenge

First Announcement

Who wouldn't be fascinated by the perfectly symmetrical, transparent and shining crystals with sharp edges and corners, whether it is jewelry, diamond, icicle or sugar! Growing crystals of a desired size and shape is considered an art as well as a science. On one hand growing the smallest possible, viz., nanometer-sized crystals is a hot topic in nanoscience and technology, growing millimeter sized crystals is a challenge for researchers working in the area of X-ray crystallography. Growing centimeter sized crystals is not only important for industrial and commercial applications but also aesthetically pleasing! The crystallization techniques are being used to separate and purify compounds in research and industries.

We are pleased to inform you that the Department of Chemistry at the **National University of Singapore** and the **Singapore National Institute of Chemistry** are, once again, jointly organizing the **Singapore National Crystal Growing Challenge** this year. This creative and fun-raising biennial crystal growing challenge is for the secondary school, junior college, ITE college and polytechnic students. The challenge provides a unique opportunity for the students to discover the importance of this technique in chemistry. Further growing your own crystals can be a creative way to learn many aspects of basic physics, chemistry, geology and biology. Above all crystal growing is lots of fun! By participating in this competition, students will learn the art and science of growing crystals. They will also have an opportunity to exercise their creativity in growing something beautiful. Moreover, there is also the challenge of outdoing your peers in school as well as at the National level.

There are three categories in this competition. They are:

Junior Level - for secondary school students,

Senior Level - for junior college, ITE college and polytechnic students, and

Open Level - for secondary, junior college, ITE college and polytechnic students. ***In order to compete in this category, participating institutions must submit an entry for the junior or senior categories.***

Each institution may submit a maximum of **two** entries in each category and no more than **two** students should be involved with each entry.

All crystals must be grown at their respective institutions, under the supervision of a teacher. Based on common scientific practices, students should record all their experiments in a logbook. Although all students are encouraged to grow crystals, the teacher, or delegate, can select only the best two to represent their institution in this challenge at each level. You are required to follow the appropriate safety procedures.

Prizes

First, second, third and consolation prizes will be awarded for each category. These include trophies for the first, second and third prize-winning entries. Also, cash prize of \$400, \$300, \$200 and \$50 will be awarded for the first, second, third and meritorious prizes. Further two more awards may be presented: one for the best display & creativity award (Poster and crystal display) and the second one for the biggest single crystal award.

The prize-winning crystals and any other interesting crystals displayed, posters and the logbooks will be retained by the Department of Chemistry, NUS and may be used for display purposes. By entering this competition, participants agree to abide by this policy

The details about the crystals to be grown will be announced soon. The details will be available at <http://www.chemistry.nus.edu.sg/events/ncgc/index.html>.

9th Singapore National Crystal Growing Challenge

If your Institution is interested in participating in the above mentioned competition, please complete this form below and email to chmtlh@nus.edu.sg / fax it to **6779-1691**

Registration for this competition closes on **Tuesday, 15th June 2008**. The details about the crystals to be grown will be announced soon on our Website:

<http://www.chemistry.nus.edu.sg/events/ncgc/index.html>.

Registration form for the 9th Singapore National Crystal Growing Challenge, 2010

Please tick the categories that you will be participating in:

JUNIOR -	Number of entries	1 <input type="checkbox"/>	2 <input type="checkbox"/>	
SENIOR -	Number of entries	1 <input type="checkbox"/>	2 <input type="checkbox"/>	
OPEN -	Number of entries	1 <input type="checkbox"/>	2 <input type="checkbox"/>	(registration fee waived)

Registration fees for teams.

A total of \$_____ (@ \$50 per team) payable to "Crystal Growing Challenge, NUS" is attached. The Cheque number is:_____.

The prize-winning crystals and any other interesting crystals, logbook and poster will be retained by the Department of Chemistry, NUS. By entering this competition, I agree to provide the crystals, logbook and poster to the Department if they request.

Name of Teacher Supervisor & Signature: _____

Address: _____

Contact Number: _____

Fax Number: _____

E-mail: _____