



Department of Biotechnology  
Government of India

Vol.: 3, Issue: 1, Year: 2024, Month: March

# BIO-BUZZ

News Bulletin of Institutional Biotech Hub, Bahona College, Jorhat, Assam, India

Email ID: [biotech.hub@bahonacollege.edu.in](mailto:biotech.hub@bahonacollege.edu.in)

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Institutional Biotech Hub (IBT Hub) is an initiative of Department of Biotechnology (DBT), Govt. of India with a view to promote research and for development of skilled and trained manpower. The IBT Hub at Bahona College was established in the year 2013. Since then Biotech Hub has been conducting training programs, workshops, seminars/webinars and outreach programs through offline and online mode in basic areas of Biotechnology and thus contributing to the growth of trained manpower and biotechnology in the region.

## From Principal's Desk



**Dr. Sumbit Chaliha**  
**Principal**  
**Bahona College**

Dear, Bio- Buzz Bulletin readers, it is with great pleasure to address you today from the Principal's desk of our esteemed Biotech hub. As we navigate the ever-evolving landscape of scientific discovery, this publication serves as a beacon of knowledge, illuminating the remarkable achievements and ongoing endeavors within our Biotech hub. I encourage you to delve into the pages of this edition, to explore, to learn, and to be inspired by the remarkable work unfolding within our Biotech hub.

## From Coordinator's Desk



**Dr. Sangeeta Das**  
**Coordinator**  
**Inst. Biotech Hub, Bahona College**

It truly gives us tremendous joy to present before you all the 3<sup>rd</sup> volume of this news bulletin "Bio-Buzz" of Institutional Biotech-Hub. In the previous year, the Hub received a research grant of Rs. 3148045.00 from DBT under Phase-II project for 3 years and a number of programs were carried out under that project in the academic year 2023-24. I appreciate our Principal Sir's insightful counsel and direction in this regard. I sincerely hope that this hub will carry on and support high-caliber research projects in the days ahead.

## OUTCOMES

### Research Grant from DBT

No. BT/NER/143/SP44318/2021  
GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY  
(NER-Programme)

Block 2, 6-8th Floors  
CGO Complex, Lodhi Road,  
New Delhi-110 003  
Dated: 02/02/2023

**ORDER**

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the project entitled "DBT-NER Institutional Biotech Hubs at Bahona College, Jorhat, Assam" with Focused area "Development of infrastructure and skilled human resources through S&T intervention under Phase-II Institutional Biotech-Hub in Bahona College" for a period of 3 Year 0 Month at a total cost of Rs. 3148045/- (Rupees Thirty One Lakhs Forty Eight Thousand and Forty Five Only) on the terms and conditions detailed here under:-

- 2 The Project:
- Title: DBT-NER Institutional Biotech Hubs at Bahona College, Jorhat, Assam" with Focused area "Development of infrastructure and skilled human resources through S&T intervention under Phase-II Institutional Biotech-Hub in Bahona College".
  - Details of the Investigators:  
Dr. Sangeeta Das  
Assistant Professor,  
Department of Botany,  
Bahona College, Jorhat - 785101, Assam

### Publication

**Chapter 8**

**Biodiversity of North East India: A Rich Tapestry of Life and the Imperative of Conservation**

**Mr. Zakaria Ahmed\* & Dr. Sangeeta Das\***

- Field Assistant, DBT Project, Biotech Hub, Bahona College, Jorhat, Assam, India.
- Assistant Professor, Department of Botany, Bahona College, Jorhat, Assam, India.

**Introduction**

The northeastern region has garnered significant attention due to its remarkable biodiversity, making it a focal point for leading conservation agencies worldwide. Notably, the entire Eastern Himalayas has been recognized by the World Wildlife Fund (WWF) as a priority Global 200 Ecoregion. Additionally, Conservation International has expanded its focus from the Eastern Himalaya Hotspot, originally covering Arunachal Pradesh, Sikkim, Darjeeling Hills, Bhutan, and Southern China, to the broader Indo Burma Hotspot. This enlarged hotspot encompasses all eight states of North-East India and extends to neighboring countries such as Bhutan, southern China, and Myanmar (Myers, 2000).

The extraordinary avian diversity in the region mirrors the varied habitats found across a wide altitudinal range. North East India stands out for hosting some of the highest bird diversities in the orient, boasting around 850 bird species. Recognizing this unique ecosystem, the Royal Society for Protection of Birds

### MoA

**MEMORANDUM OF AGREEMENT**

IN WITNESS WHEREOF, the undersigned, being duly authorized representatives of the parties hereto, have hereunto set their hands and seals on this 10<sup>th</sup> March day of Two thousand and twenty three BY AND BETWEEN President of India, acting through Secretary, Department of Biotechnology, Ministry of Science and Technology, Government of India, New Delhi, hereinafter referred to as the

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10014306508

## OUTREACH PROGRAMS

Sl. No	Title	Duration & Date	No. of Participants	Participant Categories
1	DBT funded outreach program on “Mushroom Cultivation” at Bahona Girl’s High School, Jorhat, Assam	2 Days 28 <sup>th</sup> to 29 <sup>th</sup> September, 2023	101	School students and Teachers
2	DBT funded outreach program on “Apiculture” at Charigaon Girl’s High School, Jorhat, Assam	2 Days 16 <sup>th</sup> to 17 <sup>th</sup> October, 2023	78	School Students And Teachers

## TRAINING PROGRAMS

Sl. No	Title	Duration & Date	No. of Participants	Participant Categories
1	DBT funded Hands- on training Program on “Tools and techniques of microbiology” at Institutional Biotech-Hub, Bahona College, Jorhat, Assam	3 Days 9 <sup>th</sup> , 10 <sup>th</sup> and 11 <sup>th</sup> October 2023	34	UG Students
2	DBT funded Hands-on training Program on “ Bioinformatics” Online Via Google Meet.	5 Days 19 <sup>th</sup> to 23 <sup>rd</sup> December, 2023	56	Teachers, Research Scholars And Students.
3	DBT Funded Training Program On “Basic techniques in Biotechnology: DNA Extraction And visualization Using Agarose Gelelectrophoresis” at Institutional Biotech-Hub, Bahona College, Jorhat, Assam	3 Days 17 <sup>th</sup> ,18 <sup>th</sup> and 19 <sup>th</sup> January 2024	50	UG Students

## ONLINE PROGRAMS

Sl. No	Title	Date	No. of Participants	Participant Categories
1	Online Lecture 1 On “Entrepreneurship” on “Pharmacist : Role ad-emerging scopes”	31 <sup>st</sup> October, 2023	119	Students, Research Scholars, Industry Professionals and Teachers
2	Online Lecture 2 On “Entrepreneurship” on “From lab to landscape : Advancements in Bamboo Tissue Culture technology”	21 <sup>st</sup> November, 2023	148	College Students, Teachers And Research Scholars across the Globe
3	Online Lecture 3 On “Entrepreneurship” on “ Innovative Business Models: Navigating Disruption in the Digital Age”	28 <sup>th</sup> December, 2023	112	Students and Teachers

## INHOUSE PROGRAMS

Sl. No	Title	Date	No. of Participants	Participant Categories
1	Awareness program on “Good laboratory practices of Microbiology”	16 <sup>th</sup> June, 2023	32	Students
2	Training Program on “Isolation of Bacteria by Pour plate method”	8 <sup>th</sup> September, 2023	10	UG students
3	Demonstration and Identification of Laboratory Tools and Equipments	22 <sup>nd</sup> November, 2023	6	School students and teachers from Kalyani High School

## ON GOING STUDENTS’ PROJECTS

Sl. No.	Title
1	Tissue culture of bamboo and orchid plants for large scale production of plantation stalks
2	Phytochemical and antimicrobial activities of <i>Lawsonia inermis</i> , <i>Syzygium cumini</i> , <i>Terminalia chebula</i> and <i>Leucas aspera</i> plant extracts from Bahona area against coliform bacteria.
3	Antibacterial activity of <i>Cassia alata</i> leaf extracts on coliforms isolated from Bhogdoi river water.



# PHOTO SPEAK

**ONLINE LECTURE 1 ON ENTREPRENEURSHIP**

ORGANIZED BY INSTITUTIONAL BIOTECH HUB, BAHONA COLLEGE, JORHAT, ASSAM, INDIA

Tuesday 31 October 2023  
Time 03:00pm

**SPEAKER**  
**Abhijit Nath**  
Assistant professor School of Pharmacy, The Assam Kaziranga University & Research Scholar Dept. Of Pharmaceutical Sciences

Webinar on **Pharmacist: Role and Emerging scopes**

In collaboration with Institutional Biotech Hub, Bahona College, Jorhat

Presented by **Abhijit Nath**  
Assistant Professor School of Pharmacy The Assam Kaziranga University

**CLINICAL PHARMACY**

- Coordinate research activities/setting up research centers
- Providing drug safety information
- Managing medication therapy
- Making appropriate referrals
- Patient care of drug

Bahona, Assam, India  
R66R-V3M, Bahona, Assam 785101, India  
Lat 26.809854°  
Long 94.23997°  
31/10/23 03:41 PM GMT +05:30

**Organogenesis**

**ONLINE LECTURE 2 ON ENTREPRENEURSHIP**

PRESENTATION TITLE "FROM LAB TO LANDSCAPE: ADVANCEMENTS IN BAMBOO TISSUE CULTURE TECHNOLOGY".

ORGANIZED BY INSTITUTIONAL BIOTECH HUB, BAHONA COLLEGE, JORHAT, ASSAM, INDIA

Tuesday 21 November 2023  
Time 02:30pm

**SPEAKER**  
**Dr. Zishan Ahmad**  
Assistant professor, Bamboo Research Institute, Nanjing Forestry University, Jiangsu, China.

**Understanding Digital Disruption**

**Case Study 3 (in Biotechnology)**

**Genentech**

Neamati Ghat Jorhat Road, Jorhat East, Jorhat, 785007, AS, India  
Lat 26.809894, Long 94.240183  
12/28/2023 12:12 PM GMT+05:30  
Note : Captured by GPS Map Camera

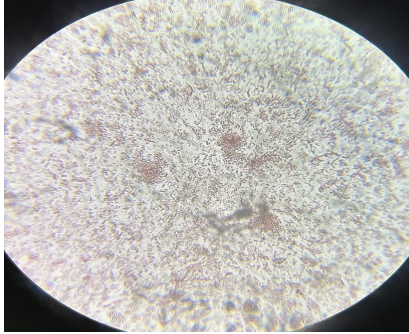
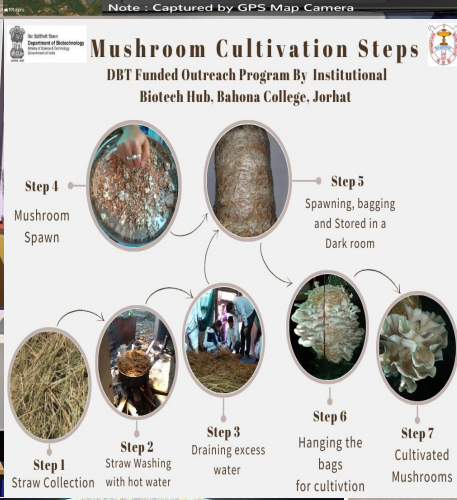
**ONLINE LECTURE 3 ON ENTREPRENEURSHIP**

PRESENTATION TITLE "INNOVATIVE BUSINESS MODELS: NAVIGATING DISRUPTION IN THE DIGITAL AGE".

ORGANIZED BY INSTITUTIONAL BIOTECH HUB, BAHONA COLLEGE, JORHAT, ASSAM, INDIA

Thursday 28 December 2023  
Time 11:30 am

**SPEAKER**  
**Er. Anshuman Goswami**  
B.E. (Mechanical Engineering) M.Tech (Petroleum Technology), Author, Co-Founder of NE CRAFTERS ENTERPRISES LLP, President of ILC CRAFTERS (NGO), Project Associate at CSIR-NEIST, Jorhat, Assam



**বাহনা মহাবিদ্যালয়ৰ মৌপালন কাৰ্যসূচী**

প্ৰতিবেদক, বাহনা, ৪ নবেম্বৰ ঃ নবপ্ৰজন্মক মৌ-পালনৰ বিভিন্ন পন্থা, ইয়াৰ উপকাৰিতা, মৌ-জালৰ বিভিন্ন স্বাস্থ্যজনিত কাৰণসমূহৰ লগত পৰিচয় কৰাৰ উদ্দেশ্যে বাহনা মহাবিদ্যালয়ৰ উদ্যোগত ১৬-১৭ অক্টোবৰত চাৰিগাঁও উচ্চ মাধ্যমিক বালিকা বিদ্যালয়ত মৌপালন বিষয়ৰ প্ৰশিক্ষণ অনুষ্ঠিত হয়। বাহনা মহাবিদ্যালয়ৰ জৈৱ-প্ৰযুক্তি কেন্দ্ৰৰ সমন্বয়ক ড° সংগীতা দাসে উদ্দেশ্য ব্যাখ্যা কৰা অনুষ্ঠানৰ আদৰণী ভাষণ দিয়ে মহাবিদ্যালয়ৰ শৈক্ষিক উপাধ্যক্ষা ড° অদিতি বৰুৱাই। চাৰিগাঁও অঞ্চলৰ মৌ-পালনৰ প্ৰতিষ্ঠিত উদ্যোগী-লীলাচৰণ দস্তই সমল ব্যক্তি ৰূপে বিভিন্ন প্ৰজাতিৰ মৌ, মৌৰ বাসস্থান, ঋতু অনুযায়ী মৌৰ প্ৰজনন, স্বাস্থ্য ৰক্ষাত মৌৰ ভূমিকা আদিৰ বিষয়ে বক্তব্য আগবঢ়ায়। জৈৱ প্ৰযুক্তি কেন্দ্ৰৰ মল্লিকা বৰুৱা আৰু জকাৰিয়া আহমেদে আঁত ধৰা অনুষ্ঠানত চাৰিগাঁও বালিকা বিদ্যালয়ৰ প্ৰধান শিক্ষয়িত্ৰী নবনীতা নেওগে শলাগৰ শৰাই আগবঢ়ায়। অনুষ্ঠানৰ লগত সংগতি ৰাখি ছাত্ৰীসকলক মৌ-পালন কেন্দ্ৰত মৌৰ পৰা সামগ্ৰী প্ৰস্তুত কৰা সম্পৰ্কে ব্যৱহাৰিক প্ৰশিক্ষণ দিয়ে।



## INVITED ARTICLE



### The Significance of Cultivating an Entrepreneurial Mindset

**Anshuman Goswami**

Co-Founder & CEO, NE CRAFTERS

[www.necrafters.com](http://www.necrafters.com)

Email: [anshumangoswami87@gmail.com](mailto:anshumangoswami87@gmail.com)

In the fast-paced and ever-evolving landscape of the 21st century, possessing an entrepreneurial mindset is increasingly crucial. More than just a buzzword, it represents a way of thinking and approaching challenges that are vital for success, whether in business, education, or everyday life.

At its core, an entrepreneurial mindset is about embracing innovation, creativity, and risk-taking. It's about seeing opportunities where others see obstacles and being willing to step outside one's comfort zone to pursue them. In a world where change is constant and disruption is the norm, individuals with an entrepreneurial mindset are better equipped to adapt, thrive, and seize new opportunities as they arise.

One of the key aspects of an entrepreneurial mindset is its emphasis on problem-solving. Entrepreneurs are natural problem-solvers, constantly seeking out solutions to the challenges they encounter. This mindset encourages individuals to approach problems with creativity and resourcefulness, finding new and innovative ways to overcome obstacles.

Moreover, an entrepreneurial mindset fosters a culture of resilience and perseverance. Failure is not seen as the end but rather as a learning opportunity, a chance to iterate, adapt, and grow. This resilience is essential in today's world, where success often requires the ability to bounce back from setbacks and keep pushing forward in the face of adversity.

Importantly, an entrepreneurial mindset is not limited to those starting their own businesses. It's a mindset that can benefit individuals in all areas of life, from pursuing career opportunities to tackling personal goals. In an increasingly competitive job market, employers are increasingly seeking out candidates who demonstrate entrepreneurial qualities such as initiative, creativity, and problem-solving ability.

In conclusion, the importance of an entrepreneurial mindset cannot be overstated. In a world that is constantly changing and evolving, individuals who possess this mindset are better equipped to navigate uncertainty, seize opportunities, and create positive change. By fostering an entrepreneurial mindset in ourselves and others, we can unlock our full potential and shape a brighter future for ourselves and for society as a whole.

## MISCELLANEOUS

### Editorial Board

**Advisor:**

**Dr. Sumbit Chaliha**

**Chief Editor:**

**Dr. Sangeeta Das**

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**Mr. Zakaria Ahmed**

**Member:**

**Ms Mallika Boruah**

