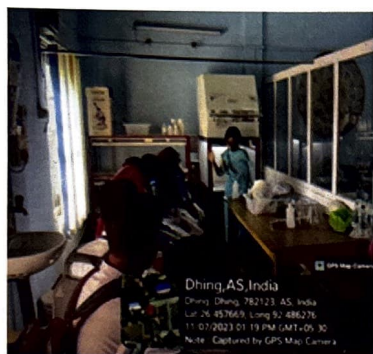


# Biotech Barta

An annual newsletter of Advanced Institutional Level Biotech Hub (Phase II) of Dhing College  
Volume I (2023-2024)

## Workshops, Outreach & Short Term Course



### Laboratory Instrumentation Techniques

A five days' Workshop cum Hands-on-Training program on "Laboratory Instrumentation Technique" was conducted at Dhing College, Nagaon from 7th Nov-11th Nov 2023 organized by Advance Institutional Level Biotech Hub, Dhing College, Nagaon. The primary aim of the workshop was to enhance participants' understanding of fundamental instrumentation techniques employed in scientific laboratories, given their pivotal role in assessing various scientific phenomena. The workshop additionally emphasized aspects related to Research & Development, entrepreneurial ventures, and innovations within the realm of biology, encompassing diverse applications of instrumentation processes. The instructional components of the program comprised lectures and discussions, complemented by hands-on practical sessions. These practical sessions delved into Basic Laboratory Techniques, including but not limited to sample collection, serial dilution, sterilization techniques, microscopy, media preparation, pure culture techniques, colony counting, and titration procedures.



### Herbal Medicinal Plant Processing (In collaboration with ADP College, Nagaon)

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.



### HIGHLIGHTS

- ◆ SCIENCE WORKSHOP & HANDS-ON-TRAINING ON 'HERBAL MEDICINAL PLANT PROCESSING, LABORATORY INSTRUMENTATION TECHNIQUES, BASIC LABORATORY SKILLS ON MICROBIOLOGY' WITH STUDENTS
- ◆ OUTREACH ACTIVITY 'FOLDSCOPIC VISUALIZATION FOR SCHOOL CHILDREN VILLAGE LEVEL COVID AWARENESS CAMP, NATUROPATHY AND YOGA CAMP
- ◆ INTERACTIVE SESSIONS WITH RESEARCH SCHOLARS
- ◆ ATTENDING SEMINARS/LECTURES
- ◆ SHORT TERM COURSE PROGRAMMES "BLENDED TEACHING & LEARNING FOR SCHOOL TEACHERS" IN ASSOCIATION WITH SCERT, ASSAM



# Workshops, Outreach & Short Term Course



## Foldscopic Visualization for School Children

A two days' Outreach programme program on "Foldscopic Visualization for School Children" was conducted at Dhing K.B.H.S., Nagaon from 29th Nov-30th Nov 2023 organized by Advance Institutional Level Biotech Hub, Dhing College, Nagaon. The primary aim of the programme was to enhance school students' understanding of fundamental knowledge on microscopic techniques, given their pivotal role in assessing various scientific phenomena. The outreach programme additionally helped students to self assemble foldscopes for slide viewing, importance of foldscopes, their applications and benefits. The instructional components of the program comprised lectures and demonstrations, complemented by self assembling of foldscopes by each groups of students.



## Naturopathy and Yoga Camp

A three days' Outreach Programme on "Naturopathy and Yoga Camp" was conducted Dhing College, Nagaon from 9th Feb-11th Feb 2024 organized by Advance Institutional Level Biotech Hub, Dhing College, Nagaon in association with Arogya Yoga Kendra, Nagaon. The main objective of the Naturopathy and Yoga camp was to deepen participants' knowledge and practical experience in the principles and techniques of naturopathy and yoga, recognizing their integral roles in fostering holistic well-being. In addition to exploring the foundational aspects of naturopathy and yoga, the camp placed a significant emphasis on practical applications and their real-world implications. Participants engaged in immersive sessions that not only covered the theoretical underpinnings but also provided hands-on experiences in various naturopathic and yogic practices. This approach aimed to empower participants with the skills and insights necessary to incorporate these holistic disciplines into their daily lives.

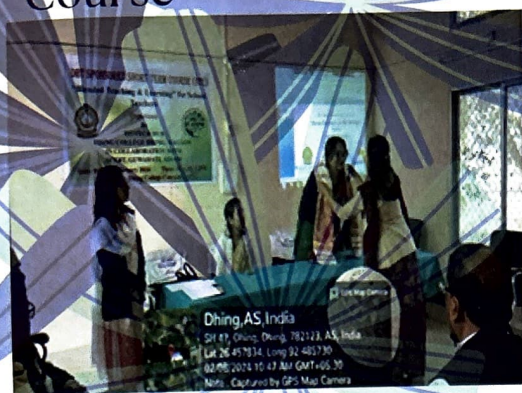


## Basic Laboratory Skills on Microbiology

A five days' workshop Programme on "Basic Laboratory Skills on Microbiology" was conducted Dhing College, Nagaon from 21st March-25th March 2024 organized by Advance Institutional Level Biotech Hub, Dhing College, Nagaon. The objective of the Basic Laboratory Skills course in Microbiology is to equip students with foundational knowledge and practical proficiency essential for conducting laboratory experiments in the field of microbiology. Through hands-on training and theoretical instruction, students will develop competency in fundamental laboratory techniques, including aseptic techniques, microscopy, culturing and staining methods, and biochemical assays. Additionally, the course aims to instill a strong understanding of laboratory safety protocols, data interpretation, and record-keeping practices. By fostering these essential skills, students will be better prepared to pursue advanced studies or careers in microbiology-related fields, contributing to scientific research, healthcare, and biotechnology sectors.



## Workshops, Outreach & Short Term Course




### Blended Teaching & Learning for School Teachers

A five days' Short Term Course (STC) programme on "Blended Teaching & Learning for School Teachers" was conducted at Dhing College, Nagaon from 6th Feb-10th Feb 2024 organized by Advance Institutional Level Biotech Hub, Dhing College, Nagaon in association with SCERT, Assam. The primary aim of the workshop was to enhance teacher's understanding of Blended teaching and learning for school teachers that combines traditional face-to-face instruction with online or digital learning experiences. And employ this hybrid model to leverage the strengths of both traditional classroom methods and technology-mediated learning to create a more flexible and effective learning environment.



### Village Level COVID & Post COVID awareness Camp

The two-day Post Covid Women Entrepreneurial Programme held from March 27th to 28th, 2024, at the Advanced Institutional Level Biotech Hub, Dhing College, Nagaon, was a significant initiative aimed at empowering women entrepreneurs adversely affected by the pandemic. The program's overarching goal was to provide these women with the necessary tools, resources, and skills to not only recover from the challenges posed by the pandemic but also to thrive in the transformed economic landscape.


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### Five-day-long DBT-sponsored short-term course for school teachers concluded at Dhing College

**CORRESPONDENT**

**NAGAON, Feb 13:** An Advance Institutional Level Biotech Hub, Dhing College, in association with the SCERT, Assam, organised a five-day DBT-sponsored short-term course on 'blended teaching and learning for school teachers' at the college from February 6, 2024.

The course was organised to enhance teachers' understanding of blended teaching and learning and combine traditional face-to-face instruction with online or digital learning experiences, which apparently help to leverage the strengths of both traditional classroom methods and technology-mediated learning to create a more flexible and effective learning environment.

Dr. Biman Hazarika, principal of the college, inaugurated the programme, while Dr. Sanjeeb Kumar Nath, coordinator of the Advance Institutional Level Biotech Hub and HoD, Department of Botany, elucidated the objectives of the short-term course on blended teaching and learning for school teachers. Chayanika Saikia from DIET, Nagaon, attended the programme as the keynote speaker.

Over 38 participants deputed from various high schools, ME, and lower primary schools by the Inspector of Schools, as well as BEEO, Nagaon, took part in the programme.

Chayanika Saikia, a lecturer of DIET, Nagaon, assistant professor, Department of Education, Dr. BKB College; Dr. Tribeni Saikia from Srimanta Sankardev Vishwavidyalaya; Dr. Sikha Bhagawati, assistant professor, Nowgong Girls' College; Dr. Sewali Borah from the College of Teachers Education, Nagaon; Dr. Nabanita Baisya, Dhing College; and Dr. Kangkana Sarma were present in the programme as resource persons.


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### Workshop on herbal processing technology held

**A CORRESPONDENT**

**NAGAON, Oct 18:** Advance Institutional Level Biotech Hub, Dhing College, in collaboration with the Department of 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 was to create awareness on indigenous medicinal and aromatic plants, their conservation, and sustainable use as well as to focus on research and herbal drug development strategies.

Dr. Sadananda Payeng, principal of ADP College, inaugurated the workshop following a brief note presented by Mr. Mridul Kumar Hazarika. Dr. Sanjeeb Kumar Nath, co-ordinator to Advance Institutional Level Biotech Hub, Head of the Department of Botany, Dhing College delivered the keynote address while Dr. Mousumi Saikia delivered a short note on the objectives of the workshop.

The Assam Rising

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## Workshop on Laboratory Instrumentation Technique held

**Assam Rising**

**Nagaon, November 12:** A five day long DBT sponsored workshop cum hands-on training programme on 'Laboratory Instrumentation Technique' was organized by Advance Institutional Level Biotech Hub, Dhing College, Nagaon from Nov 7 to Nov 11, 2023 here. The primary aim of the workshop cum hands-on training is to enhance participants' understanding of fundamental instrumentation techniques deployed in scientific laboratories, given their pivotal role in assessing various scientific phenomena. It also emphasized aspects related to Research & Development, entrepreneurial ventures and innovations within the realm of biology, encompassing diverse applications of instrumentation processes. The instructional components of the programme comprised lectures and discussions, complemented by hands-on practical sessions. These practical sessions focused on basic Laboratory Instrumentation Techniques, including sample collection, serial dilution, sterilization techniques, microscopy, media preparation, pure culture techniques, colony counting, titration procedures etc.

Dr. Biman Hazarika, principal of Dhing College, inaugurated the programme. Dr. Tapan Dutta, Principal of JN College, Boko, attended the inaugural session as the chief guest and Dr. Manoj Kr Saikia, Associate professor (Rtd.), Department of Botany, Dhing College, delivered the keynote address. Dr. Sanjeeb Kumar Nath, Advanced Institutional Level Biotech Hub and Head of the Department of Botany, Dhing college elucidated the objectives of the workshop and hands-on training activities. Technical sessions followed after the inaugural session. The programme witnessed the active participation of 110 undergraduate students from the Departments of Botany, Zoology, Physics and Chemistry of Dhing College, Dhing. Over 125 participants, comprising students, faculty, and resource persons, actively participated in the comprehensive event. Dr. Tapan Dutta, principal, JN College, Boko, Dr. Bala Choudhury, senior scientist, Guwahati Biotech Park, Dr. Sitananda Sharma, senior technical officer, CIF Department, IIT Guwahati, Inamul Haque, Application Support Executive, CIF Department, IIT Guwahati, Dr. Ujjayini Das, Zoology Department, Dhing College, Dr. Mahant Mom Saikia, Department of Chemistry, Dhing College, Gobin Ch Bharali, Department of Chemistry, Dhing College, attended the workshop as resource persons, a press note stated here.



# Workshop on Laboratory Instrumentation Technique held

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## Editorial

It is with great pleasure we are presenting the Advanced Institutional Level Biotech Hub, Dhing College newsletter the "Biotech Barta" to our esteemed readers. The scope of the newsletter is to enhance the scientific aspect for undergraduate students of Botany and also to highlight the various innovative activities of the Department which has been carried out throughout the year. This is an initiative on our part.

# DBT sponsored naturopathy and yoga camp held

Assam Rising, Nagaon, February 18: Advance Institutional Level Biotech Hub, Dhing College in association with Arogya Yoga Kendra, Dhing organized a three day long outreach programme on naturopathy and yoga camp at the college premise from February 9 to February 11 here. The

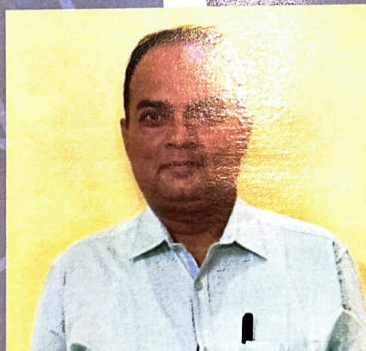
programme was sponsored by DBT. The objective of the programme was to enhance the students about how they heal their bodies by using natural elements like air, water, soil, etc through naturopathy and yoga asanas. Mud therapy is one of the most unique techniques of naturopathy

through which one can cleanse to remove toxins from the body. Dr Biman Hazarika, principal of the college inaugurated the programme while Rupjyoti Kar, secretary of Arogya Yoga Kendra, Dhing attended the programme as the resource person. Gobin Ch Bhamli, Department of Chemistry, was present as

the keynote speaker in the camp. Dr Sanjeeb Kr Nath, coordinator to Advance Institutional Level Biotech Hub and HoD, Department of Botany, elucidated the objectives of the programme. Over 60 students from the college participated in the programme, a press note asserted here.



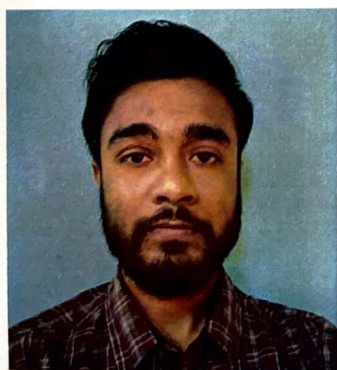
DR. MONOJ KUMAR SAIKIA



DR. SANJEEB KUMAR NATH



MS. CHANDAMITA GOSWAMI



MR. UDDHAB TALUKDAR



DR. UJJAYANTA DAS

MEMBERS OF EDITORIAL BOARD