

# A REPORT ON



**CHEMISTRY OLYMPIAD EXPOSURE CAMP**  
**10-13<sup>th</sup> November 2019**



**Organised by**  
**Department of Chemical Sciences, Tezpur University**  
*In association with*  
**Homi Bhabha Center for Science Education (TIFR)**  
**V. N. Purav Marg, Mankhurd, Mumbai-400088**

# *Olympiad*

is a movement with a very strong educational goal of exposing pre-university students to what is meaningful and challenging about a given subject so that they may be inspired to pursue the subject. The program has evolved in form of competitions involving challenging theoretical and experimental problems that touch the frontiers of the subject but are solvable by a senior secondary school student. On the surface, the olympiad program is a challenge for the students, but if one looks into its dynamics, it is infact a challenging and unique opportunity for the teaching community of the given discipline. It has enriched our conceptual understanding of chemistry and its pedagogy as it requires our engagement with the subject at historical, philosophical, practical, and conceptual level.

The three days exposure camp consisted of pedagogical sessions related to concepts in chemistry that are an integral part of the experimental and theoretical components of the Chemistry Olympiad. The participating teachers sent some of the past problems in theory and experiments. Each participant is expected to study the problems beforehand. During the camp, there were discussions on teachers' reflections on the problem-solving process. There was a special emphasis on how experiments can be modified differently to achieve greater learning for students, without actually increasing the material requirements.

Eminent scientists/speakers interacted with participants on various interesting topics, giving them a flavour of Chemistry Olympiad activities. There was special emphasis on experimental components that can enhance students' capacity to learn and appreciate the subject. The topics particularly focus on chemical reasoning skills, visualization skills, and ability to interpret different chemical systems leading to problem solving skills in the chemistry domain.

Resource Persons that participated in the programme:

Dr. Ankush Gupta, Homi Bhabha Center for Science Education (TIFR), Mumbai

Dr. Indrani Das Sen, Homi Bhabha Center for Science Education (TIFR), Mumbai

Prof. Pradeep Phukan, Gauhati University, Guwahati

Prof. Ramesh C Deka, Tezpur University

Dr. Bipul Sharma, Tezpur University

Prof. Ashim J Thakur, Tezpur University

There were 18 participants from different parts of Assam:

SI No.	Name	Address
01	Mr. Partha Sarathi Panda	Govt. Girls High School, Titilagarh
02	Dr. Chinmayee Saikia	Tezpur Science Academy, Tezpur
03	Mrs. Jahnabi Deka	Krishnaguru College of Science and Technology (KCST), Nasatra
04	Mr. Binod Rajkhowa	Kamarbandha higher Secondary School, Golaghat
05	Mr. Gauri Prasanna Bharali	Madhabdev High School, Kachikota
06	Mr. Kangkan Kishor Dutta	Bamunpukhuri high school, Jorhat
07	Mrs. Kabita Saikia	Tezpur Govt. HS School
08	Mrs. Jumi Das	KV, Central University, Tezpur
09	Mrs. Moni	KV, Central University, Tezpur
10	Mrs. Daisy Mahanta	Tezpur Bengali Boys' HS School, Tezpur
11	Mr. Naba Kanta Pegu	Rengam Champara High School, Lakhimpur
12	Mr. Manab Bharali	Govt. Gurdan HS School, Nalbari
13	Mrs. Sangita Bharali	Puthimari HS School, Athara, Kamrup
14	Mrs. Nabanita DouL Baruah	Kaliabor HS School, Koliabor
15	Mr. Debajit Ghosh	Dibrugarh Bengali High School, Dibrugarh
16	Mr. Rupjyoti Kalita	Matrix junior College, Nagaon
17	Mr. Udayjyoti Borah	Namdeuri HS School, Jorhat
18	Mr. Pranjal Borah	Kuthori HS School, Kaziranga

Participants were provided accommodation in the guest house.



Photos: Participants carrying out experiments



Photos: Resource persons interacting with the participants

There was a brainstorming discussion at the end of the programme where many participants and resource persons share their bit of experiences in teaching and learning chemistry. Some of the participants emphasised on the translation of quality materials into vernacular languages so that the vernacular students also get benefit. It was also felt that we should have more such numbers of programmes.

In the valedictory function, the coordinator of the programme, Prof. Ashim Jyoti Thakur extended vote of thanks to all the participants and resource persons for making the programme successful.

(Prof. Ashim Jyoti Thakur)  
Coordinator

R. Borah  
15/2/2022  
Head  
Department of Chemical Sciences  
TEZPUR UNIVERSITY

## Exposure Camp for Chemistry Olympiad, Tezpur University

November 10 - 13, 2019

Programme Schedule

Day	Sessions			Lunch	Sessions	
				(1:00 - 2:00 PM)		
Nov 10, Sun	9:30 - 10:30 AM Welcome and Introduction to Chemistry Olympiad (AJT & IDS)	11:00 - 1:00 PM Solving INChO Problem-(AG)			2:00 - 2:45 PM Discussion on INChO Problem (AG)	3:00 - 5:30 PM Lab 1 - Synthesis (AG, IDS)
Nov 11, Mon	9:00 - 10:15 AM Lab 1 Discussion (IDS)	10:30 - 12:00 AM Lecture 1 Crystallization (BS)	12:00 - 1:00 PM Lab 2 Introduction (IDS)		2:00 - 4:00 PM Lab 2 -Titration (AG, IDS)	4:30 - 5:30 PM Lab 2 - Discussion (AG)
Nov 12, Tue	9:00 - 10:00 AM Lab 2 Discussion (AG/IDS)	10:00 - 11:30 AM Lecture 2- Atomic Structure (RCD)	11:45 - 1:00 PM Solving INChO Problem (PP)		2:00 - 3:30 PM Solving INChO problem. contd (PP/AG)	4:00 - 5:30 PM Chemistry Learning resources (IDS)
Nov 13, Wed	9:00- 10:30 AM Multiple Choice questions (MCQs) for Understanding misconceptions (AG)	11:00 AM - 12:30 PM MCQs contd. (AG)	12:30 - 1:30 PM <b>Panel Discussion:</b> Creating local opportunities for problem solving (AJT)			

Venues: Dept. of Chemical Sciences, Tezpur University

Resource Persons:

AG - Ankush Gupta

BS: Bipul Sharma

IDS - Indrani Das Sen

AJT- Ashim J Thakur

PP- Pradeep Phukan

RCD: Ramesh C Deka

# Chemistry Olympiad Exposure Camp

## November 10-13, 2019

### Tezpur University

#### Napaam, Sonitpur, Assam, India



#### Target Audience

We are happy to invite applications from junior college/High school teachers (teaching at X to XII class), involved in teaching CHEMISTRY for the Exposure Camp to Chemistry Olympiad to be held at Tezpur University from November 10-13, 2019. Only the teachers employed in schools that are recognized by the state or central government education boards are eligible to apply.

#### About Olympiad

Olympiad is a movement with a very strong educational goal of exposing pre-university students to what is meaningful and challenging about a given subject so that they may be inspired to pursue the subject. The program has evolved in the form of competition involving challenging theoretical and experimental problems that touch the frontiers of the subject but are solvable by a senior secondary school student.

On the surface, the olympiad program is a challenge for the students, but if one looks into its dynamics, it is in fact a challenging and unique opportunity for the teaching community of the given discipline. It has enriched our conceptual understanding of chemistry and its pedagogy as it requires our engagement with the subject at historical, philosophical, practical and conceptual level. We invite you to this exposure camp to share our learning and help you gain experience of this process.

#### More on the Camp

The exposure camp will consist of pedagogical sessions related to concepts in chemistry that are an integral part of the experimental and theoretical components of the Chemistry Olympiad. The participating teachers will be sent some of the past problems in theory and experiments. Each participant is expected to study the problems beforehand. During the camp, there would be discussions on teacher's reflections on the problem solving process. There would be a special emphasis on how experiments can be modified differently to achieve greater learning for students, without actually increasing the material requirements.

Interested teachers can apply by clicking on the button below:

Fill Online Form

OR

Download

and  
send the completed application form to us to the address given below:

**Prof. Ashim Thakur**  
**Department of Chemical Sciences,**  
**Tezpur University,**  
**Napaam, Sonitpur**  
**Assam-784028**

#### NOTE:

The deadline for submitting applications for the camp is being further extended to Oct 31, 2019. The teachers who have applied till Oct 22, 2019 and whose application has been accepted will be soon intimated directly by email (provided in the application)

#### Information if selected

In case you are selected for the camp, you will need to carry a print out of the completed form certified by Principal (or concerned authorities) of your school/college when you come for the camp. Without the certified form, you will not be allowed to attend the camp.

All the participants will be eligible for to and fro travel fare as per the entitlement (maximum only upto II AC train fare). During the workshop, food and accommodation will be provided to all participants at Tezpur University campus.

#### How to reach us

