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Prof. Ashim J Thakur, Head, Department of Chemical Sciences, TU

Convener:

Prof. Robin K Dutta, Department of Chemical Sciences, TU

Coordinator (SAP):

Prof. Ramesh C Deka, Department of Chemical Sciences, TU

Joint Convener:

Dr. Kusum K Bania, Department of Chemical Sciences, TU

Shri Jibon Pator, Principal, Dengaon Higher Secondary School, KA

Treasurer:

Dr. Utpal Bora, Department of Chemical Sciences, TU

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Location of the venue:

Dengaon Higher Secondary School is at Dengaon village in the gateway to Karbi Anglong district, about 55 km from Nagaon and situated by the side of NH 36 connecting Doboka with Dimapur.



Workshop

on

Fluoride Nilogon

(Removal of fluoride from drinking water by Phosphoric Acid – Crushed Limestone method)

**Venue: Dengaon Higher secondary School
Dengaon, Karbi Anglong, Assam**

25 March 2017

**Organized by
Department of Chemical Sciences
Tezpur University
Tezpur, Assam**

&

**Dengaon Higher secondary School
Dengaon, Karbi Anglong, Assam**

**Sponsored by
University Grants Commission (UGC), New Delhi
Under Special Assistance Program (SAP)**

Introduction:

Fluoride contamination of drinking water: Groundwater in vast areas of Assam as well as some other states of India is contaminated with fluoride in alarmingly high concentrations. Fluoride is a deadly poison. A long term ingestion of fluoride in drinking water and cooking water causes dental and skeletal fluorosis in addition to other health problems. Symptoms of excess fluoride induced disorders are prevalent some states of the country including Assam. Karbi Anglong and Hojai districts are the most fluoride-affected districts in Assam.

Fluoride Nilogon: A low-cost and simple method for removal of fluoride from contaminated groundwater, viz., *Fluoride Nilogon*, Phosphoric Acid - Crushed Limestone Treatment method has been recently developed and successfully tested in field by a group of researchers lead by Prof. Robin K. Dutta from the Department of Chemical Sciences, Tezpur University. The method removes fluoride efficiently and selectively without leaving any toxic residual in the water at a recurring cost of ₹ 1 per 100 L of water. The *Fluoride Nilogon* system can be custom designed to meet the requirements of the users ranging from small household to community. It uses a crushed limestone fixed-bed reactor where the water is treated for 3 hours in presence of a small quantity (0.00067 M) of phosphoric acid. The present workshop, sponsored by the UGC, New Delhi, is being organized for popularizing the *Fluoride Nilogon* method in the fluoride affected areas of central Assam with Dengaon located almost in the centre.

Themes:

- Fluoride contamination of groundwater and the importance of its removal.
- Demonstration of *Fluoride Nilogon*.
- Future course of action towards mitigation of the fluoride menace.

Language for deliberations in the Workshop:

Assamese, Karbi, Hindi and English

Participants:

- i) Users of Fluoride Nilogon from Dengaon and Tekelangjung areas of Karbi Anglong
- ii) Teachers and students of schools and colleges and villagers of the fluoride affected areas of Karbi Anglong and Nagaon districts of Assam.
- iii) Faculty members and students (both PhD and PG programs) of Chemical Sciences and other related Departments of Tezpur University.

Registration:

- There is no registration fee.
- Teachers and students of schools and villagers from the fluoride affected areas of Karbi Anglong and Nagaon Districts may contact Shri Jibon Pator, Principal, Dengaon High School, Dengaon, Karbi Anglong (Ph. 96133 33088) for registration.
- Students of PhD and PG programs of the Department of Chemical Sciences and other related departments of Tezpur University willing to participate may intimate their willingness with signature to Dr. Kusum Bania, Joint Convener of the Workshop.

Hospitality:

- Tea and working lunch will be provided during the Workshop.

Travel assistance:

- Bus/tempo fare may be reimbursed for the school teachers and villagers for attending the Workshop as per Government rule.
- Conveyance will be provided to faculty and students from Tezpur University

Tentative Program:

9:00 a.m.	Registration
9:10 a.m.	Demonstration of Fluoride Nilogon: Assamese – Shri Pranab Bhagawati, Dengaon (User since March 2013) Karbi – Shri Joy Sing Teron, Tekelangjung (User and promoter since 2014)
10:00 a.m.	Inauguration by Prof. Ramesh C. Deka, Coordinator, Dept Chem Scs, TU
10:10 a.m.	Welcome address by Principal, Dengaon Higher Secondary School
10:25 a.m.	Welcome address by Prof. Swapan K. Dolui, Dept Chem Scs, TU
10:30 a.m.	Felicitation of guests & Address by Guest of Honor – Shri S.K. Sahoo, GM, Cement Corporation of India, Bokajan Cement factory
10:45 a.m.	Fluoride contamination of drinking water and its health effects – Prof. Kali Prasad Sharma, Dept of Environmental Sciences, TU
11:00 a.m.	Introduction to Fluoride Nilogon and its background - Dr. Robin K. Dutta, Professor, Dept of Chem Scs, TU
11:30 a.m.	Opinions of users of Fluoride Nilogon
11:45 a.m.	Address by faculty members, Chem Scs, TU
12:00 Noon	Presentation on Fluoride Nilogon – Shri Jiban Pator, Shri Sem Sing Bey and Shri Rajkamal Mohan
12:30 p.m.	Interaction session: Feedback & Planning of strategy for future work
1:00 p.m.	Vote of thanks: Shri Kanak Das, Assistant Teacher, Dengaon High School
1:10 p.m.	Working Lunch
2:00 p.m.	Demonstration by Shri Anup Jyoti Bora, Research Scholar, Dept. Chem Scs, TU and Shri Joy Sing Teron, Tekelangjung
4:00 p.m.	Closure
