### A Brief Report

on

#### **National Conference**

on

# Science and Technology for Sustainable Development (STSD-2022)



**Organized Jointly**By



Science College, Kokrajhar



Vijnana Bharati, NESM

In collaboration with

&



IASST, Guwahati



and

NECTAR, Shillong

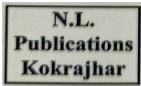
Venue: Science College, Kokrajhar BTR, Assam, India

Date: 9th & 10th September, 2022

#### **Introduction:**

A two-day national conference on Science and Technology for Sustainable Development (STSD - 2022) was organized jointly by Science College, Kokrajhar & Vijnana Bharati, NESM in collaboration with the Institute of Advance Study in Science and Technology (IASST), Guwahati and North East Centre for Technology Application and Reach (NECTAR), Shillong from 9<sup>th</sup> to 10<sup>th</sup> September, 2022. This was the first ever interdisciplinary conference on science organized by Science College, Kokrajhar in offline mode. A good number of eminent speakers, delegates, guests and scholars from different parts of the country participated and shared their knowledge and views on the contribution of Science & Technology to the sustainable development of society. The conference received sponsorship from IASST, Guwahati, NECTAR, Shillong, ASTEC, Guwahati, NTPC, Bongaigaon, SBI, Kokrajhar, IOCL, Bongaigaon Refinery, and many others.







The inaugural ceremony of the conference was held on the 9<sup>th</sup> of September, 2022 at 10 AM at the Neel Kamal Brahma auditorium of Science College, Kokrajhar. The conference was inaugurated by Sjt. Arup Kumar Dey Hon'ble Executive Member of Bodoland Territorial Council. In his inaugural speech, the hon'ble EM emphasized the popularization of Indian science for the sustainable development of society. The inaugural session was graced by Prof. Laishram Ladu Singh, Hon'ble Vice-Chancellor of Bodoland University, Kokrajhar, Dr. Dhurba Sharma, Deputy Registrar, Institute of Advanced Study in Science and Technology, (IASST) Guwahati, Mr Paresh Mathur, Additional General Manager, NTPC, Bongaigaon, Prof. Debendra Mohan, Professor of Civil Engineering, IIT, Banaras Hindu University, Prof. Hilloljyoti Singha, Professor & Head of the Department of Zoology of Bodoland University and many others. Eminent personalities from various colleges and universities were also there to embellish the inaugural ceremony.

The registration record of the conference reflects the participation of 259 persons in the conference. The conference was held in seventeen (17) technical sessions consisting of Keynote and Plenary lectures, Invited Talks and Oral presentations. Prof. Hilloljyoti Singha, Professor & Head, Department of Zoology, Bodoland University was the Keynote Speaker. Mr. Paresh Mathur, Additional General Manager, NTPC, Bongaigaon and Dr. Dhruba Sharma, Deputy Registrar, IASST, Guwahati were the plenary speakers.

#### Statistics of the conference:

Sl. No.	Registered as	No.
1	Keynote speaker	1
2	Plenary speaker	2
2	Invited speakers	20
3	Delegates	50
4	Oral presenters	126
5	Participants	60
	Total	259

#### ORGANIZING COMMITTEE

#### **National Advisory Board:**

Prof. Parimal Ch. Bhattacharjee, President, VIBHA-NESM

Dr. Arup Kumar Mistra, Chairman, Pollution Control Board, Assam

Prof. Ashis K. Mukherjee, Director, IASST, Guwahati

Dr. Arun Kumar Sarma, Director General, NECTAR, Shillong

Sri Jayant Sahasrabudhe, National Organizing Secretary, Vijnana Bharati

Prof. Probodh Borah, College of Veterinary Science, Guwahati

Prof. Devendra Mohan, *Professor*, *IIT-BHU* 

Prof. Sandip Das, Dean, Faculty of Science & Technology, Bodoland University

Dr. Vivek Kumar, Sr. Innovation Officer & Head, NIF, India

Dr. Sunil Kumar Paul, Chief Scientist, RARC, Gossaigaon, BTR

Patron: Dr. R. N. Sinha, Principal, Science College, Kokrajhar

Chairperson: Dr. Sharmistha Chakraborty, Vice Principal, Science College, Kokrajhar

**Co-Chairperson :** Mr. Biswajit Nath, *Coordinator*, *IQAC*, *Science College*, *Kokrajhar* 

**Convenors:** Mr. Sudeep Dey, Asstt. Professor, Department of Mathematics

Mr. Rajib Sarma, General Secretary, Vijnana Bharati, NESM

Joint Convenors: Mr. Babla Ch. Ghosh, Joint Coordinator, IQAC, Science College, Kokrajhar

Dr. Mohesh Gogoi, Asstt. Professor, Department of Botany

**Treasurer:** Dr Jahnovi Brahma, Asstt. Professor, Department of Botany

#### **Organizing Secretaries:**

Dr. Mamoni Dhar, Head, Department of Mathematics

Dr. Sanjib Brahma, *Head*, *Department of Botany* 

Dr. Ashok Singh, Head, Department of Physics

Dr. Anuradha Singha, Librarian, Science College, Kokrajhar

Dr. Tribeni Mandal, Head, Department of English

Dr. Mehdi Al Kausor, Asstt. Professor, Department of Chemistry

Dr. Manika Das, Asstt. Professor, Department of Zoology

Mr. Safiqul Islam, Head, Department of Computer Sc.

Mr. Badhaditya Narzary, *Head*, *Department of I.T*.

Dr. H.A.T. Laskar, Asstt Professor, Department of Physiotherapy

## A glimpse of the National Conference

## Inaugural Ceremony of STSD-2022 (09.09.2022)



Lighting of Lamp by Guests and Saraswati Vandana by the Students of Sankardev Shishu Niketan, Kokrajhar



Lighting of Lamp by Sjt. Arup Kr. Dey, Hon'ble EM, BTC and Chief Guest of the Inaugural Session.



Inaugural song (College Anthem) by the students of Science College, Kokrajhar



Felicitation of Guests in the Inaugural Session



Inaugural speech by the Chief guest Sjt, Arup Kumar Dey Executive Member, Health and Family Welfare Bodoland Territorial Council



Inauguration of Book of Abstract of the conference



Participants

# **Keynote and plenary session** (09-09-2022)







Keynote lecture by Prof. Hilloljyoti Singha, Professor & Head, Department of Zoology, Bodoland University

## Plenary talk (09-09-2022)

#### 1. Mr. Paresh Mathur, AGM (TS), NTPC, Bongaigaon, Salakati





Plenary talk by **Mr. Paresh Mathur**, Additional General Manager, NTPC, Bongaigaon on the topic "**Nowhere to Every Where; An Epitome of Sustainable Growth**"

#### 2. Dr. Dhruba Sharma, Dy. Registrar, IASST, Guwahati





Plenary talk by **Dr. Dhruba Sharma**, Dy. Registrar, IASST, Guwahati on the topic "**Demonstration based science eduction for School Students - An initiative of IASST for the promoting Science Education in Accordance with New Education Policy**"

#### **Technicals session**



Invited talk by **Prof. Sanjay Basumatary**, Professor & Head, Department of Chemistry, Bodoland University



Presentation of certificate and memento to Dr. Pranjal Kalita, Associate Professor, CIT, Kokrajhar



Invited talk by Prof. Devendra Mohan, Professor, Civil, Engineering, IIT-BHU, Varanasi



Presentation of certificate to **Dr. Apurbajyoti Mazumdar**, Librarian, Assam University, Silchar









Presentation of paper by participants











Cultural program on 09-09-2022



Members from joint-organizer Vijnana Bharati, NESM



Invited speakers with participants



Invited speakers with participants



**Invited speaker with participants** 



Invited talk by Dr. Akshya Kumar Haloi, Bhattadev University



After valedictory session

#### **Valedictory Session:**

In the valedictory session, the welcome address was delivered by Mr. Biswajit Nath, Co-Chairperson, STSD-2022. Convenor of the conference Mr. S. Dey presented a brief report on the conference. Followed by feedback from the participants. Joint-Convenor, Mr. Babla Chandra Ghosh offer a vote of thanks at the end of the conference.

## **List of Invited Lectures**

Sl No.	Title of Invited Lecture	Name of Speaker
1.	Low-cost and Environment-Friendly Approach for Removal of Trace Toxins	<b>Prof. Devendra Mohan</b> Dept. of Civil Engineering IIT (BHU)
2.	NTPC – Nowhere to Every Where; An Epitome of Sustainable Growth.	Mr. Paresh Mathur A. G. M. NTPC, Bongaigaon
3.	Demonstration Based Science Education For School Students - An Initiative Of Iasst For Promoting Science Education In Accordance With New Education Policy	<b>Dr. Dhruba Sharma</b> IASST, Guwahati
4.	Diversity of ethnic foods in the northeast: prospect of developing functional food and sustainable livelihood	<b>Dr. M. J. Bhattacharjee</b> IASST, Guwahati
5.	North East Centre for Technology Application & Reach (NECTAR)	<b>Dr. Arun Kumar Sarma</b> NECTAR, Shillong, Meghalaya
6.	Biomass-based materials as efficient solid catalyst for synthesis of renewable biodiesel	Prof. Sanjay Basumatary Dept. of Chemistry, Bodoland University
7.	Sustainable Materials for Chemicals and Clean Technology	<b>Dr.PranjalKalita</b> Dept. of Chemistry, CIT, Kokrajhar
8.	Ion Beam Effect on Structural, Optical and Morphological Properties of Semiconducting Materials	<b>Dr. Prince Kumar Mochahari</b> Dept. of Physics, Bodoland University
9.	Eri silk based silver nanoparticle: Sustainable material for antibacterial activity	<b>Dr. Manasi Buzar Baruah</b> Dept. of Physics, CIT, Kokrajhar
10.	Mathematical modelling of conflict Analysis using Neutrosophic logic	<b>Dr. Gautam Chandra Ray</b> Dept. of Mathematics, CIT, Kokrajhar
11.	L-Uniform Spaces	<b>Dr. Dipak Kr. Mitra</b> Dept. of Mathematical Sc., B.U.
12.	Birds as Bioindicators in Urban Ecological Study	Prof. Hilloljyoti Singha Dept. of Zoology, Bodoland University
13.	Environmental Heath: Challenges and future directions of endocrine disrupting chemicals	<b>Dr.Akshay Kumar Haloi</b> Dept. of Zoology, Bhattadev University
14.	'Angiospermic Flora' of Assam: Species Novelty, Rediscovery and New additions	<b>Dr. Sanjib Baruah</b> Dept. of Botany, Bodoland University
15.	Potentiality Of Cover Crops In Sustaining Vegetable Production	<b>Dr.Sanchita Brahma</b> Dept. of Horticulture, SCSC of Agriculture

16.	Bibliographic Analysis: The Factor Which Determine The "Impact" Of Scientific Research	<b>Dr. Apurba J. Majumder</b> Assam University, Silchar
17.	Front-End Processing Of Speech Signal: An Experimental Study With Reference to Bodo Language	<b>Dr. Manoj Kumar Deka</b> Dept. of Com. Sc. & Technol., B.U.
18.	Physiotherapy as a Sustainable Health Care Management	<b>Dr.JoybiHeikrujam</b> RIMS, Imphal, Manipur
19.	Physical therapy for maintenance of sustained health	<b>Dr.Ujwal Bhattacharya</b> Professor cum Dean, Pratiksha Institute of Allied Health Sciences
20.	Bio-Centric World View -Eco critical reading of K V Raghupati and NilamaniPhookan's poetry	<b>Dr.Sanjib Kumar Sarma</b> Department of English, Dispur College, Guwahati

## PROGRAMME SCHEDULE

# FOR THE CONFERENCE SCIENCE AND TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT (STSD - 2022)

Date	Sl. No.	Time	Programme
			Spot Registration
	1	08:00 - 09:30 AM	Distribution of Conference Kit
			Breakfast
	2	10:00 - 11:00 AM	Inaugural Session
	3	11:00 - 11:30 AM	High Tea
022	4	11:30 - 01:30 PM	Key Note Lecture & Plenary Session
09/09/2022 DAY-1	5	01:30 - 02:30 PM	Lunch
06) D	6	02:45 - 04:45 PM	1st Technical Session
	7	04:45 - 05:00 PM	Tea
	8	05:00 - 07:00 PM	2nd Technical Session
	9	07:00 - 07:30 PM	Tea
	10	07:30 - 08:30 PM	Cultural Programme
	11	8:30 PM	Dinner

Date	Sl. No.	Time	Programme
	1	08:00 - 09:00 AM	Breakfast
23	2	09:00 - 11:00 AM	3rd Technical Session
10/09/2022 DAY-2	3	11:00 - 11:15AM	Tea
0/09 DA	4	11:15 - 01:15 PM	4th Technical Session
<b> </b>	5	01:30 - 02:30 PM	Lunch
	6	03:00 - 04:30 PM	Valedictory Session

#### NATIONAL CONFERENCE ON SCIENCE & TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT (STSD-2022)

#### **Technical Session Details**

09/09/2022 (DAY-1)

			DETAILS OF PARALLEL TECHNICAL SESSIONS				
Date	Session	Time	Venue	Venue	Venue	Venue	
			Gallery-1	Room No-121	Gallery-2	Physics Lab	
	Technical	2:45-	Invited Lecture by <b>Dr.Anupam Bhattacharjee,</b> Sr. Research  ScholarI.A.S.S.T., Guwahati	Invited Lecture by <b>Dr. Dipak Kr. Mitra,</b> Dept. of Mathematical Sc.  B. U., Kokrajhar	Invited Lecture by Prof. Sanjay BasumataryDept. of Chemistry B. U., Kokrajhar	Invited Lecture by <b>Dr. Sanjib Baruah</b> Dept. of Botany  B. U., Kokrajhar	
	Session-1	4:45 pm	Sub.: Zoology, No. of OP: 7	Sub.: Maths, No. of OP: 8	Sub.: Chemistry, No. of OP: 8	Sub.: Botany, No. of OP: 7	
09/09/22		<b>p</b>	OP Code Nos.: ZOO-01, ZOO-05, ZOO-07, ZOO-08, ZOO-12, ZOO-19, ZOO-20	OP Code Nos.: MAT-01, MAT-02, MAT-03, MAT-04, MAT-05, MAT-06, MAT-07, MAT-08	OP Code Nos.: CHE-01, CHE-03, CHE-04, CHE-05, CHE-09, CHE-10, CHE-11, CHE-12	OP Code Nos.: BOT-01, BOT-02, BOT-03, BOT-04, BOT-05, BOT-06, BOT-07	
0/60							
Day-1 (		5:00-	Invited Lecture by Prof. Hilloljyoti SinghaDept. of Zoology B. U., Kokrajhar	Invited Lecture by  Dr. Manoj Kumar Deka  Dept. of Com. Sc. &  Technology  B. U., Kokrajhar	Invited Lecture by  Dr.PranjalKalitaDept. of  Chemistry  C.I.T., Kokrajhar	Invited Lecture by Dr. Prince Kumar Mochahari Dept. of Physics B. U., Kokrajhar	
	Technical Session-2	7:00 pm	Sub.: Zoology, No. of OP: 7	Sub.: OP:Maths: 3& Comp. Sc: 5	Sub.: Chemistry, No. of OP: 7	Sub.: Physics, No. of OP: 7	
		hm	O.P. Code Nos.: ZOO-02, ZOO-04, ZOO-06, ZOO-09, ZOO-10, ZOO- 11,ZOO-13	OP Code Nos.: MAT-13, MAT-17, MAT-18, CSC-01, CSC-02, CSC-03, CSC-04, CSC-05	OP Code Nos.: CHE-02, CHE-06, CHE-07, CHE-08, CHE-13, CHE-14, CHE-15	OP Code Nos.: PHY-01, PHY-03, PHY-06, PHY-07, PHY-08, PHY-09, PHY-14	

# NATIONAL CONFERENCE ONSCIENCE & TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT (STSD-2022) Technical Session Details 10/09/2022 (DAY-2)

				DETAILS OF PARALI	LEL TECHNICAL SESSIONS	
Date	Session	Time	Venue	Venue	Venue	Venue
			Gallery-1	Room No-121	Gallery-2	Physics Lab
	Technical	9:00-	Invited Lecture by  Dr.Akshay Kumar  HaloiDept. of Zoology  Bhattadev University,  Bajali	Invited Lecture by <b>Dr. Gautam Ch. Roy</b> Dept. of Mathematics  C.I.T., Kokrajhar	Invited Lecture by Prof. Devendra Mohan Dept. of Civil Engineering I.I.T. (BHU)	Invited Lecture by <b>Dr. Manasi Buzar Baruah</b> Dept. of Physics  C.I.T., Kokrajhar
	Session-3	11:00	Sub.: Zoology, No. of OP: 7	Sub.: Maths, No. of OP: 8	Sub.: Chemistry, No. of OP: 7	Sub.: Physics, No. of OP: 8
		am	O.P. Code Nos.: ZOO-03, ZOO-14, ZOO- 15, ZOO-16, ZOO-17, ZOO-18, ZOO-28	OP Code Nos.: MAT-09, MAT-10, MAT- 11, MAT-12, MAT-14, MAT-15, MAT-16, MAT- 19	OP Code Nos.: CHE-16, CHE-17, CHE-18, CHE-19, CHE-20, CHE-21, CHE-22	OP Code Nos.: PHY-02, PHY-04, PHY-05, PHY-10, PHY-11, PHY-12, PHY-13, PHY-15
/22						
Day-2 10/09/22	Technical	11:15-	Invited Lecture by <b>Dr. Kushal Choudhury</b> Dept. of Zoology  B. U., Kokrajhar	Invited Lecture by  Dr.Apurba Jyoti  Mazumdar Assam  University, SilcharDr.  Sanjib Kumar Sarma  Department of English,  Dispur College, Guwahati	Invited Lecture by  Dr.JoybiHeikrujam  R.I.M.S., Imphal, Manipur&  Dr.Ujwal Bhattacharya,  Professor cum Dean,  Pratiksha Institute of Allied Health Sciences	Invited Lecture by  Dr.Sanchita Brahma,  Dept. of Horticulture  S.C.S.C. of Agriculture  Prof. JatinSarmaDept. of  Biotechnology,  B. U., Kokrajhar
	Session-4	1:15 pm	Sub.: Zoology, No. of OP: 7	Sub.: Library & IS: 6 & Others: 6	Sub.: Physiotherapy, No. of OP: 5	Sub.: Botany: 2 Biotech.: 10& Others: 1
			O.P. Code Nos.: ZOO-21, ZOO-24, ZOO- 25, ZOO-26, ZOO-27, ZOO-22, ZOO-23	OP Code Nos.: LIS-01, LIS-02, LIS-03 LIS-04, LIS-05, LIS-06, MSC-01, MSC-02, MSC- 3, MSC-05, MSC-06, MSC-07	OP Code Nos.: PYT-01, PYT -02, PYT -03, PYT -04, PYT -05	OP Code Nos.: BOT-08, BOT-09 BIO-01, BIO-02, BIO-03, BIO-04,BIO-05, BIO-06, BIO-07, BIO-08, BIO-09, BIO-10, MSC-04











# NATIONAL CONFERENCE ON

# SCIENCE & TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT (STSD-2022)

Organized jointly by

SCIENCE COLLEGE, KOKRAJHAR & VIJNANA BHARATI, NESM

(In collaboration with)

IASST, Guwahati, India & NECTAR, Shillong, India







Mr. Abhijit Das

of

Central Institute of Technology, Kokrajhar

has presented a paper entitled "Handwritten Assamese Character and Digit Recognition System" in the National Conference on "Science & Technology for Sustainable Development (STSD-2022)" held on 9th-10th September, 2022 at Science College, Kokrajhar, Assam, India.

Principal Science College, Kokrajhar

President Viinana Bharati, NESM Chairperson National Conference STSD-2022

Convenor National Conference STSD-2022 Convenor National Conference STSD-2022 Organizing Secretary National Conference STSD-2022

Figure: Format of Certificate

#### Reported as News in State Dailies



Agrodoot barta 10-09-2022



Yugasankha, 11-09-2022



The Assam Tribune, 13-09-2022

The National Conference on "Science & Technology for Sustainable Development (STSD-2022) provide a platform to bring Academicians, Scientists, Scholars, Industrialists, Scholars and students from various institutions, universities, colleges and industries from different parts of the country. The relevance of various areas in the Science & Technology for Sustainable Development of the future of mankind was explored as well as shared views in the conference. The highlight of the conference was the most recent development in the field of Science & Technology with an emphasis on sustainable development.

Mr. Sudeep Dey Convenor, STSD-2022

&

Assistant Professor Science College, Kokrajhar NATIONAL CONFERENCE ON SCIENCE & TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT (STSD-2022)

## REGISTRATION DETAILS

#### **BIOTECHNOLOGY**

SI. No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
1.	BIO-01  Noymi Basumatary, Dipankar Baruah, P. Kr. Sarma and Jatin Sarmah  Global burden of Glucose-6-phosodehydrogenase (G6PD) deficiency- a known asymptomatic genetic disorder: a study from Bodoland Territorial F		dehydrogenase (G6PD) deficiency- a lesser known asymptomatic genetic disorder: a pilot study from Bodoland Territorial Region (BTR), Assam	Online Registered		Hoyni Basunatay
2./	BIO-02 Rijumoni Daimari, Silistina Narzari, and Jatin Sarmah Narzari, and Jatin Sarmah Narzari, and Jatin Sarmah		Online Registered		Manilá Daimari Visha Somowal	
3./	Genetic Diversity Assessment in Rice bean		Online Registered	/	Trista Somowal	
4.	BIO-04	Meghali Mree Narjari and Silistina Narzari	A check list of grasshoppers (orthoptera) in Khalingduar Reserve Forest, Udalguri district of Assam.	Online Registered		
5/	BIO-05	Mrinal Kalita, Sushil Kumar Middha, Debadin Bose, Arvind Kumar Goyal	A survey of <i>Posa Kumura</i> (self-degraded <i>Benincasa hispida</i> fruit), an ethnic food of Assam: production technique & ethnobotany		-	Mrumal Kaliba.
6.	BIO-06	Sonam, Markandeya, S.P. Shukla, Devendra Mohan	Antimicrobial Resistance: Emergence, Spread and Role of Food Habits			A. San
7.	BIO-07	Kapil Sharma, Devendra Mohan	Birthomas			· · · · · · · · · · · · · · · · · · ·
8.	BIO-08	Devendra Mohan, Surendra  Kumar Pandey, Vaibhav  Pandey, and co-workers	and Around Varanasi Region: Some	and the second		
9,	BIO-09	Sudem Brahma, Sushil Kumar Middah. Talambedu Usha, Arvind Kumar Goyal	Identification of bioactive components and antioxidant activity of HOPE- a novel polyherbal formulation for diabetes	Registered		Sudem Brahma
10.	BIO-10	Banjai Mochahary, Sushi Kumar Middah <sup>2</sup> . Talambedu	Physicochemical and antioxidant properties of	Online Registered		Banjai Nachah

732,41	Usha, Arvind Kumar Goyal	hepatoprotection	

## **BOTANY**

Sl. No.	O.P. Code No.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
1	BOT-01	<u>Jyotirekha Chakravarty</u> and Adani Lokho	Vegetable Cultivation in Murshidabad District, West Bengal, India: Present Scenario	Online Registered		High 10/04/20
2	BOT-02	Hirokjvoti Das, Tripti Roy, Tapati Poddar, Devlina Das, Indira Devi and Mohesh Gogoi	Genetic diversity of Citrus limon (L.) Brum f. (Assam lemon) and technological intervention in nursery for enhancing its production	Online Registered	· /	Participant  For 10/09/2
3.	BOT-03	Nilanjana Rajbonshi	Therapeutic potential of Garcinia pedunculata Roxb. (Borthekera) and it's other uses: A review	Online Registered		
4.	BOT-04	Sanjib Brahma	Plant diversity of remote villages of Bodo tribe: Plants used for fun and games.	Online Registered		
5.	BOT-05	Sanswrang Basumatary and Sanjib Baruah	Angiosperm Diversity of Chirang Reserve Forest in Manas Biosphere Reserve of Assam, India	Online Registered		Sanswaray.
6.	ВОТ-06	Vinod Upadhyay, Sanchita Brahma, Bikash Ḥazarika, Manha Bathrai and Sunil Kumar	Dragonfruit Cultivation: Diversification towards High Value Fruitcrop for Doubling Farmers Income in Assam	Online Registered	/	J 09/09/2
7.	BOT-07	Mahadev Uzir Băsumatary and R.K. Saud	Integrated nutrient management in rice - buckwheat cropping sequence	Online Registered		
8.	BOT-08	Bidinti Brahma and Jahnovi Brahma	growing Bonsai in Kokrajhar District. BTR, Assam	Online Registered		
9./	ВОТ-09	Rafwt Gwra, Ritu Shah. Chitra Goyary and Yutika Narzary		Online Registered		Rafiot Gwa Basumatary

## ZOOLOGY

SI. N	No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant	
u		ZOO-01	Nijira Brahma and Bhisma Narayan Swargiari	Effect on AChE activity in chronic toxicity of cadmium in Brotia (Antimelania) Costula	Online Registered	1	N8 A A	Ja Va
/:	2.	ZOO-02	Priyanka Narzary and Hilliljyoti Singha	Distribution and Population Abundance of Red-Vented Bulbul (pycnonotus cafer) in Kokraihar Town, Assam	Online Registered		Priyanka Kly	N
N.	3.	ZOO-03	Nisha Brahma and Hilliljyoti Singha	Peoples Perception towards Garden Lizard (calotes versicolor) in Gwjwnpuri area, Kokraihar BTR, Assam.	Online Registered	-	Nisha Brahma r	Brown
	4.	ZOO-04	Miniswrang Borgoyary and Rajib Ratan Kashyap	A preliminary study on ichthyofaunal diversity of Talu-Malu beel of Dhubri	Online Registered		- Paparlehi Mushdor	4 /29
1	5.	ZOO-05	Hatarkhi Mwchahary and Dulur Brahma	Diversity Assessment Of Residential Gut Bacteria In Eri Silkworm (S. Ricini) Larvae Through 16s Metagenomic Approach	Registered		Totankhi Vimenos	10
2 >	6.7	ZOO-06	Saurabh Mardi and Hilliljyoti Singha	Spotted Deer: A Literature trail (1830-2021)	Online Registered		2000 4 (22 ·	- 6
×	29	ZOO-07	Deep Smita Nath, B. Dey, M. U. Ahmed, G. H. Sarkar, A. Nath, R. Sutradhar, B. Goyari, P. Patgiri and Hilliliyoti Singha	A rapid bird survey in Chakrasilia whether Sanctuary	Online Registered		Doephole	
1.	8.	ZOO-08	Bishal Basumatary, H. Bharali, C. Bora, B. Kashyap, N. Islam, S. Deka, R. Barman, K. Choudhury and Hilliljyoti Singha	Abundance and diversity of butterflies in the First Addition to Manas National Park of Assam, India	Registered		Barmaty	0
2	9.	ZOO-09	Dulur Brahma and Rajib Ratan Kashyap	Phytochemical analysis of food plants adopted by rearers for Ericulture in Kokrajhar District	Registered		Minisusang Kajibkat Bogoyang Kujibkat	en R
1.	10.	ZOO-10	Mritunjoy Kumar Roy, Monita Daimari and Ananta Swargiary	Phytochemical and antioxidant analysis of different solvent fractions of Hypericum	Online Registered		Mirday John Joseph 9	2
	W.	Z00-11	Manita Daimari, Mritunjoy Kumar Roy, and Ananta Swargiary	Phytochemical analysis and free radical scavenging properties of Phlogacanthus	1 Million		Martographit	09/2

		×	1
	20	9	1
8	97		
7			

		77*	Comia rigini on			Harely Nang
12	ZOO-12	Fangleng Narzary and Dulur Brahma	Rearing of Eri silkworm, Samia ricini on Papaya (Carica papaya) leaves during different seasons in Kokrajhar, Assam.	Online Registered		Hargley Navzer
13.	ZOO-13	Eliza Basumatary	Urban bird diversity of Kokrajhar town	Online Registered	-	Eliza Basumatary.
.14	Z00-14	Bihung Basumatary and Ananta Swargiary	Studies on check list of different fish species of Diplai Beel, Frequency and IUCN status.	Online Registered		Beling Camme
15	Z00-15	Mondeep Thakuria and	Impact of human disturbance on bird diversity in the Champamati Barrage Reservoir	Online Registered		Money Trakertia
15.	Z00-16	Hilliljyoti Singha  Meghraj Barman, Papiya  Das and Kushal Choudhury	A preliminary study on the Grasshopper community (Order: Orthoptera) in and around the Bodoland University campus, Assam	Online Registered		Maghouj Barmon.
17.	ZOO-17	Pforeni Jane Sapruna, Hilliljyoti Singha and Kushal Choudhury	Is Environmental Temperature a Factor to Change the Size of Eyespot in Butterflies? A preliminary Literature Review	Online Registered	25.46	
18.	ZOO-18	Firdus Ali, Kushal Choudhury and Hilliljyoti	Density and flight heights among the Firelies in Bodoland University Campus, Kokrajhar,	Online Registered	~	Findus Ale
19.	ZOO-19	Bainu Brahma, Saurabh Mardi, Deep Smita Nath and Hilliljyoti Singha	Roosting Ecology of Indian flying fox Pteropus giganteus in sal trees Shorea robusta in Gossaigaon College Campus,	Registered	3	Baime Brahma
20.	ZOO-20	Biehitra Narzary and Bronson Kr. Khangembam	Indigenous Ornamental Fish Diversity of Kokrajhar and its Potential: A Case Study	Registered		Miniswoong Boszosom
21.	Z00-21	Amarjyoti Nath and Hilliljyoti Singha	The impact of anthropogenic activities or avifaunal diversity in Sareswar Beel Kokraihar	Registered		
22.	ZOO-22	Tamal Das and Manika Das	Management of Stored grain pest and granary	e Online		
×3.	Z00-23	Kundan Rabi Das and Jwngma Narzary	A study on Amphibian fauna of Choraikhol.	Registered	~	258
2 24	ZOO-24	Karan Brahma Choudhury Saurabh Mardi and Hilliljyot	Survey of Common Myna (Acridothere tristis) nest in Kokrajhar town, Assam:	Online Registered		chy.
- 625.	Z00-25	Singh  Debasmita Purkayastha and	1 : 1 - 1 on Corvi	is Online	1	Debarmita Pur kay ar

		Hilliliyoti Singha	splendens and Corvus macrorhynchos in	Registered			
			Silchar, Assam			Bhan Pinja Nry	Bu
128	ZOO-26	II'll'limeti Cingho	Raganshali Kokraihar	Registereu	/	1	
27.	Z00-27	Dipika Chetry, Hilliljyoti	Comparative Ecology of House Sparrow and Tree Sparrow in areas Kokrajhar Town,	Online Registered	/	Dipiha Chebry	Ph.
28.	ZOO-28		Fish diversity of 2 no. Chawolkhua bamuna Reel and its Management, Barpeta District,	Online Registered	/	Manika Las	

## **CHEMISTRY**

Sl. No.	O.P. Code No.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
١٠.	CHE-01	Bipul Kr. Nath, Mofizul Hussain and Md. Amanur Rahman	Preparation and characterization of modified MCM-48	Online Registered	<b>/</b>	A Ser
2/	CHE-02	Bidangshri Basumatary and Sanjay Basumatary	Utilization of an agro-waste and highly efficient heterogeneous catalyst for conversion of Jatropha curcas oil into biodiesel	Online Registered		Bidanghmi Basuhatangk
3.	CHE-03	Deepmoni Brahma and Hemaprobha Saikia	Synthesis of ZrO <sub>2</sub> /MgAl-LDH composites and evaluation of its isotherm, kinetics and thermodynamic properties in the adsorption of congo red dye	Online Registered		Delpmini Brahma
4.	CHE-04	Murshida Karim	Synthesis of a few Chalcones and their Bromination using TBATB as green Brominating Agent	Registered		Roy
\$.	CHE-05	Maromi Roy and Dhrubajyoti Haloi	Emulsion Prepared Vinyl Acetate based Terpolymers and their Properties: A Review	Online Registered		Maroni Roy
6/	CHE-06	Bhaskar Barman. Anamika Kalita Deka and Arunendu Mondal	Study of Antioxidant activity of polyherbal green tea using DPPH assay	Registered		Bharshar Bounaur.
7	CHE-07	Sujata Brahma and Sanjay Basumatary	chinensis based neterogeneous catalyst.	Registered		Brankor Bourden . Sujula Brahma J. Achinta Medhe
8.	CHE-08	Achinta Medhi and Dhrubajyoti Haloi		Registered		House Mense

			Organo-functionalized waste cashew nut			
9,	CHE-09	Sudem Borgayary, Dulu Brahma and Pranjal Kalita	shell(Anacardium occidentale): A sustainable heterogeneous solid acid catalyst for production of 5-HMF.	Online Registered		(Sh)
10.	CHE-10	Nijara Das and Pranjal Kalita	Recent advances of Graphitic Carbon Nitride as a metal-free solid-base catalyst	Online Registered	-	Mijare das
11	CHE-11	Anamika Baishya and Pranjal Kalita	Highly active Ru-incorporated reduced graphene oxide: for solvent free oxidative coupling of benzylamine to imine	Online Registered	-	Anamiko Baishyo
12.	CHE-12	<b>Deepjyoti Ghosh</b> and Pranjal Kalita	Production of 5-Hydroxymethylfurfural from Fructose over Cr-KIT5 Mesoporous Solid Acid Catalyst Under Biphasic Solvent System	Online Registered		Deepjysti Yhosh
13.	CHE-13	Sharmistha Chakraborty	A Review on the Nutritional Benefits of small food fishes available in rural areas of Kokrajhar ,BTR, Assam	Online Registered		
14.	CHE-14	Swarna Kamal Dey	Antidiabetic efficacy of aqueous-methanolic leaf extract of <i>Bambusa tulda</i> in alloxan-induced diabetes rats	Online Registered		
15.	CHE-15	Bimal Boro and Basanta Kr. Das	Detection of pesticide residues in few vegetables cultivated in udalguri district of Assam and there probable impacts on human health.	Online Registered	~	Bimal Boss.
16,	CHE-16	Pradyumna Ghosal, <u>Sujata</u> <u>Brahma</u> and Mehdi Al  Kausor	Adsorptive removal of phenol from wastewater by crushed brick powder: Influence of system parameters.	Online Registered		Sujala Brahm
17.	CHE-17	Sanjukta Roy, Megha Dutta and Biswajit Nath	Waste plant-based green synthesis of zinc nanoparticle and its characterisation	Online Registered		
18.	CHE-18	Rupjyoti Nath	Biosynthesis of ZnO NPs	Online Registered		
19.	CHE-19	<u>Debasis Borah</u> and Hemaprobha Saikia	An efficient green protocol for Knoevenagel condensation of benzaldehyde with ethyl cyanoacetate in water catalyzed by Na and Ru incorporated bentonite.	Online Registered		K Contraction of the Contraction
20.	CHE-20	Mizanur Rahman	Investigation on the rate of horizontal spread of phenanthrene in a sandy clay soil	graband		
21.	CHE-21	Mohammed Ali	Composite nanoparticle membrane applying click chemistry: Solution to charge dependent			•

			nano object filtration		
22.	CHE-22	Taznur Ahmed, Susmita Sen Gupta	Bi <sub>2</sub> Fe <sub>4</sub> O <sub>9</sub> – GO nanocomposite preparation for of Methylene Blue dye uptake from aqueous effluent	Online Registered	

## **PHYSICS**

Sl. No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant	
1.	Code No. PHY-01	Arvind Anand, K. B. Singh and Gopal JEE	Study of Josephson Tunnelling Effect across a Superconductor Potential Barrier Junction	Online Registered	/	Among Avong	F
12.	PHY-02	Santanu Sen, R. K. Parida and B. N. Parida	Improved Optical, Dielectric, and Impedance Spectroscopy of BFO solid solution due to Inclusion of CaTiO <sub>3</sub>	Online Registered	4		
3.	PHY-03	Suvankar Saha and Prince Kr. Mochahari	Plant mediated green synthesis of Silver nanoparticles using Tinospora Cardifolia leaf extract and study their optical and photocatalytic properties	Online Registered		180 PM	1
4,	PHY-04	Samir Thakur, Sankar M. Borah, Ashok Singh, Dilip Saikia and Nirab C. Adhikary	Studies on structural, electronic and spectroscopic properties of Bi-doped graphene quantum dot	Online Registered	V	Sile	6
5.	PHY-05	Rajive Kumar Basumatary and Rajeeb Brahma	Synthesis and investigation of lead free, non- rare earth ferroelectric / multiferroic materials.	Online Registered	_	Rajive Kr., Bosumodary	
6	PHY-06	Mousumi Narzary, Riu Riu Wary, Bidhu Bhisan Brahma and Manasi Buzar Baruah	Recent Advancements of Sustainable Bamboo Leaves for Nanotechnology	Online Registered		Narzary	
1. 7.	PHY-07	Riu Riu Wary, Pranjal Kalita and Manasi Buzar Baruah	Designing Hollow Ag <sub>3</sub> PO <sub>4</sub> Photocatalyst for the Wastewater Remediation	Registered		Reu Riu Wary	94
8.	PHY-08	Ashok Singh, Samir Thakur and Nirab Adhikary	Wavelet and scaling analysis of rainfall time	Online		Whi.	
9.	PHY-09	Rabindra Mahato and Baruah Monmoyuri	Spectral Analysis of RGS data of GX13+1 NSLMXB	Online Registered	-	Shire.	23
10.	PHY-10	Femina Brahma, S. Bhattacharjee, R. L Hota and B. N. Parida	Investigation of electrical impedance and leakage current of La- modified BiFeO <sub>3</sub> -	Online Registered	1		

PHY-11	Bikash Dey and S. K. Srivastava	Influence of potassium doping on structural, optical, and magnetic property of ZnO compound	Online Registered		Bikash Dey 2
PHY-12	Bidhu Bhushan Brahma and Manasi Buzar Baruah	Comparative studies of silk fibroin for	Online Registered	-	M. W.
13. PHY-13	Leeladhar Chouhan and Sandeep Kumar Srivastava	Non-Magnetic Element Doped ZrO2 as	Online Registered		
14. PHY-14	Kamaljyoti Talukdar	Modeling of combined steam turbine plant and	Online Registered	<u></u>	Kamaljyak Kandyyak Zalek k
15. PHY-15	Dhaneswar Kalita	Dependance of Structural and Optical Parameters of Vacuum Deposited CdSe	Online		ar solg

## **MATHEMATICS**

	Sl. No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
	51.110.	Code No.  MAT-01	Abdur Rohman	Edge Intersection Semigraph	Online Registered		Ableve Rohman Rhom
	2.	MAT-01	Dhajendra Rabha	The dynamical universe features of anisotropic dark energy bounce cosmological model in f(R, G) gravity.	Online Registered		Rabha / Jims
1	3.	MAT-03	Nihir Basumatary and Mukunda Dewri	LRS Bianchi type I cosmological model in f(G) gravity with logamediate scale factor	Online Registered	/	Hihis Basumatary Bosumato
>/ \/	1	MAT-04	Sudem Brahma and Dimacha Dwibrang	Urban Growths in Undivided Kokrajhar District: Reactions of Scheduled Tribes People	Online Registered		Sucken Breaking. Blama.
	15	MAT-05	Mwchahary  Metoka Narzary and and	A study of Dark Energy Models in f(Q, T) gravity	Online Registered		Metoka Noozany /M Norgan
<i>y</i>	6.	MAT-06	Mukunda Dewri  Jili Basumatary and Bhimraj Basumatary	at N. 1 CT la widel	Online Registered		Ili Basimatary.
	7.	MAT-07	Niva Rani Nath and Surajit Kumar Nath	ev-Dominating energy of semigraph	Online Registered	-	N.R. Auch Broth
	8.	MAT-08	Bishnu Prasad Brahma and Mukunda Dewri	Bianchi type-V Dark Energy in f(R,T) gravity based on Lyra Geometry with Heat Conduction	Online Registered	~	Chare told

1	9.	MAT-09	Jeevan Krishna Khaklary	A brief review on Neutro-Topological Space	Online Registered	/	De y
1	10	MAT-10	Derphungshar Basumatary and Mukunda Dewri	Magnetized Bianchi Type-VI dark energy model with electromagnetic field	Online Registered		Joba Pari R
	11.	MAT-11	Jaba Rani Narzary and Sahalad Borgoyary	A few properties of cyclic group and normal subgroup using imprecise set definition	Online Registered		Noney .
4	, 12.	MAT-12	Md. Nazir Hussain	Bezout character of distributive near ring groups	Online Registered	~	18 10
	13	MAT-13	Bikram Baro	A Study in the difference in quality of students' academic achievement in relation to their gender.	Online Registered		Bibrom Baro
	14.	MAT-14	Jwngsar Moshahary	A Note on generalized Pythagorean Bitopological space	Online Registered		
11	15.	MAT-15	Ruhul Kuddus Ahmed	Non-Newtonian Fluid Flows used in Food processing system	Online Registered	V	The state of the s
9	16	MAT-16	Bibha Rani Talukdar, Gautam Ch. Roy and Hilloljyoti Singha	How were you during the COVID-19 period? An Introspection Among the People of Assam	Registered		For 5 la 20/04/2022
P	17.	MAT-17	Sudeep Dey and Gautam Ch. Roy	Separation Axioms in Neutrosophic Topological Spaces	Online Registered		
	18.	MAT-18	Babla Ch. Ghosh and Dipankar Das	Fixed-Point Results under Quasi Week Contraction in Dislocated Quasi Metric Modular Spaces	Registered		
	19.	MAT-19	Satya Ranjan Pradhani	A Study on Stability Problems of Non-	Online Registered		

## COMPUTER SCHENCE & INFORMATION TECHNOLOGY

SI. No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
1.	Code No.	Chandamita Nath	Natural Language Processing and its Applications in Mankind	Online Registered		
2.	CSC02	Atul Aditya. Anup Kr. Barman, Prabal Baishya and Uttam Choudhury	IOT Based Garbage Monitoring System	Online Registered		
3.	CSC03	Subungshri Basumatary	Word Sense Disambiguation (WSD) using a	Online Registered		

4.	CSC04	Mithun Karmakar, Kajal Yadav and Amitava Nag	COVID-19 Detection from Radiography Chest X-ray Images Using Deep Learning Liver Assumese Character and Digit	Online Registered Online	
5.	CSC-05	Abhijit Das	X-ray Images Using Deep Learning Handwritten Assamese Character and Digit Recognition System	Registered	

## **PHYSIOTHERAPY**

SI. No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
1./	Code No. PYT-01	Santosh Kr Rajak, Abhijit Kalita, P.C.Sarma and Abhijit	Correlation between Pes Planus and Osteoarthritis of Knee in Ipsilateral leg patients: Cross sectional Study Pilot Study	Online Registered		Joon .
2./	PYT-02	Dutta  Prasenjit Bhattacharyya, Daisy Saikia and Mayuri Phukan	Study on Glenohumeral External Rotation Gain (GERG) VS Glenohumeral Internal Rotation Deficit (GIRD) in Subjunior (U-16) Badminton Players of Jorhat District, Assam	Online Registered	~	
3.	PYT-03	Abhijit Kalita and Andrew Milton	The Combined Effect of Glenohumeral End- Range Mobilization and Contract-Relax Technique for Glenohumeral Internal Rotators in Subjects with Periarthritis	Registered	~	which .
4.	PYT-04	Anjuman Nahar, Nibedita	Smartphone Application based Cervical Range	Online Registered		. ()
55	PYT-05	Das and Malaya Dutta  Montu Paul	Sustainable well being and it's correlation to	Online Registered	V	Manth Van

## LIBRARY AND INFORMATION SCIENCE

Sl. No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
SI. NO.	Code No.	Dailee Kalita and Banasri	0 1 1	Online Registered	~	Deise Kdila Banashi Deka
2.,		Biswajit Paul and Didwmtha	Implementation of a simplified way for	Online Registered	~	Sout.
3/	LIS-03	<u>Dersin Daimari</u> , Bihung Brahma and Amitava Nag	Application of Advanced Technologies in	Online Registered	V	Janu

4.	LIS-04	Alakesh Roy	Bibliographic Analysis of Doctoral Thesis of Gauhati University in Chemistry submitted in Shodhganga.	Online Registered		Alakosh hat .
5.	LIS-05	Dhan Maya Chetry	Scholarly Research Trend of Assam	Online Registered	/	D. M. Cheby
6.	LIS-06		Bibliometric Study/Analysis:Its Relevance and	Online Registered	~	Chuy

## ENGLISH AND OTHERS

Sl. No.	O.P.	Name of Author(s)	Title of Paper for Oral Presentation	Regn. Status	Kit obtained	Signature of the Participant
1.	MSC-01	Tribeni Mandal	Role of Technology in Literature	Online Registered		
2.	MSC-02	Maitrayee Sinha	Climate Change	Online Registered		
3.	MSC-03	Riazul Hoque	A Study of the Role of Literature in advancing Science and Technology	Online Registered		
4.	MSC-04	Sanatan Deka and Lukose P. J.	The scope of linking livelihoods and conservation for sustainable development among the local communities around Raimona National Park, Assam, India.	Online Registered		
5.	MSC-05	Moniruzzaman Sk.	A Critical Study of Literature and Science	Online Registered		
6.	MSC-06	Radhakrishnan Dutta	In- Between Science and Fiction: An Analysis of The Strategies of Negotiation in Amitav Ghosh's Novel "The Calcutta Chromosome"	Online Registered		
7.	MSC-07	Papori Haloi	A Critical study of the relationship of Literature and Science & Technology	Online Registered		

STUDENTS REGISTRATIO	N
----------------------	---

NAME	Acces (Fallo)	7	
	DELTC	As 500/-	
NEEKI BASUMATARY	BPT STO YEAR	· Pard(cash)	Science College Kok
Va. SUPRIYA BASUMATARY	BPT 3rd YEAR	u	College Kok
3. ELORA ROY	BPT 35d YEAR	ti	19
4. WAKIB MAHMUD	BPT STO YEAR.	",	1/2
48. KHAIRUL ISLAM HOQUE	BPT 3TD YEAR	4	vj.
MAZUMDAR			
16. RAJA BRAHMA	BPT 3rd YEAR	4	4
7. RINGKO GOYARY	BPT 3TH YEAR	11	ч
S. URPAL DHANRAJ NARZA	IRY BPT 3rd MEAR	Comment of the commen	A
LY. DATSA BORD	BPT 3rd YEAR		ч
40. JINTU KOCH	BPT 3rd YEAR	1,	- ¥
M. HITESH BASUMATAR	1 BPT 3TO YEAR	2 11	4
42. KUNGFUNG BRAHMA	BPT 412 SEME	STER "	ч
13. MILITULEE BASUMAT	ARY BPT 4 TO SE	MESTER "	٨
14. SANGWRA GAYARY	BPT 416 SE	MESTER "	Ħ
45. DOLI DAS	BPT 415 SE	MESTER .	
45. LAKHANA NARZARY	BPT 419 S	EMESTER 4	4
THANIMA ISLARY	BPT 412 S	EMESTER "	ч
48. TULTULI BRAHMA	BPT 380 YE		J
19. CHINMOY RAY	BPT 46 SE		м
20- MAHMUDHASSAN	BPT 3rd YEI	Collection of the Collection o	n
LT. DIPANITA SARKAR			ч
42. JENAMONI SOREN	BPT 3rd YE	EAR 9	J
23. HANNA SOREN	BPTHESE	MISSTED h	V
24 POOJA RANI OWARY	BPT 3rdye		u
The State of the S		Inlalama	
25- DHANANJOY BARMI	021 11 100	Para Per	1 Cia
VHANANS DY BAKMI	AN MISC 15 Sel	m. BOTANY Pai	st) college Kok
96		0	1.2
DE- TUILLY AT ROALLA	111110	out) Paid (or	m/ma)
26- THUNLAI BRAHMA	M.Sc (Pass	(SCK)	nune)
OT SAUCOTIA CANATA			
27. SANGRILA GAYARY	Guest Facul	y (paid of	ffline) 3ch
28. S			