### Workshop cum Hands-on-Training on HERBAL PROCESSING TECHNOLOGY

9th-13th Oct 2023

Venue: Computer Hub (Theory Sessions) & Dept of Herbal Science & Technology (Practical Sessions) ADP College, Nagaon





DBT Sponsored Workshop cum Hands-on-Training



### HERBAL PROCESSING TECHNOLOGY

Date 09-13" Oct 2023 Time: 10AM-2PM

Venue: Computer HUB and Department Of Herbal Science and Technology, ADP College Campus

#### Themes

- □ DAY 1 Introduction to Herbal Technology, Cultivation and Post Harvest Management
- □ DAY 2 Identification of Medicinal Plants, Solvent Extraction Of Crude Drug.
- □ DAY 3 Phytophermaceuticals, Phytochemical screening
- DAY 4 Herbal Drug Formulation, Industry- Academia Interaction Session
- ☐ DAY 5 Commercial Aspects and Scope of Herbal Technology









### Organized By Advance Level Institutional Biotech HUB Dhing College, Nagaon

In Collaboration with Department of Herbal Science & Technology, ADP College

### Program Schedule

Date	10.00AM-11.00AM	11.00AM-12.00 PM	12.00-12.30PM	12.30- 1.00PM	1.00PM- 3.00PM
DAY 1: 9/10/23	Inauguration Session: Objectives- Dr. Sadananda Payeng, Principal, ADP College, Nagaon Keynote address- Dr. Sanjeeb Kumar Nath, Coordinator Advance Institutional Level Biotech Hub, Dhing College, Nagaon Lecture 1-Introduction to Herbal Technology by- Dr. Mousmi Saikia, ADP	Lecture 2- Medicinal plants by Dr. Sanjeeb Kumar Nath, Dhing College, Nagaon	Lecture 3: Cultivation and Post-Harvest Processing of Medicinal Plants by- Pankaj Jyoti Chetia, M.Sc 3 <sup>rd</sup> Sem ADP College, Nagaon	Lunch	Practical 1- Basic Laboratory Techniques, Collection and Processing of Crude Drug

	College, Nagaon				
DAY 2: 10/10/23	Lecture 4- Identification of Medicinal Plant & crude drug by- Dr. Neeta Basumatary, Nagaon Girl's College	Lecture 5- Herbal Technology: Its impacts on Life in 21st Century - by Mr. Pranab Borah, Ph.D. Scholar, Cotton University	Lecture 6: Solvent Extraction of Crude Drug by- Monoshwee Tanti, M.Sc 3 <sup>rd</sup> Sem ADP College, Nagaon	Lunch break	Practical 2- Solvent Extraction of Crude Drug
DAY 3: 11/10/23	Lecture 7- Phytopharmaceuticals by- Ms. Jahnowi Das, ADP College, Nagaon	Lecture 8- Concepts Of Quality Assurance and Quality Control by- Pranjal Boruah, Microbiologist, Bisleri International Pvt Ltd.	Lecture 9- Phytochemical Screening of the prepared extracts by- Syeda Nafesa Anjum, M.Sc 3 <sup>rd</sup> Sem, ADP College, Nagaon	Lunch break	Practical 3- Phytochemical Screening of the prepared extracts
DAY 4: 12/10/23	Lecture 10- Herbal Drug Industry Prospective by Ms. Bornali Hazarika, Quality Control Executive at LSJ (DXN-Deahsan) Biotech PVT Ltd.	Lecture 11- Herbal Industry Prospects by Mr. Pranab Patowary, Factory PIC, at LSJ (DXN- Deahsan) Biotech PVT Ltd.	Lecture 12- Herbal Drug Formulation by- Deringdao Jidung, M.Sc 3 <sup>rd</sup> Sem, ADP College, Nagaon	Lunch break	Practical 4- Herbal Formulation e.g Gel, Ointment, etc.
DAY 5: 13/10/23	Lecture 13- Commercial Aspects of Herbal Products- by Dr. Mousmi Saikia, ADP College, Nagaon	Validatory	-		-

A five days' Workshop cum Hands-on-Training program on "Herbal Processing Technology" was conducted at Anandaram Dhekial Phookan College, Nagaon from 9th oct-13th oct 2023 organized by Advance Institutional Level Biotech Hub, Dhing College, Nagaon, in collaboration with the Department of Herbal Science and Technology, ADP College, Nagaon.

The main objective of the workshop was to create awareness on the indigenous Medicinal and Aromatic plants, its conservation and sustainable use. The workshop also focused on the Research & Development and Herbal drug development strategies. The lectures and discussions were followed by hands-on practical session on Basic Laboratory Technique, Identification of Crude Drug, Solvent Extraction of Crude Drug, Phytochemical Screening of Phytopharmaceuticals and Herbal Drug Formulation.

The program was inaugurated by Dr. Sadananda Payeng, Principal, ADP College, Nagaon followed by a speech by Dr. Mridul Kumar Hazarika, Vice- Principal, ADP College, Nagaon. The keynote address was delivered by Dr. Sanjeeb Kumar Nath, Co-Coordinator, Advance Institutional Level Biotech Hub, and HoD, Department of Botany, Dhing College, Nagaon. Dr. Mousmi Saikia, Organizing Secretary and HoD, Department of Herbal Science & Technology, ADP College, Ngagon delivered the objectives of the workshop cum Hands-on Training.

Technical sessions were started after the inaugural session followed by Hands-on practical sessions each day. Seventy-three (73) undergraduate students from the Department of Botany, Zoology and Herbal Technology from Nowgong Girls' College, Dhing College and ADP College, and eighteen (18) Post-Graduate students of M.Sc. Herbal Science & Technology participated in the program. A total of 105 participants including students, faculty and resource person participated in the event.

#### Organizing Committee-

- · Dr. Biman Hazarika, Principal, Dhing College
- · Dr. Sadananda Payeng, Principal, ADP College
- Dr. Sanjeeb Kumar Nath, Co-Coordinator, Advance Institutional Level Biotech Hub, Dhing College, Nagaon.
- Dr. Manoj Kumar Saikia, Coordinator, Advance Institutional Level Biotech Hub, Dhing College, Nagaon.
- Dr. Mousmi Saikia, Organizing Secretary, ADP College, Nagaon.
- Ms. Jahnowi Das, Member, ADP College, Nagaon.

#### Resource Persons-

- · Dr. Neeta Basumatary, Assistant Professor, Nowgong Girls College
- · Mr. Pranab Borah, Ph.D. Scholar, Cotton University
- Mr. Pranjal Boruah, Microbiologist, Bisleri International Pvt Ltd, Nagaon
- Ms. Bornali Hazarika, Quality Control Executive at LSJ (DXN-Deahsan) Biotech PVT Ltd.
   Tezpur
- Mr. Pranab Patowary, Factory PIC at LSJ (DXN-Deahsan) Biotech PVT Ltd. Tezpur Topic Discussed-

DAY 1 - Introduction to Herbal Technology, Cultivation and Post Harvest Management
DAY 2 - Identification of Medicinal Plants, Solvent Extraction of Crude Drug.
DAY 3 - Phytopharmaceuticals, Phytochemical screening
DAY 4 - Herbal Drug Formulation, Industry- Academia Interaction Session
DAY 5 - Commercial Aspects and Scope of Herbal Technology

#### Lectures given by Resource Persons/ Faculty/Students-

- 1) Dr. Mousmi Saikia- Introduction to Herbal Technology
- 2) Dr. Sanjeeb Kumar Nath- Medicinal Plant
- 3) Dr. Neeta Basumatary- Identification of Crude drugs
- 4) Mr. Pranab Borah-Herbal Technology: Its impacts on Life in 21st Century
- 5) Ms. Jahnowi Das- Phytopharmaceuticals
- 6) Mr. Pranjal Boruah- Concepts of Quality Assurance and Quality Control
- 7) Ms. Bornali Hazarika-Herbal Drug Industry Prospective
- 8) Mr. Pranab Patowary- Herbal Industry Prospects
- Mr. Pankaj Jyoti Chetia, (Student, M.Sc 3<sup>rd</sup> Sem)- Cultivation and Post Harvest Management of Medicinal Plant
- 10) Ms. Monoswee Tanti, (Student, M.Sc 3rd Sem)- Solvent Extraction of Crude Drug
- 11) Ms. Syeda Nafesa Anjum, (Student, M.Sc 3rd Sem)- Phytochemical Screening of Plants
- 12) Mr. Deringao Jidung, (Student, M.Sc 3rd Sem)- Herbal Drug Formulation

### Photos-

Day 1































### Day 3













### Day 4









Day 5



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News paper clippings of the Workshop:



### Workshop on herbal processing technology held

A CORRESPONDENT

Herbal Science and Technology, ADP College, Nagaon organized a five-day long workshop-cum-hands-on training programme on 'Herbal processing technology' at ADP College from October 9 to October 13.

The prime objective of the workshop

Dr Sadananda ADP College, inau following a brief Mridul Kumar H Kumar Nath, co-Institutional Level

### Herbal processing technology workshop pro indigenous medicinal plants and research at AL

HT Correspondent
NAGAON, Oct 18: The Advance
Institutional Level Biotech Hub at
Dhing College, in collaboration
with the Department of Herbal Science and Technology at ADP College, Nagaon, organized a five-day
workshop cum hands-on training
program on 'herbal processing
technology' from October 9 to Oc-

dicinal and aromatic plants, their conservation, sustainable use, and to emphasize research and strategies for developing herbal drugs. Dr Sadananda Payeng, Principal of Nagaon ADP College, inaugurated the workshop following a brief introduction by Dr Mridul kr Hazarika. Dr Sanjeeb Kr Nath, Coordinator of the Advance Insti-

keynote addi Saikia provide workshop's of saw participal students, facul source persons College, Now and Dhing Co 73 undergradi partment of B

### Workshop on herbal processin technology held at ADP College CORRESPONDENT

NAGAON, Oct 20: The Advance Institutional Lev Biotech Hub, Dhing Colleg in collaboration with the Department of Herbal Science and Technology, A College, Nagaon, organise five-day workshop cum hands-on training program on 'Herbal processing technology' at the ADP College recently.

The prime objective of the workshop was to create awareness on indigenous medicinal and aromatic plants, its conservation and sustainable use as well as focus on research and herithrugs development strate pies.

Dr Sadananda Payeng, principal of Nagaon ADP College, inaugurated the workshop following a brief note presented by Dr Mri Kr Hazarika. Dr Sanjeeb Kumar Nath, coordinator, Advance Institutional Lev Biotech Hub, and head, Department of Botany, Dh College, delivered the keynote address, while D Mousmi Saikia spoke on to objectives of the event.

Over 105 students, fact members and resource persons from Nagaon ADP College, Nowgong Girls' College and Dhing College participated in the event. More than 73 undergradu students from the departments of Botany, Zoology. Herbal Technology as wel 18 postgraduate students Herbal Science and Techn gy participated in the programme.

Dr Neeta Basumatary, assistant professor, Nowg-Girls' College: Pranch Rec

## Workshop on herbal processing technology held at ADP College

Assam Rising, Nagaon, October 18: Advance Institutional Level Biotech Hub, Dhing College in collaboration with Department of Herbal Science and Technology, ADP College, Nagaon organized a five day long workshop cum hands training on programme on 'herbal processing technology at ADP College from October 9 to October 13. The prime objective of the workshop was to create awareness on indigenous medicinal and aromatic plants, its conservation and sustainable use as well as to focus on research and herbal drugs development strategies. Dr

Sadananda Payeng, principal of Nagaon ADP College inaugurated the workshop following a brief note presented by Dr Mridul kr Hazarika. Dr Sanjeeb Kr Nath, co-ordinator to Advance Institutional Level Biotech Hub, HoD, Department of Botany, Dhing College delivered the keynote address while Dr Mousmi Saikia delivered a short note on the objectives of the workshop. Over 105 students, faculty members and resource persons from Nagaon ADP College, Nowgong Girls' College and Dhing College participated in the event. Over 73 undergraduate students from the Department of Botany, Zoology and Herbal Technol-

ogy as well as 18 post graduate students of Herbal Science and Technology participated in the programme. Dr Neeta Basumatory, assistant professor, Nowgong Girls' College, Pranab Bora, PhD scholar, Cotton University, Pranjal Boruah, microbiologist, Bisleri International Pvt Ltd. Bornali Hazarika, quality control executive at LSJ (DXN - Deahsan) Biotech Pvt Ltd, Tezpur and Pranab Patowary, factory PIC at LSJ Biotech Pvt Ltd, Tezpur participated in the workshop as the resource persons, a press note stated here.

Signature Coordinator & PI Advance Institutional Level Biotech Hub, Dhing College

> Coordinator & PI Biotech Hub **Dhing College**

Principal

Dhing College

Dhing, Nagaon (Assam)

#### **SCIENCE QUIZ COMPETITION**

Science Quiz competition 3 days science Quiz competition was held under DBT-HRD star college scheme from 6<sup>th</sup> October to 9<sup>th</sup> October 2023. The principal of our college Dr. Biman Hazarika Inaugurated Science Quiz competition on 6<sup>th</sup> October at 2 pm. The 1<sup>st</sup> competition was held among the 5<sup>th</sup> semester (Honours) Students of our department. The competition was conducted by Mr. R. S. Baruah, Assoc. Prof. and Miss K. Saikia Guest Lecture of our department. We made the students were 5 groups and its group have free students. We have selected 2 groups for the final round.

On 7<sup>th</sup> October the competition was held among the students of 3<sup>rd</sup> semester (Honours) of our department, there were 7 groups and quiz master were D. Deb Nath and R.S Baruah and from this 3 groups were selected for final round. After that competition was held among the students of 1<sup>st</sup> sem (major) of our department. The quiz master were M. D. Deb Nath and R.S Baruah, both associate professor of our department. There were 7 groups joined in the competition and out of 7 groups 2 groups were selected.

On  $9^{th}$  October the final round of quiz was held. The selected groups from  $1^{st}$ ,  $3^{rd}$  and  $5^{th}$  semester joined in the competition. The quiz was conducted by Dr. N.K. Barthakur, Mr. R.S. Baruah and Mr. D. Debnath.

In the final round quiz, Sourav Das and his team took the 1<sup>st</sup> position, Mr. Seikh Abdulla and his team took the 2<sup>nd</sup> position and Miss Imrana Ferdos and her group took the 3<sup>rd</sup> position. After the competition prize distribution ceremony was held prize were give hand to winners.





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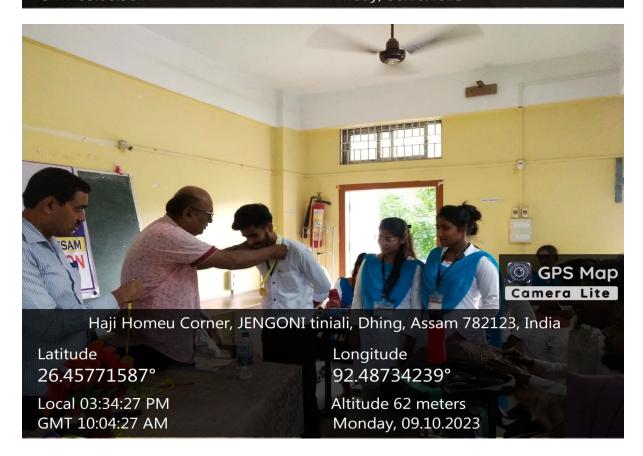
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#### 1ST HANDS-ON-TRAINING

The five-day hands-on training programme was held in the department of physics under DBT-HRD star college scheme from 12<sup>th</sup> oct. to 16<sup>th</sup> oct. 2023. The inaugural function was the presided by HOD physics. and of her faculty member of the department and Mr. G. Bharali head of the chemistry department. The resource person on of the session Hands on training programme was Dr. Samarjit Saikia and the members from our faculty. Dr. S. Saikia now is working as a Asstt. Prof. in Downtown university, Guwahati.

After the inaugural function the training program was started Dr. Saikia demonstrated various practical, such as Hall effect. G.M counter working of CRO etc. to the 5the semester students.

On the second- and third-day  $1^{\rm st}$  semester students were attained the training programme. On third day  $3^{\rm rd}$  semester attended the programme. Dr. Saikia demonstrated various apparatus how to work that apparatus.

On last two days training Programme was done by Mr. R.S. Baruah and Mr. D. Debnath of our department. They Showed various practical which were done in this department.











### SEMINAR ON ANDERSON LOCALISATION IN RANDOM LASER

A One Day Seminar on Anderson Localization in random laser was organized by the Department of Physics under DBT-HRD-Star college scheme on 19th October 2023.

The speaker of the seminar was Prof. Anurup Gohain Baruah, Dept. Of Physics, Gauhati University, Guwahati. The inaugural function was held under the chairmanship of Principal of Dhing College, Dr. Biman Hazarika, HOD of Physics Dept. Dr. N. K. Barthakur welcomed the principal, speaker friend and students. The principal of Dhing College inaugurated the seminar.

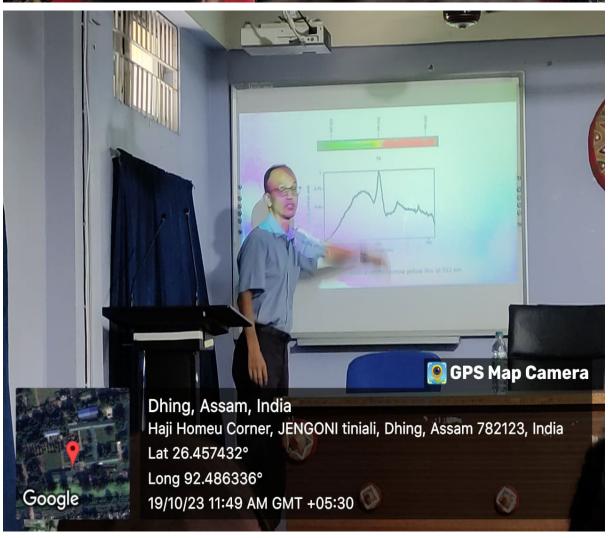
After that resource person, Prof. Anurup Gohain Baruah started his lecture. First of all, he gave some insights about the Anderson Localization of Random Laser. After that he started to talk on his own research work about firefly. He gave very interesting talk. The participants came to know various new findings on firefly from his lecture.

There were all together 125 person including teachers, students and other members attended the seminar. After end of lecture given by the speaker, Mr. R.S. Baruah Associate Professor of the Department of Physics offered vote of thanks.

After that the seminar came to an end.











### **6 DAYS HAND-ON-TRAINING**

The six days Hands-on -Training was organized by the Physics Department of Dhing College for the student of 1st, 3rd and 5th semester (Major and Honours) student under DBT-HRD Star college scheme.

The training was held from 30th October 2023 to 4th November 2023. The resource person for the program was Mr. Manoj Bora, Research Scholar, Dept. Of Physics, Assam University, Silchar.

The hands -on Training was basically programming in computer in C and C++ and also the use of Metleb and Mathematics which were very essential for the student. The resource person demonstrated everything in very nice manner and students were greatly benefited from his demonstration.



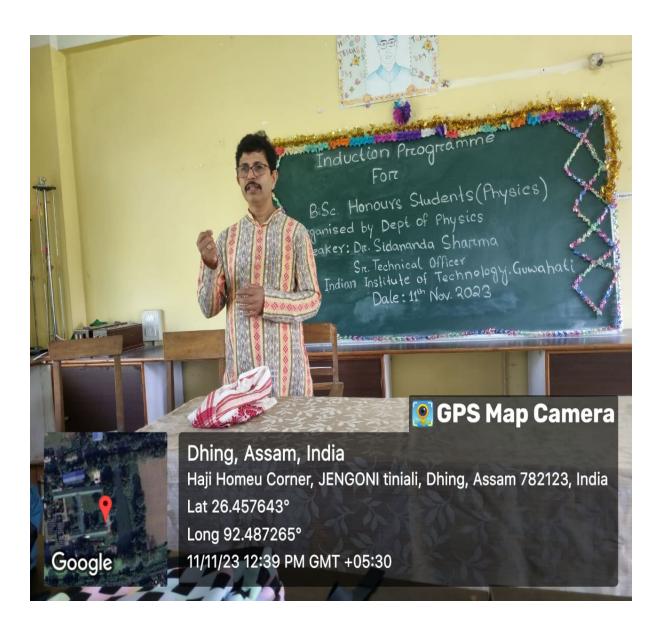




### **ONE DAY INDUCTION PROGRAM**

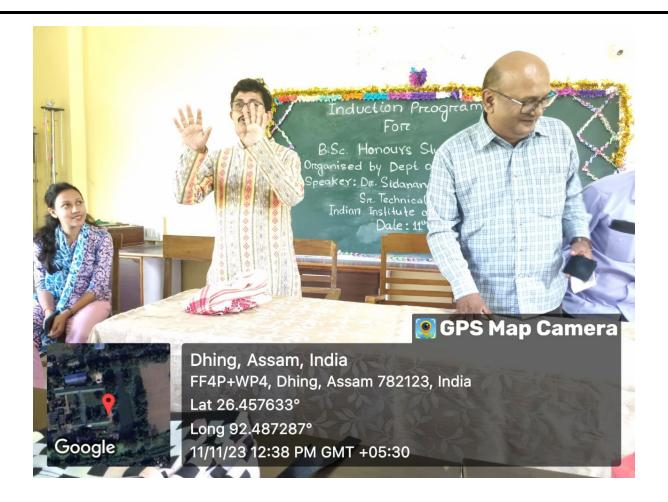
One day Induction Program was arranged in the Physics Department of Dhing College under DBT- HRD Star college scheme. The resource person for the induction program was Dr. Sidananda Sarma, Senior Scientific Officer of IIT Guwahati.

He delivered lectures about various sophisticated electronic and other machine available in central instrument facility center in IIT Guwahati. He also interacts with the student and also visited our lab and impressed over our lab. The student was greatly benefited from his lecture.









# ONE DAY OUT REACH PROGRAMM TO DEPARTMENT OF INSTRUMENTATION AND USIC, GAUHATI UNIVERSITY, GUWAHATI.

The 5th semester (Honors) student visited Department of Instrumentation and USIC on 17th November, 2023 under the DBT-HRD Star college scheme. There were all together 24 5th Semester students and 2 teacher - Dr. Nandan Kr. Borthakur (Hod) and Mr. Debabrata Debnath accompanied with them as supervisor for the outreach programme.

In the Department of Instrumentation and USIC, Gauhati University, Guwahati. The students were divided into 5 groups. Each group attended the working of all the machine available in the department and Workshop. The faculty, Research Scholar and other members of the department demonstrated various facility such as XRD, XRF 3D Printing and Industrial Automation and Various works in the workshop.

At the end, The head of the department gave the certificate to those students who had attended the Industrial Automation.







Guwahati University Rd, Guwahati University, Jalukbari, Guwahati, Assam 781013, India

Latitude 26.15253702°

Local 01:15:02 PM GMT 07:45:02 AM Longitude 91.65875702°

Altitude 56 meters Friday, 17.11.2023



Guwahati University Rd, Guwahati University, Jalukbari, Guwahati, Assam 781013, India

Latitude 26.1525376° Local 01:15:14 PM

GMT 07:45:14 AM

Longitude 91.65876888°

Altitude 56 meters Friday, 17.11.2023

### SUCCESS STORY FROM DBT STAR COLLEGE DEPARTMENT OF CHEMISTRY DHING, NAGAON (ASSAM) PIN-782123

Dhing College, Dhing, Nagaon (Assam) has been selected as DBT Star College from the academic session 2023-24. After getting the Star college status including four departments (Physics, Chemistry, Botany & Zoology) the college arranges various programmes under the scheme. A number of activities as listed in the proposal are done by the participating departments.

#### Hands-on-training on Lab Equipment

The Chemistry department of the College organized a Hands-on-training on "Lab Equipment" dated 16<sup>th</sup> to 18<sup>th</sup> November, 2023. Approximately 50 participants attended the programme during three days session. The resource persons are Mr. Nabadeep Kalita, SRF, Department of Chemistry, Gauhati, Mr. Himajit Nath, Mr. Prasenjeet Kuri. The session appears to be very useful as the students are able to view some precious slides presented by the resource persons. They also come to know about primary process of Lab Technique. They also taught how to use UV -Visible Spectrophotometer, Digital PH meter, Flame Photo Meter & Digital conductivity meter. The sessions are very fruitful because the feedback was found from the side of the listeners.



















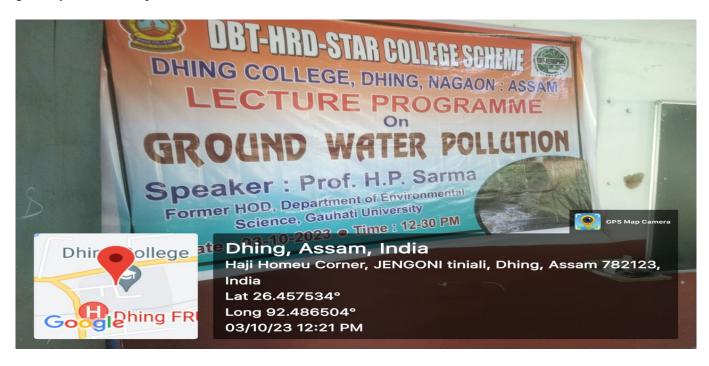






#### **Lecture Program-1**

The Chemistry department of the College organized a Lecture Program on "Ground Water Pollution". The speaker of the program was Prof. H.P. Sarma (Retd.) dept. of Environmental Science, Gauhati University. The program was very fruitful for the students and teachers because all are interested about the pollution of ground water, which is the source of the drinking water for mass people. The student asked different questions and queries the facts given by the resource person.











#### **Science Quiz Competition**

The Chemistry department of Dhing College organize a series of Science Quiz Competition under HRD-DBT-Star College Scheme. The subject matter of the quiz competition is about the structure of Atom, Fundamental sub atomic particle, Hydrocarbon and its derivatives etc. The program was co-ordinated by Mr. Binod Bora, Assoc. Prof, Dhing College. The program was very fruitful for the students and the teachers because all are interested about the Atomic Particle and their discoveries. The quiz master of the program was Mr. Dibyajyoti Baruah, Fellow (SFG Program) North-East Centre for Equity, Action on Integrated Development. A total of 7 groups were selected for the final competition. According to the feedback of the student the competition was very much fruitful for their course syllabi. They also thankful to DBT Star College Scheme for giving them such an opportunity for organizing such types of programs.













#### **Outreach Program**

The Chemistry Department of Dhing College organized a series of Outreach programme in its nearby educational institute. The department select five (5) schools namely Adarsha Vidyalaya, Batadrava, Sankardev Vidya Niketon, Dhing, Dhing K.B.H.S. School, Dhing Public High School and Dhing G.B.H.S. School. The faculty members of the department went to these educational institute and performed demonstration classes for the students. The different topic of general science syllabus was discussed in these classes. The feedback of the students are found very good.













#### **Demonstration of Practical By Visiting Faculty**

The Chemistry Department of Dhing College organized a Demonstration programme by visiting faculties of IIT, Guwahati on 11/11/2023. The Resource Person of the programme was Kishore Mohan Talukdar, Application Support Executive, CIF Department, IIT Guwahati. The Resource Person explained the basic principle of some instrument exists in the Chemistry Department of Dhing College. He also gave a live demonstration of a few instruments. The students asked different question and quarries the facts given by the resource person.



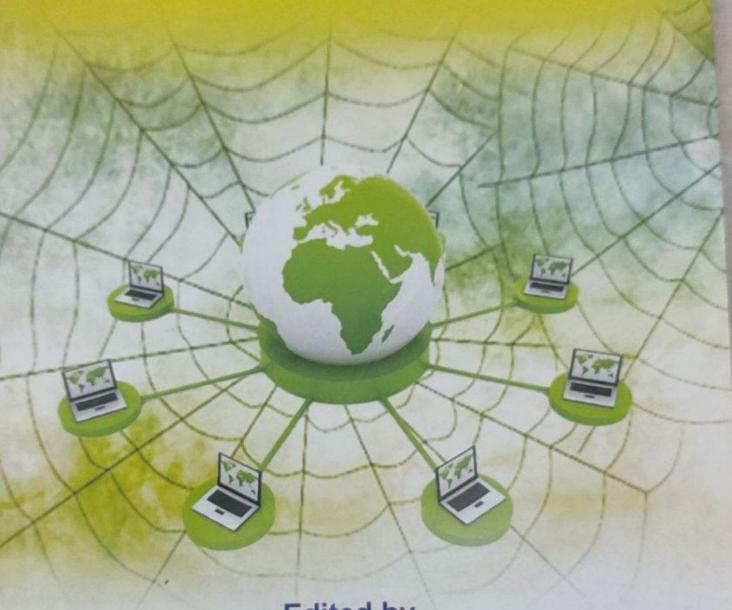








A compilation of webinars held at Dhing College during covid-19 period



Edited by Dr. Sanjeeb Kumar Nath



# KNOWLEDGE SPECTRUM

A compilation of webinars held at Dhing College during covid-19 period

> Edited by Dr. Sanjeeb Kumar Nath

KNOWLEDGE SPECTRUM: The Proceeding of webinars organized by different Departments of Dhing College during Covid-19 period.

Published by Dr. Biman Hazarika, Principal Dhing College, Nagaon, Assam. Saraswati DN Prakashan

### Editorial Board:

Dr. Biman Hazarika, Principal, Dhing College Sujit Kumar Sarma, Vice-Principal, Dhing College Anju Deka Bora, HOD, Botany, Dhing College Dr. Manoj Kumar Saikia, Botany, Dhing College Dr. Snigdha Mahanta, Assamese, Dhing College Ajit Sarma, English, Dhing College Sayeda Umme Tasnim, English, Dhing College

Editor: Dr. Sanjeeb Kumar Nath Co-ordinator, Webinar Committee, Dhing College

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## **Message from Principal's Desk**

The academic activities concentrate on helping the students and teachers of an institution to enhance excellent theoretical and practical knowledge base and we are committed to develop skills of our students and teachers to implement them all through the year without a break. Dhing College fraternity has been constantly reviewing academic set up to update and improves while making sure that student and teachers' gain thinking skills, analytical frameworks etc. In the 21st century, we rely on the internet for the latest up-to-date information, and instead of public talks we also rely on the methods of virtual learning and teaching. Now, Webinars becomes not only an excellent way to learn new things, but also require you to consider the subject from someone else's perspective and follow their line of logic. We are now accustomed with attending online webinars, an activity that many people enjoy under the Covid-19 situation.

During the Covid-19 Pandemic, when all the activities of teaching and learning came to an abrupt halt for a long spell of 6 months in the bygone year, we did not fail to continue our academic pursuit by using various virtual platforms. We have successfully organised a series of academic Webinars (International, National and state Level) and still continuing with that programme in association of different wings and organisations.

It's my immense pleasure to share here that all the Webinars were successfully hoisted based on different topics with the active participation of our esteemed faculties belonged to Arts, Science and Commerce streams. Participations of Students, invited Resource persons from reputed Academic institutions of India and abroad making all our webinar sessions highly successful and meaningful. I convey my heartiest thanks to all the esteemed convenors and coordinators, Ho.Ds of different departments and more particularly Dr. Sanjeev Kumar Nath, the chief Convenor of Webinar Forum for taking so much of pains in successfully organising the webinars which drew attention of all the participants, academics and scholars. I also offer my heartiest thanks to all the invited resource persons who joined in these webinars despite their busy schedule.

I hope, the publication of the Webinar proceeding which will showcase our ongoing academic activity will shed new lights on our mission of research activity based on our mission that we incorporated for disseminating education in our institution.

Sd/ [Dr. Biman Hazarika]
Principal
Dhing College

## Message from the Editorial Board

The appearance of COVID-19 pandemic by the end of 2019 and beginning of 2020 conferences and such events were cancelled targeting the social distance to limit the spread and decrease the danger of the newly emerging virus. The world of today witnessed the rise of the infamous, corona virus since the dawn of 2020. We the public locked in our homes, brands marketers have been busy finding new ways to generate insights and communicate with others after March 24, 2020. There must be an alternative for communication and continuing the learning especially in medicine hence the trend is directed to the webinars. So the need of the war was to move fast and formulate webinar strategies and get the benefit to keep connected to the places virtually that are no longer available in real.

The COVID-19 situation has made it impossible to conduct in-person meetings or presentations. As a result, the popularity of webinars increased considerably. Many favorite webinar software already existed in the market. Among them, Zoom has become the most preferred webinar hosting platform because of several user-friendly features. The word 'webinar' is composed of two compartments, 'web' and 'seminar'. A webinar is an event which is held on the internet and attended exclusively by an online audience. Audience or participants can follow webinars via smart-phones, tablets, PC, and laptop at anywhere they are existing. They can see and hear the speaker. Webinar allows various interactive opportunities, such as asking a question, Chatting, Poll, Survey and Tests. Webinars are readily available technology inexpensive and beneficial too that may be continued even after the COVID-19 pandemic time.

Conducting webinars is the safest option for the current scenario, but a considerable investment amount goes into hosting a seamless webinar. The investment is the time for preparations and the capital for buying/renting the equipment. However, it is also necessary to make the webinar engaging. Expert webinar hosts recommend including polls, Q&A sessions, and visual aids to make the presentation interesting. Finally, a webinar should be to the point and of reasonable time duration so that the attendees don't lose interest.

Webinar events should be modified to attract more audience and encourage them to engage to it and maintain their attention and concentration level up to the

end. Spacing between successive webinars is important for the audience not to get pored and keeping the webinars beneficial and interesting. Undoubtedly, webinars have turned out to be a savior with the social distancing measures in place. However, the importance of in-person meetings hasn't reduced for the majority of the professionals. Despite several options of webinar platforms, few of them were the webinar host's favorite. The primary motivation for shifting to webinars is the time and money saved by the participants and the hosts. Apart from hosting webinars, it is also essential to make them successful. Only then can the audience be retained for future webinars. Except for the necessary equipment, a webinar host needs to include some elements that allow interaction with the audience to keep them hooked. Until now, webinars have proved to be guite successful, but only time will tell whether its popularity remains the same or not after the social distancing restrictions are eased. With this aims and objectives the webinar series was organized under the aegis of different departments and Internal Quality Assurance Cell of Dhing College, were held from September 8 to October 30, 2020. The different Departments of Dhing College altogether organised 19 webinars from September 8 to October 30, 2020 in which eminent speakers from India and abroad deliberated on various issues. As many as 3,000 attendees participated in the webinars series. Also, recorded webinars are available on Zoom & YouTube channel.

The first webinar of Dhing College was held on the topic Job, Placement and Entrepreneurship' organized by Department of Botany in association with IQAC and Eco-Club, Dhing College. The webinar was anchored by Dr. Sanjeeb Kumar Nath, Co-ordinator of Webinar Committee and was inaugurated by the Dr. Biman Hazarika, Principal of Dhing College. Prof. M. R Sinha, Vice Chancellor, Netaji Subas University, Jamsedpur, Jharkhand and Dr. A. K. Shrivastava, HOD, Department of Botany & Microbiology, Govt. D.T PG College, Utai, Durg, Chhattisgarh took part as Chief Guest and resource persons respectively. Two International webinars were organized by the Department of Botany and Research Forum of Dhing College. The first International of Dhing College was organized by the Department of Botany in association with IQAC and Eco-Club, Dhing College on the topic 'Polar Warming impacts & implications for us'. Dr. Guy R

Tanner, Chairman, The Human Nature Network from UK and Rituraj Phukan, National Coordinator for Biodiversity, The Climate Reality Project India took part as resource persons. The second International Webinar of Dhing College was organized by the Research Forum on the topic 'The relevance of History in today's World: Teaching; Research and Career Opportunities'. Dr. Lopita Nath, Prof. & Dept. Chair. Dept. of History, The University of Incarnate Word, USA took part as resource person. Such series of webinars were organized on various topics by the Departments of Botany, Assamese, Mathematics, Commerce, English, Chemistry, Political Science, NCC, Zoology, Physics, Economics, History, Bengali and Research Forum of Dhing College where several professors, research scholars and students from different parts of the country took part. Two webinars were organized in association with Sipajhar College and Jorhat Engineering College. Moreover renowned Vice-Chancellors from India Prof. M. R Sinha, Vice Chancellor, Netaji Subas University, Jamsedpur, Jharkhand and Prof. Amalendu Chakraborty, Vice Chancellor, Rabindranath Tagore University, Hojai, Assam, India took part as resource persons.

I am thankful to all the authors for their contributions to the present volume. I am grateful to Dr. Biman Hazarika, Principal for his help and encouragement in different ways in organizing the webinar series a success. I am thankful to Sujit Kumar Sarma, Vice-Principal, Anju Deka Bora and Dr. Manoj Kumar Saikia for their inspiration and constant encouragement. I record my sincere thanks to all the Co-ordinators, Convenors, faculty and staff members of Dhing College for their active participation and help in bringing out this volume. I convey my gratitude to Kumar Kritartha Kausik and Homen Singh Raja for rendering technical support for organizing the webinars. Thanks are also due to my wife Mrs. Tannipana Pandit and my son Shubham Kumar Nath for their helping hand and support.

In view of the above it is believed that this book will benefit to educate scholar/researcher to exchange ideas, thoughts on different topics in virtual mode especially during the covid-19 pandemic.

Sd/ [ Dr. Sanjeeb Kumar Nath] [Editor]

#### 1. NATIONAL WEBINAR

Organised by Department of Botany in association with IQAC and Eco-Club, Dhing College

Day, Date & Time: 08-09-2020, Tuesday, 11 AM-01PM

PLATFORM: ZOOM and YOUTUBE LIVE

#### WEBINAR TITLE: JOB, PLACEMENT AND ENTREPRENEURSHIP

Chief Guest - 1. Prof. M. R Sinha, Vice Chancellor, Netaji Subas University, Jamsedpur, Jharkhand

RESOURCE PERSON - 2. Dr. A. K. Shrivastava, HOD, Department of Botany & Microbiology, Govt. D.T PG College, Utai, Durg, Chhattisgarh

CO-ORDINATOR and MODERATOR – Dr. Sanjeeb Kumar Nath

**Organizing Committee:** Anju Deka Bora (Associate Professor & HOD, Department of Botany, Dhing College) and Dr. Manoj Kumar Saikia (Associate Professor, Department of Botany, Dhing College)

**Introduction**: The Covid 19 pandemic and subsequent lockdown has necessitated need to know different aspects of Job, Placement and Entrepreneurship in the present scenario. To be precise, the pandemic almost certainly usher in broader effects on the above mentioned different aspects and the present webinar tried to throw light on the same.

#### **Objectives:**

To study the direct and indirect effects of the pandemic on Job, Placement and Entrepreneurship To reflect upon the role of the various organizations both government and non-governmental on it in the present circumstances.

To open up new scope and importance of Job, Placement and Entrepreneurship in the post Covid 19 period.

The webinar was formally inaugurated by the respected Dr. Biman Hazarika, Principal of Dhing College, who welcomed the Chief Guest, resource person and the participants present for an intense discussion of a burning problem of today and covid 19 pandemic. The chief Guest and resource person, Professor Manoj Ranjan Sinha and Dr. Awadhesh Kumar Shrivastava was introduced to the participants by Dr. Sanjeeb Kumar Nath, Associate Professor, Department of Botany and the co-ordinator of the webinar.

- ➤ Invited Speakers:
- 1. Professor Manoj Ranjan Sinha is serving as the Vice Chancellor of Netaji Shubas University, Jamsedpur, Jharkhand. (as **the Chief guest**)

Chief Guest, Professor Manoj Ranjan Sinha is serving as the Vice Chancellor of Netaji Shubas University, Jamsedpur, Jharkhand. Professor Manoj Ranjan Sinha a Gold Medalist in B.Sc (Botany Hons.) and MSc (Botany) from Ranchi University. He served as HOD, Department of

Botany, Jamsedpur Cooperative College and then he served as the Principal of Jamsedpur Cooperative College. He was the proctor and Head of Botany Dept. of Kolhan University, Jharkhand. Presently he is the Vice Chancellor of Netaji Shubas University, Jamsedpur, Jharkhand. He has many research papers in national and International Journals. He has many Phd scholars who has been awarded Ph.D.& still various scholars are working under his supreme guidance. He is a perfect teacher in true sense. His many students are in Indian Administrative and Bihar Administrative Services. Prof Sinha has extensive experience of education and public policy, the keenness of his mind, and the strong understanding of education as policy maker. Prof Sinha's contributions to the education are very much valued and needed.

2. Dr. Awadhesh Kumar Shrivastava, HOD Department of Botany and Microbiology, Govt. D.T. PG College, Utai, Durg, Chhattisgarh (as **the Resource Person**)

Dr. Awadhesh Kumar Shrivastava, obtained his B.Sc Hons -Botany from Rachi University, Rachi, Jharkhand. M.Sc. from Bhagalpur Univ. & Ph.D. from GGD Univ. Bilaspur Chattisgarh -He is currently HOD Department of Botany and Microbiology, Govt. D.T. PG College, Utai, Durg, Chhattisgarh It is so impossible to mention his every single accomplishment because they are a lot. His achievements have been recognized by many different awards including Recognition awardin 2019. However, today we are here to recognize Dr. Awadhesh Kumar Shrivastava's outstanding talents as a professor and mentor. He has a teaching experience of about 33 years in UG level and 14 years in PG Level. He also has 63 international and national level publications to his credit. His fields of interest are Research, sec metabolites PGPR & Algae. He has attended several important conferences & workshops at national/international level. He has completed 2 research project under UGC. Presently he is the PhD supervisor under Pandit Ravishankara Shukla University, Raipur, Chhatisgarh, 5 Ph.D. Scholars were awarded this award under his guidance. He has edited 3 books & editorial board member of various journals of national & international level. Those students lucky enough to take classes from Shrivastava have always been amazed by his ability to make even the most complex concepts understandable. He is widely sought after as a lecturer and is always willing to mentor students, even when they are not his own students.

#### **Outcome of the Webinar:**

Professor Manoj Ranjan Sinha pointed on the career progression. He emphasized on the causes of employment and unemployment India is facing today. He discussed in brief about the consequences and causes of employment especially in India. In the end he stressed on the long – run remedies on high rate of economic growth and rural industrialization.

Dr. Awadhesh Kumar Shrivastava explained about the Atma Nirbhar Bharat Abhiyaan and its need for empowering poor, labourers and migrants who have been adversely affected by Covid. He emphasized in his talk on various schemes and steps taken by the government of Chattisgarh and explained about the success story in terms of job, placement and entrepreneurship. He talked about the advantage of Chhattisgarh to development. Shrivastava in his speech gave a glimpse of

the rich resources of Assam and the prospect for development. At the end he threw light on new field open for entrepreneurship development.

The session ended with curious queries from the participant's end on various aspects of job and Entrepreneurship. The session was ended with the vote of thanks by Anju Deka Bora, HOD, Department of Botany. The feedback forms received from the participants made for careful observations and suggestions for future. E-certificates were subsequently sent to the participants.

You Tube Link of the Webinar: <a href="https://youtu.be/wEVgv6z5J7w">https://youtu.be/wEVgv6z5J7w</a>

#### 2.NATIONAL WEBINAR

Organised by Department of Assamese, Dhing College

Day, Date & TIME: 14-09-2020, Monday, 11 AM-01PM

PLATFORM: ZOOM and YOUTUBE LIVE

## WEBINAR TITLE: <u>LANGUAGE AND LANGUAGE EDUCATION IN NATIONAL</u> EDUCATION POLICY: 2020

Chief Guest - 1.Dr. Bibhas Chandra Das Purkayasta, Retd. Principal, Pandu College, Guwahati, Assam

RESOURCE PERSON - 2.Dr. Anupam Dutta, Assistant Professor, Department of English, Barbhag College

#### CO-ORDINATOR and MODERATOR - Dr. Snigdha Mahanta

**Organizing Committee:** Dr. Pankaj Bora (Associate Professor, Department of Assamese, Dhing College) Biman Kumar Doley (Associate Professor & HOD, Department of Assamese, Dhing College) Puranda Gogoi (Assistant Professor, Department of Assamese, Dhing College) and Anita Biswasarma (Assistant Professor, Department of Assamese, Dhing College)

#### **Objectives:**

- ❖ To discuss on the need and importance of language of National Education Policy 2020.
- The most important objective of the webinar is to.
- ❖ To advertise and expand all the languages through electronic media.
- ❖ To give equal importance to each and every language.
- ❖ To discuss and to increase the advertise and expand of the Assamese language based on National Education Policy 2020.

The webinar was formally inaugurated by the Principal of Dhing College, Dr. Biman Hazarika who welcomed the resource persons and the participants of the webinar. The resource person,

Dr. Bibhas Chandra Das Purkayasta, Retd. Principal, Pandu College and Dr. Anupam Dutta, Assistant Professor, Department of English, Barbhag College was introduced to the participants by Dr. Snigdha Mahanta, Associate Professor, Department of Assamese and the co-ordinator of the webinar.

#### ➤ Invited Speakers:

1.Dr. Anupam Dutta, Academic Secretary, ACTA, Asst. Prof., Dept. of Eng., Barbhag College. Joint Secretary, Assam Chapter, English Language Teachers' Association of India(ELTAI) Member, Academic Council, GU, Member, Coordination Committee, UGCBCS, GU, Completed Ph.D. from Assam University, 19 years of teaching experience at the UG level, 12 years of Research Experience, Completed two Minor Research Projects on ELT and Indian English Fiction funded by UGC, Presented papers in National/International conferences in India and abroad on diiferent areas of ELT, English Literature and Educational Issues, Participated in state level and national seminars and conferences as Resource persons, Published research papers/articles in national and international journals and edited volumes, Edited the ACTA Journal in 2017 and three issues of ACTA Bulletin in 2018, 2019 and 2020, Edited five books on a variety of subjects, Areas of interest include ELT Methodology, Indian Writing in English, Postcolonial Studies, Educational Policy and Practice, etc. (as **the Resource Person**)

2.Dr Bibhash Ch Das Purkayastha, Former Principal of Pandu College, Executive committee member of NCERT and Rajiv Gandhi University, Court member of Bodoland University,

#### **Outcome of the Webinar:**

University(as the Resource Person)

The session ended with curious queries from the participant's end on Language and Language Education in National Education Policy: 2020 and vote of thanks. The feedback forms received from the participants made for careful observations and suggestions for future. Ecertificates were subsequently sent to the participants in the next week.

Margadarshak, National Bharatiya Shikshan Mandal, Resource person of UGC-HRD Gauhati

You Tube Link of the Webinar: https://youtu.be/EKEguRnmUmw

#### 3.NATIONAL WEBINAR

Organised by Department of Botany, Dhing College & Department of Zoology, Sipajhar College in association with Eco-Club, Dhing College

Day, Date & TIME: 29-09-2020, Tuesday, 10 AM-12 Noon

PLATFORM: ZOOM and YOUTUBE LIVE

## WEBINAR TITLE: BIODIVERSITY LOSS: RESTORATION & CONSERVATION STRATEGIES

RESOURCE PERSON - 1.Prof. Bijoy Neog, Department of Life Sciences, Dibrugarh, Assam.

CO-ORDINATOR and MODERATOR – Dr. Sanjeeb Kumar Nath

Co-COORDINATOR- Kumar Kritartha Kaushik

**Organizing Committee:** Anju Deka Bora (Associate Professor & HOD, Department of Botany, Dhing College), Dr. Manoj Kumar Saikia (Associate Professor, Department of Botany, Dhing College), Dr. D. J. Saikia (HOD, Department of Zoology, Sipajhar College) and M. Mahanta (Department of Zoology, Sipajhar College)

**Introduction**: The Covid 19 pandemic and subsequent lockdown has renewed the polluted earth and necessitated need to know about the status of biodiversity in the present scenario. To be precise, the pandemic almost certainly usher in broader effects on the above mentioned different aspects and the present webinar tried to throw light on the same.

#### **Objectives:**

To study the direct and indirect effects of the pandemic on biodiversity loss

To reflect upon the role of the various organizations both government and non-governmental on it in the present status of biodiversity.

To open up new scope and importance of biodiversity loss restoration and conservation status in the post Covid 19 period.

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the Chief Guest and resource person, and the participants present for an evening of intense and thorough discussions on writing. The resource person, Prof. Bijoy Neog, Department of Life Sciences, Dibrugarh, Assam was introduced to the participants by Dr. Sanjeeb Kumar Nath, Associate Professor, Department of Botany and the Co-ordinator of the webinar.

#### ➤ Invited Speakers:

Prof. Bijoy Neog, Department of Life Sciences, Dibrugarh, Assam (as the Resource Person) Bijoy Neog has done his Master in Botany from Gauhati University and Ph.D. in Life Sciences from Dibrugarh University, Assam. A Post- Doc Fellow from Southwest University, Chongqing (P.R. China), Dr. Neog joined as the Assistant Professor in the Department of Life Sciences, Dibrugarh University in 1994. He has expertise in Cytogenetics & Plant Breeding. Besides he has also interests in Conservation Biology, Biochemistry and Molecular Biology. Dr. Neog is keen in doing research in indigenous & lesser known minor fruits of Northeast India and successfully completed several major research projects funded by various agencies such as UGC, DBT, ICMR, SERB, ASTEC etc.

Dr. Neog was awarded prestigious Chinese Government Scholarship to conduct his Post Doctoral research in Conservation Biology in Southwest University, Chongqing (P.R. China) where he developed a digital database of the Jinyun Mountain, Beibei (P.R. China). He has more than 55 research papers and Book chapters in his credits. He is also members of various national & International Scientific Societies. Presently Dr. Neog is a Professor in the Department of Life Sciences, Dibrugarh University, Assam.

#### **Outcome of the Webinar:**

The evaluation of the impact of coronavirus on biodiversity and our ability to protect it is cannot be assessed within a short period of time, but preliminary idea can be foreseen. At present, protected areas appear to be safe in many places and biodiversity is benefited from reduced human interference. However, this may not be true everywhere, particularly where threats are there. Research works has been disrupted, but time will determine the long-term consequences. The training and careers of young conservation scientists on the concern for biodiversity and its lasting effects of the pandemic will depend on our institutions. Prof Neog focused on the conservation that is the first and foremost a human tragedy which disrupts lives and is responsible for killing far too many people. He is of the opinion that the society's priorities to maintain human health and the containment of the pandemic, but we also need to be thinking ahead to the resumption of conservation practice and education. There is an opportunity to remind people of the links between healthy, resilient ecosystems and human well-being.

The session ended with curious queries from the participant's end various aspects of biodiversity and its conservation. The session was ended with the vote of thanks from Dr. D. J. Saikia, HOD, Department of Zoology, Sipajhar College. The feedback forms received from the participants and E-certificates were subsequently sent to them.

You Tube Link of the Webinar: <a href="https://youtu.be/kLUWAAT0xHc">https://youtu.be/kLUWAAT0xHc</a>

#### 4.NATIONAL WEBINAR

Organised by Department of Mathematics, Dhing College in association with IQAC , Dhing College  $\,$ 

Day, Date & TIME: 01-10-2020, Thursday, 11 AM-01PM

PLATFORM: ZOOM and YOUTUBE LIVE

#### WEBINAR TITLE: A BRIEF INTRODUCTION TO NUMBER THEORY

Keynote Speaker - Dr. Dibyajyoti Mahanta, Dean, KKHSOU, Guwahati

RESOURCE PERSON - **Dr. Anupam Saikia, Department of Mathematics, IIT, Guwahati.** CO-ORDINATOR and MODERATOR – Dombarudhar Kakati

**Organizing Committee:** Dipak Sarma (Associate Professor, Department of Mathematics, Dhing College) and Gitanjali Goswami (Associate Professor, Department of Mathematics, Dhing College).

**Introduction**: Number theory is a branch of pure Mathematicsdevoted to the study of the natural numbers and the integers. It is the study of the set of set of positive whole number which are

usually called the set of natural numbers. As it holds the foundational place in the discipline, number theory id also called "The Queen of Mathematics". The number theory helps to discover interesting relationships between different sorts of numbers and to prove that these are true. Number theory is partly experimental and partly theoretical. Experimental part leads to questions and suggests ways to answer them. The theoretical part tries to device an argument which gives a conclusive answer to the questions.

Here are the steps to follow:

- 1. Accumulate numerical data.
- 2. Examine the data and find the patterns and relationship.
- 3. Formulate conjectures that explain the patterns and relationships.
- 4. Test the conjectures by collecting additional data and check whether the new information fits or not.

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the Chief Guest and resource person, and the participants present for an evening of intense and thorough discussions on writing. The chief Guest and resource person, Professor Manoj Ranjan Sinha and Dr. Awadhesh Kumar Shrivastava was introduced to the participants by Dr. Sanjeeb Kumar Nath, Associate Professor, Department of Botany and the coordinator of the webinar.

➤ Invited Speakers:

## 1. **Dr. Dibyajyoti Mahanta, Dean, KKHSOU, Guwahati** (as **the Keynote Speaker**) SERVICE EXPERIENCE

Dean, Krishna Kanta Handiqui State Open University, Guwahati, Assam

Former HoD & Associate Professor, Dept. of Mathematics, Nowgong Girls' College

MEMBERSHIP IN DIFFERENT SOCIAL AND EDUCATIONAL BODIES

Expert Member, ICH (UNESCO Cell) of Sangeet Natak Academy, Ministry of Culture, India

Expert Member, High Power Committee, National Education Policy 2020, Govt of Assam

Founder & Former General Secretary of the Assam Academy of Mathematics, Nagaon Branch

Life member, Centre for Teacher Education (CTE), Assam Chapter

Member, Textbook and Syllabus preparation of SEBA and Asom Prakshan Bharati

Member, Assam Council on Educational Administration and Management (ACEAM), affiliated to Commonwealth Council on Educational Administration and Management (CCEAM)

Member Editorial Board, Journals: "Space & Culture, India"

Member Editorial Board, "Asian Journal of Advanced Basic Sciences"

Member, Peer Review Committee, Pragjyotika, Centre for Literary and Cultural Studies, Delhi RESEARCH EXPERIENCE

Principal Investigator in a project on Radio Mathematics in the Community Radio Station, Jnan Taranga, of KKHSOU under NCSTC of Department of Science and Technology, Govt. of India. PUBLICATIONS

Textbooks: Handbook for TET (ISBN: 978-81-922919-4-6); several textbooks on H.S. Mathematics, Class X & IX Gen. and Adv. mathematics (for AHSEC & SEBA); textbooks for

Degree Classes (for KKHSOU); teachers' handbooks for Class X, IX and lower primary (for SEBA); Bharati Ganit for I to VIII (for Asom Prakashan Bharati) and Mathematics for VI, VII and VIII (for SCERT).

Textbooks (Translated): NCERT Mathematics for Class X & IX (for SEBA); several textbooks on general and advanced mathematics for Class X & IX (for SEBA) Other Books: Traditional Measurement System for Vigyan Prasar; Padartha

Bijnanat Nobel Bota Bijoyee Bijnanir Chamu Parisay (Supported by NCSTC, New Delhi) and books on poems: Barashun aru Basana (ISBN: 978-81-923589-3- 2), Bhuinruwa Patharar Gan (ISBN:978-93-85310-25-6) and another book in press

Books edited: Model Papers for HSLC (Gen. & Adv. Math), Math for D. El. Ed. (KKHSOU)

Books reviewed: Books on Mathematics for 'State Institute for Open Schooling', under NIOS and some chapters of Advanced Mathematics book for Class X by SEBA

Journals Edited: Member of Editorial Board of International Journal 'Space and Culture, India' by ACCB publishing (England) & Prag Foundation (India); Several volumes of Ganit Bikash, Ganit Bichitra (Journals of AAM); Barta Pakhili (Guest editor, RNI no. ASS/2000/5943); School magazine KBIAN (Dhing KBHS School, 1978)

#### SEMINARS AND LECTURE PROGRAMMES

Presented various papers on Mathematics in National and International journals

Participated in various international and national seminars and workshops

Organized seminars and workshops on Mathematics and Science on teaching-learning for teachers and students and on other areas

Participated as Resource Person for various Institutions (Govt., private and social initiatives) on topics relating to teaching and on other social issues

Delivered lectures on various relevant issues on different platforms in Assam and outside

#### OTHER ACADEMIC AND SOCIO-CULTURAL ACTIVITIES

Judge and Speaker of several all-Assam and inter-college debate events

Quiz Master in several Quiz Competitions including general quiz, open quiz and cultural quiz across the state of Assam

#### **INTERESTS**

Radio and TV Programmes on Education, Environment and other social issues

Activities in acting (Drama, and Bhaona)

Student related academic and social activities; games for inspiring the students

Writing articles on various issues (including Mathematics) and poems in daily papers and journals

#### 2. Dr. Anupam Saikia, Department of Mathematics, IIT, Guwahati.

Anupam Saikia Born Assam, India Nationality Indian Education Cotton College St. Stephen's College Trinity College Notable work Arithmetic Number Theory

Anupam Saikia is an Indian mathematician and at present professor in the Department of Mathematics at IIT Guwahati, India. He is known for his work related to arithmetic number theory, in particular applications to Iwasawa Theory and p-adic measures. He has also published articles in mathematical cryptography.

Saikia qualified his school leaving examinations from Govt. Higher Secondary School, Golaghat, Assam, in 1989. Then, he did his pre-university studies at Cotton College, Guwahati until 1991 and joined St. Stephen's College, Delhi for his Bachelors in Mathematics. After his B.Sc. degree in 1994, he joined Trinity College, Cambridge and became a wrangler in 1996. He completed his Certificate for Advanced Study in Mathematics (Mathematical Tripos, Part III) at Trinity College in 1997 with distinction, and then pursued his PhD degree from the Department of Pure Mathematics and Mathematical Statistics, University of Cambridge, which he received in 2001 for a thesis titled Iwasawa Theory of Lubin-Tate Division Towers and p-Adic L-Functions under the supervision of John Coates.

Since his PhD, Saikia has held post doctoral positions at several institutes, including IHES, France and McGill University, Canada. Following a brief period of time at IIT, Bombay, Saikia has been a member of the faculty at IIT, Guwahati since 2005, becoming full professor in 2015. At various times, he has held several administrative positions in IIT, Guwahati as well.

Saikia is also a keen sportsperson and was captain of the Trinity College Badminton team in 1999-99, as well as member of its cricket team. He is also an enthusiastic chess and carom player. He lives in Guwahati with his wife and children.

#### Awards and Honours

Saikia has won several awards and scholarships during his career. He won the Ramanujan Scholarship to pursue his studies at Cambridge, given to one Indian student each year. He was awarded the Smith and Knight Prize in the annual mathematics essay competition for second year Ph.D. students at the University of Cambridge in 1999 and the Senior Rouseball Scholarship, awarded by Trinity College, Cambridge on the basis of postgraduate research work in 2000-2001.

#### **Professional Contributions**

Saikia has written several research papers so far related to Iwasawa Theory, p-adic measures, Cyclotomic fields and Euler Systems. He has so far guided 6 students under him for their Ph.D dissertation. He is also associated with giving several popular lectures for school and college students in different places of Assam as well as in other parts of the country. He has also edited two volumes of conference proceedings related to Wiles' Proof of the Iwasawa's Main Conjecture and Bloch-Kato Conjectures.

He is a member of the editorial boards of the Journal of the Ramanujan Mathematical Society and the Bulletin of the Mathematics Teachers' Association (India).

#### **Outcome of the Webinar:**

Sufficient numbers of students were presents in the webinar. They were very much interested in the funny facts of number theory. They demanded to hold such seminars in the Department in a regular interval.

You Tube Link of the Webinar: <a href="https://youtu.be/9-KbsKYmn94">https://youtu.be/9-KbsKYmn94</a>

#### **5.NATIONAL WEBINAR**

Organised by Department of Commerce, Dhing College in association with IQAC, Dhing College

Day, Date & TIME: 02-10-2020, Thursday, 11 AM-01PM

PLATFORM: ZOOM and YOUTUBE LIVE

## WEBINAR TITLE: ENTREPRENEURSHIP OPPORTUNITIES IN POST COVID PERIOD THROUGH ATMANIRBHAR BHARAT

RESOURCE PERSON - 1.Dr. Hariprasad Goenka, Associate Professor & HOD Commerce, Rabindranath Tagore University, Hojai

2.Mr Sailen Sarma, Associate Professor Department of Commerce, Nowgong College, Nagaon

3.Mr Dhanesh Sharma, Assistant Professor Department of Commerce, Khagorijaan College, Nagaon

4.Mr Kailash Powdel, Assistant Professor Department of Commerce, Khagorijaan College, Nagaon.

CO-ORDINATOR and MODERATOR – Bimal Paul

**Organizing Committee:** Bimal Paul (Assistant Professor & HOD, Department of Commerce, Dhing College), M Islam (Assistant Professor, Department of Commerce, Dhing College) Ashok Pareek (Assistant Professor, Department of Commerce, Dhing College)

Topic: Entrepreneurship Opportunities in Post Covid Period through Atmanirbhar Bharat

#### REASON FOR SELECTING THE TOPIC

In the present situation of global pandemic the world economy, along with Indian economy has taken a big blow. The pandemic situation has brought the economic activities at a jeopardy and halt. The pandemic has affected all the sectors of the society. So, to make the students familiar about the ongoing economical environment. Every problem also brings an opportunity with it. So the main objective of the webinar was to search out the prevailing entrepreneurship opportunities in the post covid period through Atmanirbhar Bharat.

#### **RESOURCE PERSONS**

#### 1. DR. HARIPRASAD GOENKA

Dr. H.P. Goenka is one of the senior most Professor of R.T. University. Earlier he was an Associate Professor in Hojai College, Commerce Department. At present, he is the HOD of the Commerce Department, Rabindranath Tagore University, Hojai.

#### 2. MR. SAILEN SARMA

Mr. Sailen Sarma is an Associate Professor of the prestigious & pioneer institution, Nowgong College, giving his service is the Commerce Department. He was also served at the post of HOD of Department of Commerce.

#### 3. MR. DHANESH SHARMA

Mr. Dhanesh Sharma is presently working in Khagorijaan College, Nagaon at the post of Assistant Professor. He is also pursuing M. Phil from Gauhati University.

#### 4. MR. KAILASH POWDEL

Mr. Kailash Powdel is presently working at the post of Assistant Professor in the Khagorijaan College, Nagaon. He is also pursuing M. Phil from Gauhati University.

**Outcome of the webinar:** Aatmanirbhar Bharat provides a truly watershed moment in our history to ignite the innovative entrepreneurial spirit of New India by focusing on strengthening the above pillars, which will ensure an unprecedented wave of long-deserved growth, prosperity and well-being that can serve the interests of the rest of the world as well. E-certificates were subsequently sent to the participants in the next week.

You Tube Link of the Webinar: <a href="https://youtu.be/MsnJN1W2Qr0">https://youtu.be/MsnJN1W2Qr0</a>

### **6.NATIONAL WEBINAR**

DEPARTMENT OF ENGLISH, DHING COLLEGE

TIME: 04.10.2020, 7.30 p.m.

PLATFORM: ZOOM and YOUTUBE LIVE

WEBINAR TITLE: TRACING A WRITER'S JOURNEY: IN CONVERSATION WITH

**JAHNAVI BARUA** 

RESOURCE PERSON - JAHNAVI BARUA

CONVENOR and MODERATOR - SYEDA UMME TASNIM

CO-ORDINATOR - MUSLEHUL ISLAM

CO-ORDINATOR - AJIT SARMA

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the resource person, and the participants present for an evening of

intense and thorough discussions on writing. The purpose of the webinar was to provide the participants a writer's perspective, of the nuances of writing, writing as a career, publishing in India and the challenges of writing. The resource person, Jahnavi Barua was introduced to the participants by Ajit Sarma, Assistant Professor, Department of English and the co-ordinator of the webinar.

Jahnavi Barua is an Indian writer based in Bangalore. *Next Door* (Penguin India, 2008), her debut collection of short stories was longlisted for the Frank O'Connor International Short Story Award. Her next, a novel called *Rebirth* (Penguin India, 2010), was shortlisted for the Man Asian Literary Prize and the Commonwealth Writers' Prize. The third, *Undertow*, a novel, was published by Penguin Random House India (Viking Books) in February 2020 and was longlisted for the JCB Prize for Literature 2020. Her short fiction has been widely anthologized and her work is part of several university syllabi. Barua studied medicine but is not a practising doctor. She was born in Guwahati and raised between Assam, Meghalaya, Delhi and Manchester.

Barua insisted on having a more interactive session, thereby incorporating a structural approach for her presentation which was strategically divided into sections. She talked about her journey and transition from medicine to writing, offering tips along the way for budding writers and approaches to the publishing industry in India. In the first section, Barua offered her insights on writing about a particular region from a diaspora point of view, of writing memories and specially the idea of home or the motherland as she is primarily based in Bengaluru. While writing a piece of fiction, she felt one does not necessarily present things in a conscious manner; it is an unconscious transition which does not aim at highlighting things in a particular manner. In fact, that is the beauty of good writing.

Barua's insight into the world of writing — the genres to be picked, the nuances of academic and non-academic writing, the practicality of writing as a career, the hardships and challenges of being a writer were fascinating and concrete. Her approach to the publishing world was both practical and systematic. It could be ascertained for a fact that writing cannot be done in isolation and it has to be a collaborative effort as it leaves the threshold of the author's domain. For example, proof-reading by confidantes before the manuscript is actually sent to the editor's office is a fairly common practice.

The session ended with curious queries from the participant's end ranging from Barua's personal take on writing as a career, professional writing, scope of translations, the sorry state of the vernacular mediums, the usage of casual language and tone in modern Indian fiction, the interrelationship between academia and writing. The session was ended with the vote of thanks from the moderator. The feedback forms received from the participants made for careful observations and suggestions for future endeavours. E-certificates were subsequently sent to the participants in the next week.

You Tube Link of the Webinar: <a href="https://youtu.be/VOm50cVo\_Ms">https://youtu.be/VOm50cVo\_Ms</a>

#### **7.NATIONAL WEBINAR**

Organised by Department of Botany, Dhing College & Arogya Yoga Kendra, Dhing in association with Eco-Club, Dhing College

Day, Date & TIME: 05-10-2020, Monday, 11 AM-01PM

PLATFORM: ZOOM and YOUTUBE LIVE

#### WEBINAR TITLE: Yoga-The Natural immunity booster

RESOURCE PERSON - **Dr.Vinod Kashyap**, National Joint General Secretary- International Naturopathy Organisation (INO)

CO-ORDINATOR and MODERATOR – Dr. Sanjeeb Kumar Nath

**Organizing Committee:** Anju Deka Bora (Associate Professor & HOD, Department of Botany, Dhing College), Dr. Manoj Kumar Saikia (Associate Professor, Department of Botany, Dhing College) and Rupjyoti Kar (Founder, Arogya Yoga Kendra)

**Introduction**: COVID-19 pandemic outbreak has brought the entire world on its knees. To maintain the optimum health conditions the body's natural defense system should be enhanced. We all know that prevention is better than cure. Experts from different parts of the world have suggested taking a holistic approach to general health focusing on immunity and resilience focusing on prevention than to cure. As Covid-19 scare grapples the whole country, people are getting concerned about their health. Regular practice of yoga has shown effective results. Different asanas boost immunity, build the body's strength, increase energy levels, bring down anxiety and stress, infuses positivity and freshness in the mind. While practicing good hygiene is a practice everyone must adopt, the one thing you can really do is to look for ways to boost your immunity naturally. It has been observed that certain yoga positions can help support, balance and boost the immune system. It can also help fight oxidative stress which poses a risk to the healthy cells. If done regularly, yoga reduces stress systemically in the body, which in turn, cuts down inflammation and degeneration. Yoga is one way that can naturally uplift our vitality without having to step out of the comfort of your home during this lockdown. The Covid 19 pandemic and subsequent lockdown has necessitated need to boost up immunity to cope up with the pandemic and the webinar tried to point out on the same.

#### **Objectives:**

The impact of traditional practices in boosting one's immunity with reference to fight against COVID

To perform "Yoga at Home" to de-stress the mind and strengthen the body.

Simple easily doable yogic exercises and some traditional immunity boosting practices for general wellbeing

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the resource person, and the participants present about the history of yoga and highlighted the need in the present context. The resource person Dr. Vinod Kashyap and Yoga instructor Rupa Kar were introduced to the participants by Dr. Sanjeeb Kumar Nath, Associate Professor, Department of Botany and the co-ordinator of the webinar.

#### Invited Speakers:

1. **DR.VINOD KASHYAP**, National Joint General Secretary- International Naturopathy Organisation (INO) (as the Resource Person). His qualification includes Diploma in Naturopathy from UTRAKHAND OPEN UNIVERSITY-2012, Graduation from Delhi University-1988, Diploma in Naturopathy form ALL INDIA NATURE CURE FEDERATION, NEW DELHI-in 1991

His present Social Responsibilities are Chairman-National Institute of Holistic Health (NIH), Chairman — Mahakal Shakti Mandal Trust, National Head: Indo-Vietnam Medical Board, Adjudicator: India Book & Asia Book of Records, General Secretary-Mahakali Adya Shakti Peeth , General Secretary-Delhi Institute of Naturopathy, National Joint General Secretary-International Naturopathy Organisation (INO), Zila Proud Karya Pramukh, Rasthtriya Swayam Sewak Sangh (RSS), Zila, Gandhi Nagar, Delhi Prant, Member: Syllabus subcommittee-National Institute of Open Schooling, Ministry of Education, Govt.of India.

His Unique contribution in this field includes Working in the field of Naturopathy since 1991, Organised National Conference on Naturopathy for 2500 delegates from all over India in 2001, Organised Doctors Management Training camp every year since 2003 to 2014 for 600-700 Naturopaths, Organised International Conference on Yoga-Naturopathy in Benagaluru (Karnataka) in the year of 2012 for 5000 delegates from 30 countries.

He served as Former Administrative officer-Balaji Nirogdham (a 150 bedded indoor Nature cure Hospital in Delhi), Former Chief Medical officer-Vivekanand Nature cure Hospital ,Delhi, Joint General Secretary -International Naturopathy Organisation (INO), Organised Holistic Health Mela in December 2015 at Vivekanand, Delhi where more than 10000 visitors presents every day.

He was awarded with Jeewan Gaurav Samman in Naturopathy at Solapur, Maharasthra, Prakritik Chikitsa Shiromani Samman by Delhi Institute of Naturopathy at New Delhi, Best Hospital Administrator Award in New Delhi and Best NGO for the propagation of Naturopathy by Lok Sabha Speaker in 2020.

2. **RUPA KAR** (as Yoga Instructor) A graduate with Zoology major from Dhing College is qualified in Diploma in Yoga Education, Qualified State Yoga Referee of Assam Yoga Association and Diploma in Herbal Medicinal Science

Her awards in the field of Yoga includes:

Bronze medal in District Yoga Championship Nagaon 2016

Silver medal in Namami Brahmaputra festival, Nagaon 2017

Four Gold medals in District Yoga Championship Nagaon 2017

One Gold, three Silver and one Bronze medal in State Yoga Sports Championship, Assam 2017

Sixth Position in National Yoga Sports Championship, Ghaziabad 2017

Sixth position in artistic pair category, 2nd Federation Cup, Karnataka 2017

Sixth position in artistic pair category, International Yoga Championshp, Dharmasthala, Karnataka

3 Gold Medal, 1 Silver Medal in Assam State Yoga Championship, 2018 6th position in Rhythmic Pair in National Yoga Championship, Patiala, 2018 Silver Medal in All India Yoga Confederation Cup, 2019, Odisha

#### **Outcome of the Webinar:**

#### **Highlights:**

Motivational speech by Dr. Vinod Kashyap on yoga as immunity booster.

Live sessions by trained Yoga instructor Rupa Kar

#### Benefits of Yoga:

It boost immunity

It enhances the lung capacity

It brings balance to your thoughts, activities and emotions

The natural food, healthy diet and an active lifestyle have a defining impact on boosting one's immunity.

The session ended with curious queries from the participant's end on different aspects of yoga in our life. The session was ended with the vote of thanks from the moderator. The feedback forms received from the participants and E-certificates were subsequently sent to the participants.

You Tube Link of the Webinar: <a href="https://youtu.be/viPb7FLF2k0">https://youtu.be/viPb7FLF2k0</a>

## **8.NATIONAL WEBINAR**

Organised by Department of Chemistry, Dhing College in association with IQAC, Dhing College

Day, Date & TIME: 12-10-2020, Monday, 11 AM-01PM

PLATFORM: ZOOM and YOUTUBE LIVE

**WEBINAR TITLE: Best Practices in Higher Education Institute** 

RESOURCE PERSON - **1.Prof. H. P. Sarma, Ex-Rector of Gauhati University** CO-ORDINATOR and MODERATOR – Dr. Mukut Moni Saikia

**Organizing Committee:** Gobin Chandra Bharali (Associate Professor & HOD, Department of Botany, Dhing College) and Dr. Manoj Kumar Saikia (Associate Professor, Department of Botany, Dhing College)

**Introduction**: The National Assessment and Accreditation Council (NAAC) in Criterion 7 on Institutional Values and Best Practices looks at the ethics, values, beliefs and the culture that makes up the ethos of the HEI. NAAC expects a report of two Best Practices that any HEI follows every year in its Annual Quality Assurance Report (AQAR) as well as in the Self-Study Report (SSR), while applying for accreditation. The Best Practices have a weightage of 30 out of the 100 for the criterion. Thus, it is important for any HEI to establish practices which reflect its vision, mission and become its unique distinctive feature. With this rationale, the webinar was organised.

**Prof. H. P. Sarma** emphasized that for any educational institute identifying the areas in academics and administration which needs strengthening is the key to Best Practices. Once identified, proper planning and implementation of processes and monitoring is essential to get the desired outcome. Any practice that is reproducible and implementable by majority of the departments and benefits a large number of stakeholders can become a Best Practice.

Mandatory criteria for selecting a Best Practice by an HEI:

- It should be sustainable
- Has the potential to become a benchmark for the practice
- Commendable value addition to the institution
- Suitability for the beneficiaries
- Is dynamic but compatible with the institute's context and culture
- Promotes the quality of a performance
- Implementable and assurance of commitment
- Makes processes simpler. Removes/reduces complexities and advantageous over previous practice
- It should enhance team spirit in the institute

Any Best Practice that gets established and benefits a large number of stakeholders needs to be promoted and disseminated via various platforms such as the college website, promotional brochures, college prospectus, presenting the practice at various relevant conferences/seminars, writing about the practice in the yearly AQAR or incorporating in the College SSR. The audience appreciated **Prof. H. P. Sarma** session. The webinar has led to rethinking and reworking our Best Practices.

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the resource person, and the participants present for an evening of intense and thorough discussions on Best Practices in Higher Education Institute. The resource

person, Professor H.P.Sarma was introduced to the participants by Dr. Mukut Moni Saikia, Associate Professor, Department of Chemistry and the co-ordinator of the webinar.

#### ➤ Invited Speakers:

1. Hari Prasad Sarma (Rector, Gauhati University) PROFESSOR MSc (Gauhati) PhD (Gauhati) MPhil (Gauhati) Environmental Chemistry Department of Environmental Science (as **the Resource Person**)

Professor H. P. Sarma has a rich experience of over 38 years in teaching and research and also in human resource management, technology transfer and social outreach activities. He started his career as a Lecturer in Chemistry at Mangaldai College after completion of his Masters in Chemistry in 1979. Later, he shifted to North Lakhimpur College at the same category in September, 1981. Finally, he joined Gauhati University as a Reader in the Department of Environmental Science in November, 1999 and was subsequently promoted to the rank of Professor in the same department in 2009. Hari Prasad Sarma's 34 research works with 748 citations and 7301 reads, including: Biosorption of lead (II) from water using heartwood charcoal of Areca ... During the last few years of his service, he has served the university and other communities in different capacities. Currently, he is serving as the Rector of Gauhati University since 2014.

#### **Outcome of the Webinar:**

The best practice benchmarking approach is an inductive approach to quality management in higher education institutions with a focus on practice and continuous improvement. The five-stage approach will help institutions of higher education to play their role effectively in quality sustenance and enhancement. The best as an ideal should be the vision of every higher education institution in the country. Stakeholders can contribute differently for the realization of this goal by the institutions. Policy makers in education have an important responsibility of creating an enabling policy framework for effective functioning of the institutions. The Management should ensure proper infrastructure and effective governance systems. Teachers have a critical role in building competencies of learners through best pedagogic practices. Finally, students, for whom the whole system is designed, should desire and demand the best. Then everything else will follow The session was ended with the vote of thanks from the moderator. The feedback forms received from the participants made for careful observations and suggestions. E-certificates were subsequently sent to the participants.

You Tube Link of the Webinar: <a href="https://youtu.be/RZNq\_k6BA2k">https://youtu.be/RZNq\_k6BA2k</a>

#### 9.NATIONAL WEBINAR

Title of the Webinar: Issues and Challenges of Governance in Pandemic Period

**Date and Time**: 12-10-2020, 1.30 pm onwards.

Convenors: Dr. Mofidul Islam (Assistant Professor, Department of Political Science, Dhing

College) and

Ms. Kangkana Sharma (Assistant Professor, Department of Political Science, Dhing College)

**Organizing Committee:** Dr. Lakhinanda Bordoloi ((Assistant Professor, Department of Political Science, Dhing College) and Mr. Ranjit Bordoloi (HOD and Assistant Professor, Department of Political Science, Dhing College)

**Introduction**: The Covid 19 pandemic has necessitated a re-thinking on the ideas of democratic politics and governance. To be precise, the pandemic almost certainly usher in broader effects on governance and the present webinar tried to throw light on the same.

#### **Objectives:**

- To study the first-order political effects of the pandemic and governmental responses to it
- ❖ To reflect upon the role of the various organs of state and other institutions.
- ➤ Invited Speakers:
- 1. Prof. Jayanta Krishna Sarmah (Gauhati University, Guwahati) (as **the key-note speaker**)

Dr. Jayanta Krishna Sarmah is currently Professor in Political Science at Gauhati University, Guwahati, Assam, India. A Rotary Peace Fellow in the Rotary International Centre for Peace and Conflict Studies at Chulalongkorn University, Bangkok, Thailand (2012) and UGC-Raman Postdoctoral fellow in the University of Texas at Austin, USA (2014-15), Sarmah has published research papers in national and international journals of repute. He also authored a number of books that include Welfare Administration in Assam (2012) and The Autonomy Paradox: Interrogation of Autonomy Movement and Autonomous Councils in Assam (2014) and also edited a few journals. He has been undertaking different research projects and the policy recommendations are well appreciated. An eminent poet, columnist and a popular speaker Professor Sarmah delivered lectures and presented papers in National and International Conferences including International Political Science Association Conference, Madrid, Spain (2012), International Africa Conference UT Austin, TX, USA (2015), Midwest Public Affairs Conference, University of Wisconsin, Milwaukee, USA (2015), World Conference of Association for Applied and Clinical Sociology, Colorado, USA (2016), Rotary International Peace Assembly and Presidential Peace Conference, Atlanta, USA (2017), Visiting fellow address at Huston-Tillotson University, TX, USA (2017) among others.

2. Dr. Anushka Singh (Assistant Professor, School of Law, Governance and Citizenship, Ambedkar University, Delhi) (as **the Resource Person**)

Dr. Anushka Singh is an Assistant Professor at the School of Law, Governance and Citizenship, Ambedkar University Delhi. By training a political scientist, she graduated from Miranda House and did her Masters from Lady Shri Ram College (LSR), University of Delhi. Her M. Phil dissertation is titled 'Constitutionalism, Democracy and Sedition in India'. She was awarded a PhD degree in 2016 for her thesis 'Sedition and Democracy, a Comparative Study of Liberal Democracies'. Before joining AUD, she taught Political Science at Gargi College, University of Delhi. She has previously also taught at LSR and Department of Political Science, University of Delhi. Her areas of interest include nature of state, constitutionalism, law and politics, peoples' movements, democratic rights. She was awarded the Visiting fellowship for doctoral research at Tagore Centre for Global thought, King's College, University of London, England in 2014. She was also awarded the ICSSR Doctoral fellowship in 2015 and ICSSR Doctoral Fellowship in 2014. She is the author of 'Sedition in Liberal Democracies' published by OUP in 2018. She has published in both English and Hindi in journals including *Economic and Political Weekly*, *Social Change*, *Studies in Indian Politics*, *Pratiman*, etc. and has presented at conferences both national and international.

#### **Outcome of the Webinar:**

Prof. Jayanta Krishna Sarma emphasized on the idea of effective communication as an important pillar of governance in the present pandemic period. He took into account the Whole of Society Approach as to deal with the crisis by engaging individual, civil society and private sectors. Many relevant questions were asked by the participants regarding impact of lockdown on marginalized people; role of media and civil society etc.

Dr. Anushka Singh threw light on the unprecedented importance given to executive led governance during the present pandemic period. This system avoided interface with parliament and no accountability question was asked to executive. She also highlighted the silent behavior of judiciary in this context as it has not been able to keep the executive in check. She also dealt in details as to how fundamental rights of people (infringement of privacy) are at stake, due to apps like Aarogya Setu. Certain thought provoking questions were asked by the participants. (Do you suggest of any economic reforms?, Is it healthy management of crisis?)

You Tube Link of the Webinar: <a href="https://youtu.be/vLxgesbgoAs">https://youtu.be/vLxgesbgoAs</a>

### **10.NATIONAL WEBINAR**

Title of the Webinar: New Education Policy 2020 and Higher Education in India

Organised by: National Cadet Corps (NCC), Dhing College Unit.

The National Webinar on topic New Education Policy 2020 and Higher Education in India was organised by Dhing College NCC Unit on 14<sup>th</sup> October 2020 at 11 am.

Basically this webinar is the outcome of the appeal made by the honourable Defence Minister and Education Minister of India for giving wide publicity of new education policy through National Cadet Corps, the largest youth organization of the country. So in this webinar our target group is mainly students' community more particularly the NCC Cadets of our country.

#### **Inauguration**:

This webinar was formally inaugurated by our principal Dr. Biman Hazarika.

#### **Key Note Speaker:**

Col. Ajay Prabhakar, Commanding Officer 8 Assam Bn NCC, Nagaon was invited as key note speaker for this webinar. Col. Ajay Prabhakar joined 8 Assam Bn NCC, Nagaon as commanding officer in the year 2018. As a commanding officer he is looking after NCC activities in 7 (Seven) districts of Assam. Before joining here in Assam, Col. Prabhakar commanded Armoured Regiment (Tank Regiment) and held various Instructional and Staff appointments in Jammu and Kashmir (J&K) and other active counter insurgency operational areas.

#### **Resource Person:**

We have invited Lt. Palvinder Singh, an Associate NCC Officer, 1 AP Battalion NCC, Itanagar as Resource person for this webinar. Lt. Palvinder has been working as Lecturer in Rajib Gandhi Govt. Poly technique Institute, Itanagar. Apart from teaching, he is very much active in NCC activities.

As recognition of his services, he received the Best ANO state award from honourable Governor of Arunachal Pradesh.

Lt. Palvinder also received Governor's appreciation in 2019 NCC Day function held at Rajbhavan in Shillong.

In the year 2019, he was the part of Republic Day Contingent of NER and he won award from the Governor of Assam.

He also received DG NCC Commendation card and appreciation medal.

# **Participants:**

The number of participants who have registered for this webinar was **344.** Out of these **157** participants submitted the feedback form designed for the webinar and E-certificate was given to all participants who had submitted the feedback form. Apart from Assam, this webinar was attended by many participants including both Cadts and NCC Officers from Rajasthan, Madhya Pradesh, Tamil Nadu, Maharashtra, Uttar Pradesh, Arunachal Pradesh etc.

**Coordinator:** This webinar was coordinated by Maj. Dr. Mriganka Saikia, Associate NCC Officer, Dhing College NCC unit as well as Associate Professor, Department of Economics, Dhing College

You Tube Link of the Webinar: https://youtu.be/RZNq\_k6BA2k

# **11.NATIONAL WEBINAR**

Department of Zoology & Department of Physics, Dhing College in association with IQAC, Dhing College

Day, Date & TIME: 15-10-2020, Thursday, 10.00 AM -11 AM

PLATFORM: ZOOM and YOUTUBE LIVE

**WEBINAR TITLE: Sensor and Instrumentation** 

RESOURCE PERSON - 1.Dr. Utpal Sharma, Professor & Head, Department of Instrumentation & USIC, Gauhati University.

CO-ORDINATOR and MODERATOR – Dr. Luna Phukan and Debabrata Debnath

**Organizing Committee:** Dr. Purnima Das Bora (Associate Professor, Department of Zoology, Dhing College), Dr. Ujjayanta Das (Associate Professor, Department of Zoology, Dhing College), Pradip Goswami (Associate Professor, Department of Physics, Dhing College), Dr. Nandan Kumar Barthakur (Associate Professor, Department of Physics, Dhing College) and Rabindra Sarma Baruah (Associate Professor, Department of Physics, Dhing College).

#### The basic objectives:

# The basic objective of any Sensor and instrumentation system generally falls into one of the following categories: 1 Information gathering. 2 Diagnostic 3 Evaluations 4 Monitoring 5 Controls.

#The purposes of measurement can be categorized as measurement being in the service of quality, monitoring, safety, making something fit (design, assembly), and problem solving. We should note that measurement sometimes serves multiple purposes.

#Measurement is the process of determining the amount, degree or capacity by comparison with the accepted standards of the system units being used. Instrumentation is a technology of measurement which serves sciences, engineering, medicine and etc. Instrument is a device for determining the value or magnitude of a quantity or variable.

# A sensor is a device that measures physical input from its environment and converts it into data that can be interpreted by either a human or a machine. Most sensors are electronic (the data is converted into electronic data), but some are more simple, such as a glass thermometer, which presents visual data.

#Sensors can improve the world through diagnostics in medical applications; improved performance of energy sources like fuel cells and batteries and solar power; improved health and safety and security for people; sensors for exploring space and the known university; and improved environmental monitoring.

# A sensor is a device that measures physical input from its environment and converts it into data that can be interpreted by either a human or a machine. Most sensors are electronic (the data is converted into electronic data), but some are more simple, such as a glass thermometer, which presents visual data.

#Sensors can improve the world through diagnostics in medical applications; improved performance of energy sources like fuel cells and batteries and solar power; improved health and safety and security for people; sensors for exploring space and the known university; and improved environmental monitoring.

- #. Many applications over a wide range of industries use sensors, detectors, and transducers of many kinds to test, measure, and control various processes and machine functions.
- # Some are designed to sense physical properties such as temperature, pressure, or radiation, while others can detect motion or proximity. They operate in a variety of manners depending on the application and may include electromagnetic fields, or optics, among others.

#### **OUTCOMES**

- 1. Having an ability to apply mathematics and science in engineering applications
- 2. Having adaptive thinking and adaptability in relation to environmental context and sustainable development
- 3. Having problem solving ability- to assess social issues (societal, health, safety, legal and cultural) and engineering problems
- 4. Having a clear understanding of professional and ethical responsibility
- 5. Having Sense-Making Skills of creating unique insights in what is being seen or observed (Higher level thinking skills which cannot be codified)
- 6. Having design thinking capability
- 7. Having computational thinking (Ability to translate vast data in to abstract concepts and to understand database reasoning), critical thinking, innovative skills and a good digital footprint.
- 8. Helps to analyze advanced engineering problems in the fields of Sensors, data acquisition and controls, to solve multi-disciplinary challenges in industry and society.
- 9. To exhibit independent, and collaborative research with strategic planning, while demonstrating the professional and ethical responsibilities of the engineering profession.
- 10.Have an idea that Sensors are central to industrial applications being used for process control, monitoring, and safety. Sensors are also central to medicine being used for diagnostics, monitoring, critical care, and public health
- 11. Having an ability to design and conduct experiments, as well as to analyses and interpret data, and synthesis of information and having an ability to use techniques, skills, resources and modern Engineering and IT tools necessary for engineering practice.

You Tube Link of the Webinar: https://youtu.be/rOp4gOMN64k

# 12.NATIONAL WEBINAR

Department of Zoology, Dhing College in association with IQAC, Dhing College

Day, Date & TIME: 17-10-2020, Saturday, 11.00 AM -12 Noon

PLATFORM: ZOOM and YOUTUBE LIVE

#### WEBINAR TITLE: YOGA FOR PHYSICAL HEALTH

RESOURCE PERSON - Srimati Moon Das is a well-experienced Yog-Adhyapak.

CO-ORDINATOR and MODERATOR – Dr. Luna Phukan

**Organizing Committee:** Dr. Purnima Das Bora (Associate Professor, Department of Zoology, Dhing College), Dr. Ujjayanta Das (Associate Professor, Department of Zoology, Dhing College),

The world is evolving. We, human beings have devised methods to make our daily ailments less arduous. We have ascended into the 21<sup>st</sup> Century and advancements in technology is certainly an implication of it. Yet, the former doesn't feel as gallant as one would think. After all, even though we are smart beings we are lazy and we often fall victim to lethargy. We have become fully dependent on our inventions. Especially during "The Lockdown", we have been slaughtered by lethargy and dependence. This eventually destroyed our mental and physical health.

In order to reduce our mental and physical hassle, the best thing to opt for is Yoga. The conceptual background of yoga has its origins in ancient Indian philosophy. There are numerous modern schools or types of yoga (i.e., Iyengar, Viniyoga, Sivananda, etc.), each having its own distinct emphasis regarding the relative content of physical postures and exercises (asanas), breathing techniques (pranayama), deep relaxation, and meditation practices that cultivate awareness and ultimately more profound states of consciousness. The application of yoga as a therapeutic intervention, which began early in the twentieth century, takes advantage of the various psychophysiological benefits of the component practices. The physical exercises (asanas) may increase patient's physical flexibility, coordination, and strength, while the breathing practices and meditation may calm and focus the mind to develop greater awareness and diminish anxiety, and thus result in higher quality of life. Other beneficial effects might involve a reduction of distress, blood pressure, and improvements in resilience, mood, and metabolic regulation.

Thereby, we: The Dept. of Zoology organized this National Webinar entitled "Yoga for Physical Health"; in order to make our students and fellow colleagues and the general public independent of mental and physical stress.

We were veryblessed to have "Srimati Moon Das", as our Honourable Resource person.

Srimati Moon Das is a well-experienced Yog-Adhyapak. She embarked on her journey to build a clean and disease free society having decent mentality and moral. She has qualified 4 major courses: "1 year C.yd. course", "1 year D.yd course", "1year yog Probudh", "1 year yog Adhyapak"; all from Yog Bidya Gurukul, Nasik, Maharashtra. She is currently engaged in her Ph.D on the topic "Yogic Therapy in lieu of Invasive Treatments of various diseases". She has won many awards. She obtained "3rd position in The 29th National yoga Championship held on 2004 in Chennai" and "1st position in All Assam Yoga Championship held on 2006" to name a few. She was the recipient of the prestigious accolade "Yoga Samragyi of Assam" in 2014. She was "The Lady Coach of Assam yoga team in 2002 National School Game". She has been a Yoga Teacher for about 21 years and is still continuing. She has conducted various (free and paid) yoga camps all across Assam and as well as in other states. She currently teaches Yoga in various schools and colleges spread all over Nagaon.

Our Respected Principal sir, Dr. Biman Hazarika inaugurated this webinar and he has put forth very virtuous points regarding the importance of yoga in daily life.

Dr. Purnima Das Bora; Associate Professor, Dept. of Zoology introduced the Resource Person The session was started by 3 "Omkaars" and recitation of the "Patanjali Vandhana" and then some asanas done in "Sleeping posture", "Sitting posture" and "Standing posture". Some of the noteworthy asanas are: "Surya Namaskar", "Bhujangasan", "Jnaushreeasan", "Ustrasan", "Ardh-Maschyandrasan" and "Pranayam", which includes "Trisbrashasan", "Kapalvatti", "Anulum-Vilom" and "Brahmari". The session was the concluded with the recitation of "Patanjali Vandhana" and "Omkarr".

Then there was interaction between resource person and audience.

Lastly, Dr. Purnima Das Bora; Associate Professor, Dept. of Zoology offered the vote-of-thanks to all.

You Tube Link of the Webinar: https://youtu.be/zzrEHaDYre8

# 13.NATIONAL WEBINAR

Department of Zoology, Dhing College in association with IQAC, Dhing College

Day, Date & TIME: 20-10-2020, Tuesday, 11.00 AM -12 Noon

PLATFORM: ZOOM and YOUTUBE LIVE

# WEBINAR TITLE: Applications of Bioinformatics: A case study on sequence analysis, phylogeny, protein modelling of Novel Corona Virus

RESOURCE PERSON - 1.Dr. Chittaranjan Baruah, Assistant Professor, Darrang College. CO-ORDINATOR and MODERATOR – Dr. Luna Phukan

**Organizing Committee:** Dr. Purnima Das Bora (Associate Professor, Department of Zoology, Dhing College), Dr. Ujjayanta Das (Associate Professor, Department of Zoology, Dhing College),

Applications of Bioinformatics: A case study on sequence analysis, phylogeny, protein modelling of Novel Corona Virus.

Bioinformatics is an interdisciplinary field that develops methods and software tools for understanding biological data, in particular when the data sets are large and complex. As an interdisciplinary field of science, bioinformatics combines biology, computer science, information engineering, mathematics and statistics to analyze and interpret the biological data. Bioinformatics has been used for in silicon analyses of biological queries using mathematical and statistical techniques.

Bioinformatics has become an important part of many areas of biology. In experimental molecular biology, bioinformatics techniques such as image and signal processing allow extraction of useful results from large amounts of raw data. In the field of genetics, it aids in sequencing and annotating genomes and their observed mutations. It plays a role in the text mining of biological literature and the development of biological and gene ontologies to organize and query biological data. It also plays a role in the analysis of gene and protein expression and regulation. Bioinformatics tools aid in comparing, analyzing and interpreting of genetic and genomic data and more generally in the understanding of evolutionary aspects of molecular biology. At a more integrative level, it helps analyze and catalogue the biological pathways and networks that are an important part of systems biology. In structural biology, it aids in the simulation and modeling of DNA, RNA, proteins as well as bio molecular interactions. To study how normal cellular activities are altered in different disease states, the biological data must be combined to form a comprehensive picture of these activities. Therefore, the field of bioinformatics has evolved such that the most pressing task now involves the analysis and interpretation of various types of data. This includes nucleotide and amino acid sequences, protein domains, and protein structures. The actual process of analyzing and interpreting data is referred to as computational biology. Important sub-disciplines within bioinformatics and computational biology include:

In present scenario the primary goal of bioinformatics is to increase the understanding of biological processes. What sets it apart from other approaches, however, is its focus on developing and applying computationally intensive techniques to achieve this goal. Examples include: pattern recognition, data mining, machine learning algorithms, and visualization. Major

research efforts in the field include sequence alignment, gene finding, genome assembly, drug design, drug discovery, protein structure alignment, protein structure prediction, prediction of gene expression and protein—protein interactions, genome-wide association studies, the modeling of evolution and cell division/mitosis.

The unprecedented weight Bioinformatics carries in today's world of science have encouraged us; The Dept. of Zoology to organize this National Webinar entitled"Applications of bioinformatics: A case study on sequence analysis, phylogeny, protein modelling of Novel Corona Virus."We believe that our students and the general public will be amused and interested by the wonders the field of Bioinformatics carries within itself.

The COVID-19 disease outbreak caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), formerlynamed "2019 novel coronavirus" (2019-nCoV), is spreading at a high rate throughout China and beyond. As of present time more than 3billion people are affected all over world2020 more than 12 lacs and 66 thousand deaths.

While the infection risk has become high at the global level, and the disease is rapidly spreading, no effective therapy exists for COVID-2019. Furthermore, no vaccine is likely to become available within 12 - 18 months2andnovel drug discovery is known to take several years. Thus, drug repurposing appears as the best strategy to yield efficient therapiesagainst COVID-2019 rapidly.

Our prestigious resource person analyzes genome sequencing and drug designing on novel corona virus.

It gives us great pleasure to introduce such a talented and assiduous resource person: who is very proficient in his field and very gifted academician: Dr. Chittaranjan Baruah

#### DR. CHITTARANJAN BARUAH

M.Sc., Ph.D. in Zoology, P.G. Diploma in Bioinformatics

Assistant Professor (Sr. Grade) in Post Graduate Department of Zoology, Darrang College, Tezpur, Assam, India

Founder & Editor, Asian Journal of Conservation Biology (Scopus indexed)

Editor (Science Section), Northeast Journal of Contemporary Research

Editorial Board member of the "Indonesian Journal of Applied Environmental Studies (InJAST)" published by Pakuan University, Indonesia.

Associate Editor, International Journal of Computational Biology

Advisory Board Member, International Journal of Zoology Research

Advisory Board Member, Journal of Fisheries & Aquaculture

Member, International Union for Conservation of Nature (IUCN)

Member, IUCN/SSC Tortoise and Freshwater Turtle Specialist Group

Reviewer: Gene Reports (Elsevier), JMIR 5 other international journals

E-mail: chittaranjan\_21@yahoo.co.in

Ph.D thesis title: In silicomolecular characterization of Pangshura genus with reference to phylogeography of Pangshurasylhetensis(Jerdon, 1870)

University: Department of Zoology, Gauhati University (2011)

Details of employment (past & present).

- UGC RFSMS Fellow for one and half years (January 2008-September 2009)
- Asian Scholar, Wetlands institute, New Jersey, USA for six months (April- September, 2010)
- Research Associate at Bioinformatics Centre, Gauhati University (during 09.1.2010 to 08.05.2012).
- Assistant Professor in Zoology in Darrang College, Tezpur, Assam, India (Since 09.05.2012- till date)

Professional recognition, awards, fellowships received:

- Conservation Leadership Programme (Future conservationist) award winner-2010
- Asian Scholar, Asian Scholarship for in-situ Chelonian conservation, USA (April-August, 2010)
- Rufford Small Grants Foundation, U.K support for in-situ turtle conservation
- British Chelonian Group seed grant award for field equipments
- Turtle Survival Alliance, USA seed grant for tortoise conservation in Manipur
- TSA-Travel grant received to attend international conservation symposium at Florida,
   USA
- UGC-Research Fellowship in Science for Meritorious Students (RFSMS) during January 2008-September 2009.

Details of professional training and research experience

- Conservation Leadership training in Canada (16-29 June, 2010).
- Training on cloning, PCR, gene expression and protein purification at Department of Biophysics, AIIMS, New Delhi (1st March-7th April, 2007).
- Trained in "DST, Govt. of India's first SERC School in Herpetology (North Orissa University during the period of December,07-January,08)"
- Trained in the IUCN Turtle Survival Alliance/Madras Crocodile Bank Trust Chelonian conservation & Field Research training in Uttar Pradesh, India (During July 31 to August 15, 2008).
- UGC-SAP Training on GIS & its applications (September 26-September 28, 2008).
- DST Workshop on North East Biodiversity initiatives (October,09)
- Attended the DBT- Workshop on capacity building in effective management of Intellectual Property Rights in Biotechnology (October 16 & 17, 2014)
- Attended Refresher Course in "Life Sciences" at University of Mysore (2016)

PROJECTS COMPLETED: 05 nos., Funded by international funding agencies (Rufford, TSA, CLP, MBZ species conservation)

RESEARCH PAPERS: International: 25; National: 10 (Total= 35 nos.)

Ph.DGuideship: School of Biological Sciences, University of Science & Technology, 9th Mile, Meghalaya (Since December 2013).

## JOURNAL EDITOR: Editorial Board member of following journals-

- Founder & Editor, Asian Journal of Conservation Biology (www.ajcb.in)
- Avisory Board Member, International Journal of Zoology Research
- Editor, Northeast Journal of Contemporary Research (NeJCR) (ISSN 1349-3089
- Associate Editor, International Journal of Computational Biology
- Advisory Board Member, Journal of Fisheries & Aquaculture

#### **BOOKS AUTHORED: 1 no**

Turtle Conservation in Northeast India: Community Awareness and Capacity Building (2020) LAP Lambert Academic Publishing, Germany [ISBN: 978-620-2-51202-2]

BOOKS CHAPTER: 5 nos.

#### SEMINARS/WORKSHOPS/CONFERENCES ATTENDED

Attended more than thirty international and national seminars, workshops and conferences-

At International level: Participated in the, Turtle conservation and Research advanced training in USA for six months, Conservation Leadership Programme Award Winner's training in Calgary, Canada and the 24th International Congress for Conservation Biology, University of Alberta, Canada; a sea turtle release by the Georgia Sea Turtle Center, Jekyll Island; turtle trapping with the Turtle Conservation Project in Massachusetts; the Wetlands Institute display at the New York Turtle and Tortoise Society's Annual Turtle Show; a visit with Peter Pritchard at the Chelonian Research Institute in Oviedo, Florida; and the Turtle Survival Alliance Eight Annual Symposium in Orlando, Florida USA.

Foreign Visit: USA and Canada

Linkage:MOU signed
Title of the linkage

Name of the partnering institution/industry/research lab with contact

details Year of commencement

Duration (From-To)

Nature of linkage

1st International Conference on Biodiversity Crisis 2014 Center for Environmental Studies, State University of Jakarta, Indonesia

2014 May-September,2014 MoU for publishing conference papers at Asian Journal of Conservation Biology (ISSN 2278-7666).

#### WOKED AS RESOURCE PERSON:

- Sl no. Title of Lecture/Academic Session Title of Conference/ Seminar etc. Organized by Whether international/ national
- Basics of Sequence Analysis, Introduction to BLASTp, ClustalW Short-term Training on bioinformatics- In silico Characterization of Proteins from Sequence and Molecular Modeling Approaches, 7th -9th November 2012 BIF- AAU Khanapara

  National
- Application of Bioinformatics in protein sequence analysis Training on "Application of Bioinformatics in teaching and research, 25th February-4th March 2013 BIF, Gauhati University National
- Bioinformatics Training programme Bioinformatics training for Biotechnology and Biochemistry students, 6th -8th November 2014 St. Anthonys' College National
- Molecular Biology and Bioinformatics: DNA extraction, gene cloning and sequencing DBT-Star college Guest lecture for UG students, on 26-02-2015 Mangaldai College National
- Basics of Bioinformatics "Basics of Bioinformatics" 17th to 19th March, 2016 BIF, Department of Biotechnology, Bodoland University National
- 6 Basics of Bioinformatics Invited Guest Lecture Programme (on 6-9-2016 at 12-00 noon)

Department of Zoology, Kaliabor College, under Star College Scheme. National

- 7 Bioinformatics teaching as Visiting Professor North Lakhimpur College (Autonomous) (2016-17) Assam Valley School Visiting Professor
- Participated in seminar on "Strategic Conservation Planning for Turtle and Tortoises of Northeast India", as resource person organized by Aaranyak

  17.05.2012
- 9 Turtles and Tortoises of Northeast India Assam Valley School 30th July 2013
- 10 Bioinformatics workshop CSIR NEIST, Jorhat 2012

Our Respected Principal sir, Dr. Biman Hazarika inaugurated this webinar and he has reminded of the dangers and damages done by the Covid-19 pandemic.

His recent papers on "International journals on Bio Medical Research on COVID- 19" is "Sequence Analysis and Structure Prediction of SARS-CoV-2 Accessory Proteins 9b and ORF14: Evolutionary Analysis Indicates Close Relatedness to Bat Coronavirus."

In this webinar; he discussedabout bioinformatics, its division,and usefulness about drug designing. His lecture was very informative for all students of zoology and Botany. We are very grateful to him because his lecture was highly informative in present pandemic situation because scientists all over the world are trying to develop drug to cure the infamous Covid-19.

Lastly,Dr. Ujjayanta Das, Asst. Professor Department of Zoology gave vote of thanks to all. By-

You Tube Link of the Webinar: https://youtu.be/XZ7omzysnaU

# **14.NATIONAL WEBINAR**

Organised by Department of Economics, Dhing College

Day, Date & TIME: 21-10-2020, Wednesday, 11 AM-12 Noon

PLATFORM: ZOOM and YOUTUBE LIVE

WEBINAR TITLE: An overview of goods and services Tax (GST): Its implementation and implications

RESOURCE PERSON - 1.Angim Kashyap Bezbaruah, Cost Accountant, Guwahati.

CO-ORDINATOR and MODERATOR – Nabanita Baishya

**Organizing Committee:** Sujit Kumar Sarma (Associate Professor & HOD, Department of Economics, Dhing College), Dr. Mriganka Saikia (Associate Professor, Department of Economics, Dhing College) Dr. Pankaj Saikia (Associate Professor, Department of Economics, Dhing College)

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the Chief Guest and resource person, and the participants present for an evening of intense and thorough discussions on writing. The resource person, Prof. Bijoy Neog, Department of Life Sciences, Dibrugarh, Assam was introduced to the participants by Dr. Sanjeeb Kumar Nath, Associate Professor, Department of Botany and the co-ordinator of the webinar.

➤ Invited Speakers:

Mr.Angim Kashyap Bezbaruah. Cost Accountant and Faculty of Institute of Cost Accountants of India, Guwahati chapter (Resource Person)

A webinar was organised by the Department of Economics, Dhing College on 21/10/2020 on the topic,"An overview of Goods and services tax; it's implementation and implications". The joint convenors of the webinar were Sujit Kumar Sarmah, HOD. Deptt. of Economics and Dr. Mriganka Saikia. Dr. Pankaj Saikia and Nabanita Baishya were the joint coordinators of the webinar. The resource person invited to deliver the lecture on the topic is

Mr.Angim Kashyap Bezbaruah. Mr.Bezbaruah is a Cost Accountant and working as a Faculty of Institute of Cost Accountants of India, Guwahati chapter. The objective of selecting the topic is to make familiar with Goods and services Tax (GST), which is an indirect tax now applied to all business and economic activities in India.By merging a large number of central and state taxes into a single tax,GST is expected to significantly ease double taxation. Introduction of GST will also make Indian products competitive in domestic and international market. The webinar tried to give an overview of GST in Indian economy. About more than 250 participants joined the Webinar and get benefited.

You Tube Link of the Webinar: https://youtu.be/4IIy8ObiAcA

# **15.NATIONAL WEBINAR**

Organised by: Department of History, Dhing College in collaboration with CIHNA, a sociocultural Organisation

Day, Date & TIME: 21-10-2020, Wednesday, 11.00 AM -12 Noon

PLATFORM: ZOOM and YOUTUBE LIVE

WEBINAR TITLE: Indigenous Knowledge System & Manuscript & Manuscriptology

RESOURCE PERSON - Mridu Moucham Bora, Practitionar & Conservator

CO-ORDINATOR and MODERATOR - Nurul Amin

**Introduction:** Manuscripts are scattered in India in state sponsored repositories and archives, private, religious and educational sources as well as individual or family collection. Indigenous knowledge system comprises knowledge developed within indigenous societies, independent of the advent of the modern scientific knowledge system. India has the oldest and largest collection of manuscripts. Various scholars have documented the preservation of these ancient manuscript collections, including indigenous methods of preserving palm leaf manuscript like wrapping, applying extracts of natural products and other chemical treatments.

#### Aims & Objectives:

The main objectives of indigenous knowledge system, manuscript and manuscriptology are:

- 1. To facilitate conservation and preservation of manuscript through training, awareness and financial support.
- 2. To document and catalogue Indian manuscripts wherever, they may be, maintain accurate and up to date information about them and the condition under which they may be consulted.
- 3. To promote ready access to these manuscripts through publication, both book form as well as electronic form.
- 4. To build up a national manuscript Library at Indira Gandhi National Centre for Arts (IGNCA)

**Outcome:** Indigenous knowledge system and manuscript to develop a legally sound an ethically nuanced policy on promoting access to its manuscript database and library. It should disseminate cultural knowledge gathered in the widest possible way while ensuring that interests of holders of manuscripts are not sacrificed and that nobody is allowed to make illegitimate gains out of the database for the documentation and protection of the knowledge contains of these valuable texts, digitalization has emerged as the possible solution and in India these are several efforts at the national, regional levels to make up digitalization of individual collection.

Mridu Moucham Bora was born and brought up in Dhing, Nagaon in the midst "Mahapurusia Parampara". He has been associated with different extinct art and cultural fields of Assam especially in conservation of manuscript paintings, writing and for its expansion. He has enormous experience in manuscript paintings, making of masks, wood carving and terracotta as a researcher and demonstrator. His vast experience in designing costumes as well sets for traditional theatre and modern drama. He has the distinction of designing costumes for distinguished organizations like Sangeet Natak Akademi and National School of Drama. He has written extensively on issues pertaining to manuscript conservation and Aharya of Ankiya Bhaona. Apart from that he has been engaged in imparting training on manuscript illustration and participated in innumerable workshops as a resource person. He has the distinction of only living artist who has created five illustrated manuscripts in Sankari tradition of Assam among which four are Ankiya Naats. He has been successful in reviving manuscript painting traditional visual elements used in traditional and folk plays of Assam which almost got extinct. He established two production centre in which traditional mask, costumes and other allied elements are produced giving livelihood to many more families. His book publication includes Descriptive Catalogue of Balisattra Manuscripts, published by National Archives of India New Delhi, 2015. His awards includes "SIKSHAK GOURAB BOTA" awarded by "Sodou Asom Prathomik TET Uttrina Shikshak Somaj, Assam" in 2019 and "ACADEMIC ENCOURAGEMENT AWARD" by CSIR-NEIST, Jorhat, Assam in 2019.

You Tube Link of the Webinar: https://youtu.be/lsGrBj3HKro

# 16.INTERNATIONAL WEBINAR

Department of Botany, Dhing College in association with IQAC & Eco-Club, Dhing College

Day, Date & TIME: 28-10-2020, Wednesday, 03.00 AM-04.30 PM

PLATFORM: ZOOM and YOUTUBE LIVE

# WEBINAR TITLE: Polar Warming impacts & implications for us

RESOURCE PERSONS - 1. Dr. Guy R Tanner, Chairman, The Human Nature Network
2. Rituraj Phukan, National Coordinator for Biodiversity,
The Climate Reality Project India

CO-ORDINATOR and MODERATOR – Dr. Sanjeeb Kumar Nath

**Organizing Committee:** Anju Deka Bora (Associate Professor & HOD, Department of Botany, Dhing College) and Dr. Manoj Kumar Saikia (Associate Professor, Department of Botany, Dhing College)

**Introduction**: Directly or indirectly, the pandemic has affected human life and the global economy, which ultimately affected the environment and climate. It reminds us how we have neglected the environmental components and enforced human induced climate change. Moreover, the global response of COVID-19 also teaches us to work together to combat against the threat to mankind. Though the impacts of COVID-19 on the environment are short-term, united and proposed time-oriented effort can strengthen environmental sustainability and save the earth from the effects of global climate change. The Covid 19 pandemic and subsequent lockdown has necessitated need to know about the polar warming impacts and implications on us. To be precise, the pandemic almost certainly usher in broader effects on the above mentioned different aspects and the present webinar tried to focus on it.

#### **Objectives:**

The policy design must overcome biases to human judgment.

The inequality can be exacerbated without timely action.

The global problems require multiple forms of international cooperation.

The transparency of normative positions is needed to navigate value judgments at the science-policy interface.

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the Chief Guest and resource person, and the participants present for an evening of intense and thorough discussions on writing. The resource persons, Dr. Guy R Tanner

and Rituraj Phukan were introduced to the participants by Dr. Sanjeeb Kumar Nath, Associate Professor, Department of Botany and the co-ordinator of the webinar.

#### ➤ Invited Speakers:

#### 1. **Dr. Guy R Tanner** BSc PhD GRIC FCQI (as Resource Person)

Born a poor post-world war baby-boomer, a product of the English National Health Service, the English state free education system and the values still personified by Her Majesty Elizabeth II, Sir David Attenborough and The Natural History Museum; Dr. Tanner is an independent social and environmental entrepreneur, consultant and human nature community coach.

A graduate in Biochemistry from Liverpool University's famous school of biochemistry; he headed off to Scotland to deliver a ground-breaking PhD thesis on the construction, structure and degradation of the architecture of woody plants.

He carried that holistic insight into system dynamics into industry and emerged 30 years later as a world-class, total quality, excellence and change management consultant.

Now 65, he makes his Life skills available worldwide as Chairman of Human Nature Solutions, a transnational network of artisans, communicators, coaches and other professionals dedicated to building Human Nature Communities; to be served by networks like ourselves and by corporate governments, governmental and non-governmental organisations, private and public organisations co-aligned to one end: a thriving Living Planet in all its beauty and diversity, safe from the absurd and diabolical Human Race to the bottom.

# 2. **Rituraj Phukan**, National Coordinator for Biodiversity, The Climate Reality Project India, COO, Walk For Water, Secretary General, Green Guard Nature Organization, (as **the Resource Person**)

"Rituraj Phukan is an environmental writer, adventurer & naturalist based out of Assam, a biodiversity-rich, climate change impacted province in the northeast of India. As the National Coordinator for Biodiversity for The Climate Reality Project India, Chief Operating Officer of Walk For Water, and Secretary General of Green Guard Nature Organization, he facilitates awareness and action on the 3 W's – Warming, Water and Wildlife- working with all stakeholders including indigenous communities, students, civil society, business and media, for a positive societal impact.

Having worked extensively at the grassroots, he says "Water is the local issue of global climate change, for people, and for biodiversity." He is driven by concerns over glacial loss in the 'water towers' of Asia and is currently working on an initiative to mobilize civil society action in the countries of the Himalayan region.

He is a Member of the International Union for Conservation of Nature and holds leadership positions in several international and national environmental groups. He has delivered presentations and talks in Malaysia, Norway, Sweden, Finland, South Africa and Bangladesh, and participated in deliberations in the USA, Canada, Argentina, Denmark, Thailand and Turkey.

Rituraj was personally trained as a Climate Reality Leader by Nobel Laureate Al Gore and was featured in the former US Vice-President's 2017 book 'An Inconvenient Sequel: Truth to Power'. Rituraj is a member of the International Union for Conservation of Nature and sits on the board of civil society groups in the Americas, Europe and Australia. He has personally experienced the impacts of climate change in Antarctica and across the Arctic region." He is member, IUCN Wilderness Specialist Group; Commission Member - IUCN WCPA Climate Change, IUCN WCPA Connectivity Conservation, IUCN WCPA Indigenous People and Protected Areas Specialist Groups, IUCN WCPA South Asia Region and IUCN WCPA-SSC Invasive Alien Species Task Force, National Coordinator, CCL India, Assam Coordinator, Kids For Tigers, the Sanctuary Tiger Programme, Associate Editor, Igniting Minds, Member, International Antarctic Expedition 2013; Climate Force Arctic 2019, Ambassador, Marine Arctic Peace Sanctuary

#### **Outcome of the Webinar:**

Dr. Guy Tanner focused on the history of life on earth He described in details about the contributions of David Attenborough, 1955 on the life on earth. He mainly on the problems of global temperatures and related on the extinctions of species on earth. Many relevant questions were asked by the participants regarding the history of life on earth.

Rituraj Phukan threw light on the Polar Warming Impacts and Implications- as he live in Assam, an early "climate-impacted" province in India. He grew up in the middle of civil unrest due to the illegal immigration of displaced people, and this set the stage for his work to mitigate the crisis that India, and the entire world, is facing today. He knew that the future could be much worse as no boundary fence or security force can prevent the mass influx of refugees from vulnerable low-lying countries, with disastrous humanitarian consequences. There are other implications for my region too, with continuous riverbank erosion and increasingly frequent floods attributed to erratic rainfall as well as the accelerated melting of the Himalayan glaciers.

In 2013, he participated in the International Antarctic Expedition and the epic journey changed my life forever. Soon after, he stepped out of his comfort zone to engage with rural communities on the 3 W's: Warming, Water and Wildlife. In 2019, He travelled across the Arctic region to gain firsthand experience of climate change impacts. It was disconcerting to learn that the Svalbard archipelago in Norway has warmed by over 5 degrees Celsius in the past 20 years, threatening the lifestyles of the local people and the biodiversity of the region. The Arctic ice cools our planet and regulates weather patterns; what happens in the Arctic affects us all. The evidence is clear that the accelerated melting of polar ice is already changing global weather with an unfolding humanitarian crisis with floods, droughts, famine and rising sea levels all over the world. The predicted disruption of the South Asian monsoon due to the accelerated melting of sea ice could be catastrophic for India, which is already facing extreme weather and an unprecedented water crisis.

The session ended with curious queries from the participant's end on polar warming and its impact on us. The session was ended with the vote of thanks from the moderator. The feedback

forms received from the participants made for careful observations and suggestions for future attempt to achieve. E-certificates were subsequently sent to the participants.

You Tube Link of the Webinar: https://youtu.be/N-TwcSUFHfI

## 17.NATIONAL WEBINAR

Department of Physics, Dhing College and Jorhat Engineering College, Jorhat

Day, Date & TIME: 29-10-2020, Thursday, 11.00 AM-12.00Noon

PLATFORM: ZOOM and YOUTUBE LIVE

WEBINAR TITLE: How you can be an inventor, too!

RESOURCE PERSON - Dr. Gauri Goutam Borthakur, Assistant Professor, Department of Physics, Jorhat Institute of Science & Technology, Assam

CO-ORDINATOR and MODERATOR –Debabrata Debnath

**Organizing Committee:** Pradip Goswami (Associate Professor, Department of Physics, Dhing College), Dr. Nandan Kumar Barthakur (Associate Professor, Department of Physics, Dhing College) and Rabindra Sarma Baruah (Associate Professor, Department of Physics, Dhing College).

## **Objectives:**

About the Talk: Possible titles
Introduction to Creative problem solving

Creative problem solving, why and how

Understanding real life problems through the eyes of an innovator

Creative problem solving

How you can be an inventor, too!

The webinar was formally inaugurated by the respected Principal of Dhing College, Dr. Biman Hazarika who welcomed the Chief Guest and resource person, and the participants present for an evening of intense and thorough discussions on writing. The resource person Gouri Goutam Borthakur was introduced to the participants by Debabrata Debnath, Associate Professor, Department of Physics and the co-ordinator of the webinar.

#### ➤ Invited Speakers:

1. Gouri Goutam Borthakur Assistant Professor, Department of Physics, JIST, Jorhat, Assam (as the Resource Person) Gouri Goutam Borthakur, Assistant Professor, Department of Physics, JIST, Jorhat, Assam is a Subject Author, you tuber and a casual Innovator. He is a recognized PhD guide of Assam Science and Technology University, Assam. He has written Books on Technical drawing (Create space publishers 2016), Concise Undergraduate Physics (Google books 2019) Digital Systems and Applications (Mahavir Publications 2020). His current research interests are centered around Physics Based Designs and recently he has successfully completed one world bank funded project entitled "Design and development of cradled electric socket". Apart from this, the speaker has few years of experience in drafting patent applications. A Physics experiment designed by him was awarded the second best experiment in the national experiment design competition NCIEP(National competition for Innovative Experiments in Physics) organized by IAPT(Indian Association of Physics Teachers) in 2017 IAPT annual convention, Haridwar, UK, India. As an you tuber(aka Phy tuber) he publishes physics videos in English, hindi and assamese in his you tube channel "Phynnovative" o Links that might interest prospective participants:

Digital systems and applications by Dr G G Borthakur in Amazon: <a href="https://tinyurl.com/yxd89dq3">https://tinyurl.com/yxd89dq3</a>
Concise undergraduate physics by Dr G G Borthakur in Google books: <a href="https://tinyurl.com/yyr8qqvh">https://tinyurl.com/yyr8qqvh</a>

Phynnovative You tube channel by Gouri Goutam: https://tinyurl.com/y39gq3sj

#### **Outcome of the Webinar:**

This hour long webinar could be a life changing event for you because in this talk you will learn about some of the secret principles applied by inventors to generate ideas that rarely hit the mind of a common man. The first part of the talk will be centered on introduction and background information of the topic.

In the second half of the talk, the process of creative problem solving will be explained with the help of examples. This part will also try to illustrate how one can inculcate creative thinking to solve problems in his or her own life or the problems of people surrounding himself/herself.

You Tube Link of the Webinar: https://youtu.be/pCfVneVq\_kE

# **18.NATIONAL WEBINAR**

Organised by: Department of Bengali, Dhing College in association with IQAC, Dhing College

**Date:** On 30<sup>th</sup> October 2020 Time: 11 AM

# TITLE: ASSAM AND BENGAL IN THE CONTEXT OF BHAKTI MOVEMENT

The webinar was inaugurated by Dr. Biman Hazarika, the Principal of Dhing College and coordinated by Mr. H. S. Chakraborty, HOD, Bengali, Dhing College.It was convened by Dr. Mala Sharma, Assistant Professor of the same department.

The main attraction of this webinar was the lectures delivered by the founder Vice Chancellor of Rabindranath Tagore University, Hojai, (Assam) Prof. Amalendu Chakraborty, who is a renowned scholar and specialist in this subject/topic.

Principal Dr. Biman Hazarika, inaugurated the programme wishing everybody a Good morning in the day of Laxmi Puja, addressing and welcomiong the resource person Prof. Amalendu Chakraborty with a keynote of this webinar. Dr. Hazarika himself a scholar on this subject. He said that, this topic still had importance though the Movement started from the 15<sup>th</sup> century Mahapurusha Srimanta Sankaradeva and Mahaprabhu Sri Chatanya lead Assam and Bengal respectively, along with other Vaishnava leaders of Bhakti Movement, of India like Ramananda, Kabira, Ballabhacharya, Namadava. "Since we are living besides the birth place of Mahapurusha Sankaradeva, only seven kilometers far from our institution (Dhing College), which was established in 1965 and taking the responsibility of speding under graduate educations in a craftsman area of (surrounding) 30 kilometers, and it is my pleasure to share here that most of the inhabitants of this area are pursuing Bhakti Cult and with the numbers of Satras and Namghars, religious establishment, spreaded in our craftsman area which is, I believe, not less than two hundred."

The resource person Prof. Amalendu Chakraborty delivered his valuable lecture in his own attractive style. Prof. Chakraborty is a double M.A. In 1978 he got the M.A. degree in Bengali Literature and in 1980 in Bengali Language from Gauhati University where he was awarded Gold Medal for being topper. After that he got lecturership in many colleges and in 1987 he joined G.U. as s lecturer in the Department Bengali. He obtained Ph.D. degree from G.U. in the year 1994. He served the Bengali Department of G.U. twice as the HOD. Besides, he was the member of Executive Council, G.U. during 2014-2015 and 2018-2019.

Prof. Chakraborty was selected as the Gauhati University Court during 2014 -2015 and 2018-2019. He also executed as the Dean, Faculty of Arts, G.U. during 2016- 2019. He was the Chairman of CCEM, G.U. from 2017 to mid of 2019. He also worked as a member, Resource Person and Writer in matters related to production of new textbooks of SEBA, Assam.

Prof. Chakraborty has to his credit an impressive list of publications which includes many own edited books as well as journals. Many of his research articles has been published in over 58 journals. He has also completed a personal research article entitled "The legacy of Indian Culture in Prabhat Sangeet", funded by Renaissance Artists and Writers Association, Kolkata.

One of his most significant work is the compilation of first trilingual Persian-Assamese-English Dictionary along with Prof. Mazhar Asif (J.N.U), which was published by G.U. in 2016. He has supervised over 21 Ph.D. and 18 M.Phil. theses till August 2019 on various aspects of Bengali

Literature. He has delivered lectures across several countries such as Japan, China, the USA and Canada.

Prof. Amalendu Chakraborty has contributed many articles in Srimanta Sankardeva Sangha's main and local journals. He has also been the Chief Speaker on various meetings, seminars and conference on Srimanta Sankardeva and Madhavadeva across India and also in the 550<sup>th</sup> Birth Anniversary celebration conference held in Kolkata and Madhupura Satra.

The awards and accolades received by Prof. Chakraborty are also noteworthy. He was awarded "Nalini Kanta Gupta Smriti Puraskar" from Sri Aurobindo Bhavan, Kolkata in the year 2004. "Yadu Samrat P.C.Sarkar Smarak Samman" by Vishwa Banga Sahitya O Sanskriti Sammelan, Kolkata (2005). Recently he was awarded with "Mathuradas Burha Ata Bonta" by Barpeta Satrar Shakha Satra Samaj, Assam, on 11<sup>th</sup> January 2020.

Prof. Chakraborty is the President of Assam Sahitya Sabha, Gauhati University Branch, Pragjyotishpur. He has been the Chairman of Assam Linguistic Minority Development Board, Assam from 3<sup>rd</sup> April 2017 to 10<sup>th</sup> October 2018. Besides, he has been associated as a member of the Selection Committee of different Universities, Board of studies for the Department of Bengali, Programme Advisory Committee (PAC) of SCERT, Assam and Literary Award and Literary Pension Committee, State Govt. of Assam for three years. He has always been the Chancellor's Nominee of several Universities for Department of Bengali, West Bengal and also served as a member of West Bengal College Service Commission.

In the above said webinar, Prof. Chakraborty mentioned about two oldest cults – Solar and Lunar Cult. In Solar Cult, everything happens putting the Sun in the centre. All rituals, worships or festivals are done with the consideration of the Earth's annual rotation around the Sun. So the solar calendar developed, which has fixed dates of every occasion. On the other hand, a sect of people believes that the Moon is the almighty and everything should be counted after the Moon's rotation around the Earth. The rotation time of the Moon is not uniform in every month and so the lunar calendar has no fixed date of any festival or occasion. As the agriculture is associated with and depended on the Sun, the farmers generally follow the solar calendar. Their every rituals and festivals happen in fixed dates according to solar calendar. Whereas the followers of lunar cult can not celebrate any worship of their Gods or Goddesses or festival in fixed dates. Since they count a year with the rotation of the Moon and lunar month, they have to lag for 11 days from the previous year's same date.

There are huge cultural gaps and conflicts between these two cults. The farmers are producers of agricultural products. But they are not the owner of these products. The sect, who are not growing crops but have to gather it, must have to show the power of man and money. Thus the peasants become victims of atrocities of their land lords. The land lords are actually from lunar cult, so they do not know how to plough. They are just gatherer and others are producers. This group of gatherer comes in front with various identity as upper cast, e.g. Brahmin, Kshatriya etc. Gradually a hatred grows between these groups and the powerful always remain in a self-made high rank. The God or Goddesses or temples become untouchable by the lower sects of people.

Vaishnavism came in a form of movement against this classification among the cultivator. Lord Vishnu is a part of the Sun and Lord Krishna and his elder brother Balaram are also from peasant's family. The Bhakti Movement taught people the simplest way of worshipping. No rituals are necessary if the devotee has the Bhakti in himself. Bhakti means division. Shankaracharya of Vedanta doctrine preached that everything, living or non living is the part of Brahma. In this doctrine, the devotee may think that he/she himself/herself the almighty and may develop arrogance out of vanity. But when the devotee knows that he/she is just a servant of Hari or Krishna and may get the ultimate goal by taking just his name only, the emotion which grows in mind is called Bhakti and there is no vanity in the mind of any Bhakta. In Assam and Bengal, Mahapurusha Srimanta Sankaradeva and Sri Chaitanya lead this movement very successfully. They had to face severe enmity, even their lives got threatened. But they did not stop their operation and now in every corner of Assam and Bengal is practicing this Bhakti cult.

At the end of the session, answering a question Prof. Chakraborty said that the Satra Culture is an old Indian culture. The term 'Satra' can be found in Veda, and we the people of Assam can feel pride because there is no Satra and Satra culture is remaining today in any part of India except Assam.

You Tube Link of the Webinar: https://youtu.be/Lwb3adSKq\_U

# 19.INTERNATIONAL WEBINAR

Organised by: Research Forum, Dhing College in Collaboration with IQAC

DATE: 30.10.2020 TIME: 7.30 p.m.

PLATFORM: ZOOM and YOUTUBE LIVE

WEBINAR TITLE: THE RELEVANCE OF HISTORY IN TODAY'S WORLD: TEACHING, RESEARCH AND CAREER OPPORTUNITIES

# **RESOURCE PERSON - DR. LOPITA NATH, University of the Incarnate Word, Texas** CO-ORDINATOR - SYEDA UMME TASNIM

The webinar was formally inaugurated by the Principal of Dhing College, Dr. Biman Hazarika who welcomed the resource person, and the participants present. Dr. Hazarika also provided an overview of history, and his take on the field. The resource person, Dr. Lopita Nath was introduced to the participants by the host and co-ordinator, Syeda Umme Tasnim, Assistant Professor Department of English. The session was started with a brief bio-note on Dr. Nath.

Dr. Nath is the Chair of the History Department and the Coordinator of the Asian Studies Program at the University of the Incarnate Word. She has taught for over 31 years in the fields of Asian and World History, Migration Studies, Refugee Issues and Human Rights. Dr. Nath is a Fulbright Scholar and the recipient of the Social Science Research Council Award. At UIW she was awarded the Edward A. Zlotkowski Faculty Award for Service Learning(2020), Minnie Piper Award UIW Nominee (2020-21), Presidential Teaching Award (2019) and the Moody

Professor Award (2015), Her research expertise is on Migration in Asia, human displacement, refugees, citizenship, and human rights. Her current research focuses on the Bhutanese Refugee Resettlement in the USA. Since 2010, she visited the Bhutanese Refugee Camps in Nepal three times to understand the Bhutanese refugee crisis, and also worked with resettled refugees in Columbus, Ohio, Dallas, Houston and San Antonio, Texas. Currently, she is working on her book on the Bhutanese Refugee Resettlement in the United States. She has authored several articles in reputed journals on her research on the Bhutanese refugees, including *TheNepalis in* Assam: Cross Border Movements and Ethnicity (2003) and co-authored "Course Based Study Abroad: How to Create a Truly Transformative Experience" (Routledge, 2019). She is the past president of the Southwest Conference on Asian Studies, Coordinator of the European, Middle-Eastern and Asian Studies at the Southwest Historical Association and serves on the Catholic Charities Refugee Advisory Board and the Faculty Advisory Board of Institute of Texan Cultures and is the Vice Chair of the Advisory Board of the Ettling Center for Civic Leadership. She is the co-director of the CIELO-Unity in Action, a Refugee Mentoring Program in San Antonio, that helps refugees transition to life in America, through women empowerment, ESL programs, tutoring and other help that refugees need, in collaboration with several community partners. Dr. Nath was part of the cohort of the UIW NEH Trauma grant 2017-19.

The topic was selected in order to present a comprehensive outlook towards the relevance of History, and the Liberal Arts in general as a career path, and the subsequent research opportunities that are available. The idea was to provide participants with a session stressing on the importance of pursuing History and the lesser known aspects related to the field, providing an eye-opening experience and debunking myths generally associated with History and the Liberal Arts. Dr. Nath presented a thorough procedure and overview of education in the United States of America, in the University of the Incarnate Word and also the rest of India. She traced the facets of the New Education Policy and the importance assigned and provided to the humanities and how it will impact the future of modern Indian education. As such she also extensively talked about the nuances and steps to be followed for pursuing education in the States.

Dr. Nath's experiences of working as a researcher, academician and student of history opened up vistas for the participants to pursue the field. Also came to light the challenges one has to tackle with while being on-field. The session ended with remarkable and thought provoking questions posed by the participants which were enthusiastically answered by Dr. Nath. The host/co-ordinator, Ms. Tasnim wrapped up the session with the vote of thanks and a general instructions for subsequent procedures to the participants.

You Tube Link of the Webinar: <a href="https://youtu.be/PDhj0X24uWU">https://youtu.be/PDhj0X24uWU</a>

Certify that the above reports of Webinars are organized by the Dhing College and submitted their reports by the coordinators to the IQAC for documentation and updation.