International Chemistry Olympiad
An Introduction

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International Chemistry Olympiad

First International Chemistry Olympiad (IChO)

June 18 - 21, 1968

Prague, Czechoslovakia

Three teams (Czechoslovakia, Poland, Hungary)

IChO Today

Period: 1st or 2nd week of July

Team: 4 students and 2 or 3 Teachers

Competition for an Individual, Participating students are from secondary or higher secondary level

Targeted towards pre-university students

Attract students towards the subject through challenging problems

No. of participating countries: about 68

Examinations -

Total: 100 points

Theoretical examination: 60 points

Practical examination: 40 points

Characteristic features of IChO

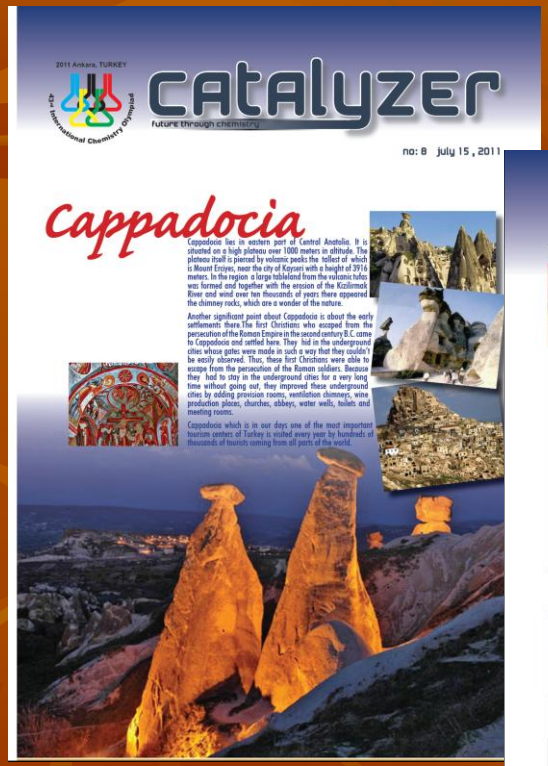
Preparatory Problems: a booklet of challenging problems in theoretical and experimental areas of chemistry– prepared by the country organising the IChO and can be downloaded and used for teaching and learning of chemistry

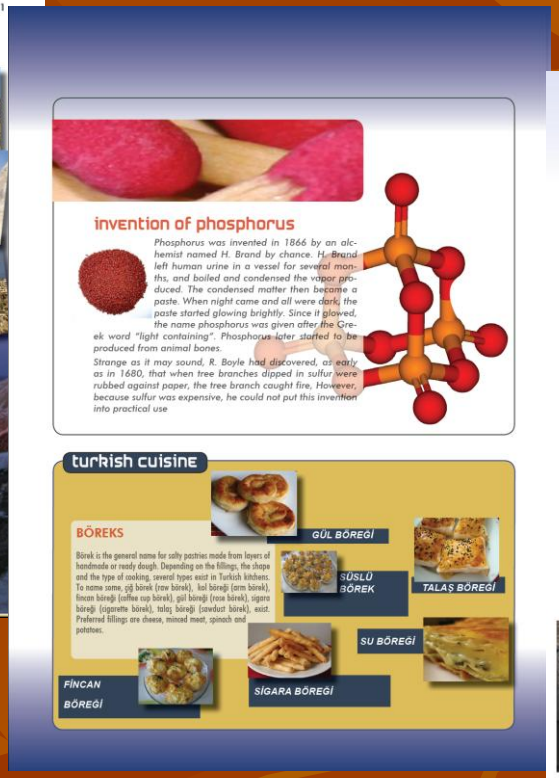
- Open system (w.r.t. papers, evaluation, rules & regulations, awards)

Characteristic features of IChO

- Platform for interactions among teachers
- Presents opportunities to compare standards of chemistry education at secondary level in different parts of world

Cultural Exchanges





Current Selection Procedure for Indian Team

Stage I: National Standard Examination in Chemistry (NSEC)

Number of centres: about 950+, across the country

Number of students : around 30,000

Nature of paper: 80 Multiple choice questions

Syllabus: (CBSC class XI &XII)

Duration: 2 Hrs

Stage II: Indian National Chemistry Olympiad Examination (INChO) Theory

Number of centres:	15 across the country
Number of students:	Around 300 selected from NSEC
Nature of paper:	6-7 Challenging Problems (syllabus :CBSE ++)
Duration:	3Hrs

Stage III: Orientation cum Selection Camp

Number :	35 students selected from INChO (Theory)
Examinations:	Multiple Theoretical and **Experimental** Examinations (based on preparatory problems)
Duration:	8 -10 days
Place:	HBCSE

Stage IV: Pre-departure Training Camp (for Indian Team)

Duration: 14 days (as per the rules of IChO)

Place: HBCSE

(prior to departure of team for the forthcoming IChO)

Stage V: Participation of Indian Team in IChO

Experimental examinations at OCS

Official website for International Chemistry Olympiad - http://www.icho.sk

Information about Indian Olympiad programme

http://www.hbcse.tifr.res.in/olympiads

For queries about Indian Science Olympiad programme write to

Prof. Anwesh Mazumdar,National Co-ord Science Olympiads

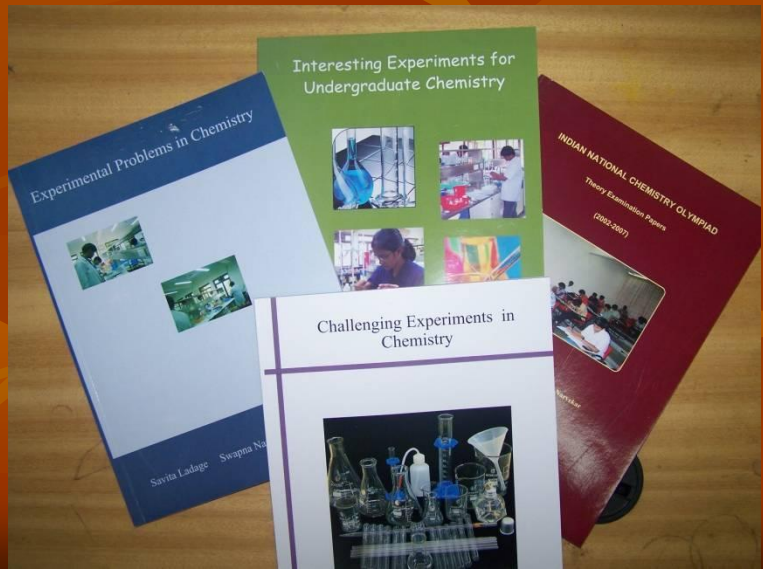
E-mail: nc-olympiad@hbcse.tifr.res.in

Contributions of INChO Programmme

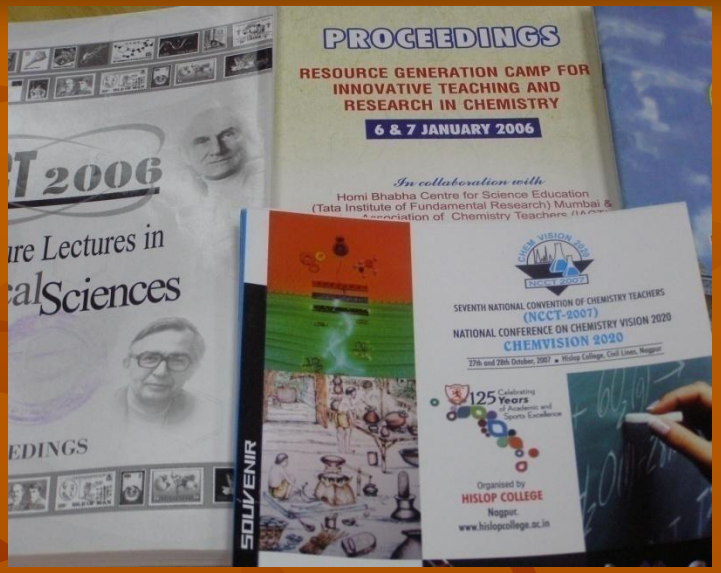
- Number of students : from 700 (in 1999) to 30,000 (in 2011)

  spread across the country. But still confined more to urban areas of the country and has low participation of female students.

- Quality questions in different areas of chemistry (accessible to any student and teachers)
- Challenging Experimental problems - These experimental problems are considerably shaping the new major undergraduate initiatives within the country



Formation of Association of Chemistry Teachers



The association playing a key role in networking chemistry teachers across India through various activities. Currently the association has 950+ members, holds annual conventions, 6 zones across India, partially funds the seminars, workshops and conferences related to chemistry research and chemistry education.

IChO Theoretical syllabus

IChO Theoretical syllabus has excellent overlap with CBSE and IIT-JEE syllabi

Students from CBSE stream and preparing for IIT-JEE are better prepared for INChO (Theoretical) examination.

IChO questions

Cover different areas of chemistry

physical

Inorganic

Organic

analytical

(Core topics, Classical and advanced)

This is true for INChO Theoretical Examination

Characteristics of IChO Theoretical questions

Context and Thematic problems

Actual situations

Tests different interlinked concepts

Nature of answers

objective (calculations, equations, structures, completing mechanisms)

No prose answers

Importance of contextual problems

- Helps in developing Students' interest
- Brings importance of chemistry in daily life
- Interconnects chemistry to various issues
- Presents active situation for learning

Is it difficult to find context?

Bihar

- Archeological buildings (^{14}C dating)
- Litchi (Polyphenolic compounds –cover of the fruits)
- Chemistry of Arsenic in Ganges river basin
- Pyrite/Limestone production
- Steel production

Thus, today Indian Chemistry Olympiad programme is an educational activity that is on one hand nurturing talent (*excellence end*) and at the same time is equally concerned about chemistry teachers and chemistry education with in the country especially attertiary level (*equity end*).

Thank You !!!!