



# **GOVERNMENT COLLEGE OF ENGINEERING AND CERAMIC TECHNOLOGY**

*Established 1941*

Accredited by NAAC with Grade A

(2015)

*73, Abinash Chandra Banerjee Lane*

*Kolkata-700010*

*West Bengal, India*

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# **ANNUAL REPORT**

## **2021-2022**



### **GOVERNMENT COLLEGE OF ENGINEERING & CERAMIC TECHNOLOGY**

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## **PREFACE**

This Institute (established on 3rd April, 1941), the then College of Ceramic Technology (Bengal Ceramic Institute) has been one of the oldest technological colleges in Kolkata and the only full-fledged college in India offering B. Tech, M. Tech. and Ph. D. programs in Ceramic Technology along with hands on trainings in traditional potteries and other ceramic products since its inception. The college has already completed 75 years of its glorious existence. The alumni of the institute are well established in their professional career and spread all over the world. They are the flag bearers of the institute

Initiating as a Diploma level institute, it was then elevated to a Degree college under Higher Education Department, Government of West Bengal and was affiliated to the University of Calcutta in the year 1962.

The institute has emerged as one of the best temples of learning and started transforming from monodiscipline institute to multi-discipline institute with the introduction of Information Technology and Computer Science & Engineering programs in 2000 and 2001 respectively. Now, the institute was affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT), formerly West Bengal University of Technology since 2001.

Research & Development are an integral part of this institute of higher learning. The institute has good research activities in the under-graduate level. From 2006-2007, students from different background are reaping the benefit of M. Tech. program in Ceramic Technology. The introduction of M. Tech program in Ceramic Technology has enormously increased the scope & possibilities for research and development. Almost all teachers, students and scholars of the college are involved in research and development activities. M. Tech. program in Information Technology has also started its journey since 2014.

GCECT received World Bank assistance under Technical Education Quality Improvement Programme (TEQIP) Phase- I and successfully reaped tangible benefits by implementing various reform measures as per guidelines resulting into development and upgradation of various laboratories and infrastructure of the whole college in recent past.

The institute also acquired one acre of land from adjacent West Bengal Small Industries Development Corporation Limited (WBSIDCL) to augment its infrastructure.

The institute received prestigious NAAC grad 'A' accreditation, a certification of the quality of the institute in the national benchmark. As a consequence, the institute received the autonomous status from the University grant commission and a substantial grant from Rashtriya Uchchatar Shiksha Abhiyan (RUSA). The grant has been used for the construction of hostel and other infrastructure. Now-a-days, the college has been able to establish its proud position in the country. This institute is not only providing latest technology oriented courses but also is equipped with good laboratory, library and other students' amenities. The students get the scope of being guided by renowned and eminent faculties to build their career.

The annual report of the institute is a reflection of the activities done in a particular year. The year 2021-22 has been an eventful year in which we had to change our conventional teaching learning and administrative processes and continue the new process in the pandemic situation due to COVID-19 which continued from 2020-21.

Several steps have been taken to manage academics including examination during COVID-19 (post March 25, 2020). The institute devised an academic system to ensure the continuity of the academic activities in the best possible ways.

All members of GCECT put their best effort to ensure that the student of the institute receive the best training to become globally competitive professional with all human values to be useful for the society.

**Prof. (Dr.) Krishnendu Chakrabarty**

*Principal*

Govt. College of Engg. & Ceramic Technology

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## ***Vision of the Institute:***

To be a centre of excellence in various fields of engineering and technology by imparting core knowledge to the students

## ***Mission of the Institute:***

M1: To impart high quality technical education with ethical values that will produce globally competitive engineers & technologists.

M2: To inculcate entrepreneurial skill and leadership quality amongst potential students.

M3: To motivate students for acquiring and eventually generating advanced knowledge.

M4: To create compassionate, responsible and innovative global citizens.

M5: To strengthen Institute-Industry interaction to make the students aware of real problems in the Industries and solutions thereof.

## ***(i) Department of Ceramic Technology:***

### ***Vision:***

To emerge as a world class centre for education and research in the field of Ceramics, Glass and allied materials to serve the Industry and the society at large.

### ***Mission:***

- To generate an environment in the department for advanced research and innovation with a view to imparting quality teaching and training in the area of Ceramics, Glass and allied materials.
- To produce graduates with a strong foundation in the area of Ceramic and Glass Technology to cater to the needs of Industry, Academia and Research organization in India and abroad.
- To emphasize Institute-Industry interaction to make the students aware of real problems in the Industries and solutions thereof.
- To motivate the faculties for meeting the requirement of leaders in industry, academic & research institutes and society.

## ***(i) Department of Information Technology:***

### ***Vision:***

The Department of Information Technology of this institute envisions itself to be in the top tier departments of the country that will be recognized for its technological advancement in teaching, learning, research and innovation and serve to address evolving global needs.

### ***Mission:***

- To give high quality education to educate future leaders and contribute to the professional workforce in engineering and technology.
- To inspire learners to excel in research and innovation, collaborative activities, technologies and systems with a positive contribution to the society.

## ***(i) Department of Computer Science & Engineering:***

### ***Vision:***

The Computer Science & Engineering department of this Institute is committed to become a centre of excellence to meet the sprouting global challenges by imparting education and research of highest quality and thus ensures to maintain its status as a pivotal or nodal agency or a nucleus of the overall technological growth in the domain of Computer Science.

### ***Mission:***

- To present our student with up-to-date curricula and pedagogy in the computer science and thus ensure that they have a solid foundation in the core concepts, equip them with problem solving and decision-making skills, and prepare them for lifelong learning in the discipline.
- To produce graduates that are knowledgeable, articulate, principled, innovative, confident, and able to think critically
- To provide for and encourages collegial, intellectual and academic growth of its faculty.
- To perform research that advances the state-of-the-art in computer science.
- To inculcates the values enshrined in the Constitution and demonstrate a sense of societal and ethical responsibility in all professional endeavors.



## **PART 1: COLLEGE ADMISTRATION**

## COLLEGE ADMISTRATION

### 1. Board of Governors (BoG)

1.	Prof. Binay K. Dutta, Former Chairman, West Bengal Pollution Control Board (Educationist)	Chairman
2.	Prof. Mehtab Alam, Jamia Milla University, New Delhi (UGC Nominee)	Member
3.	Dr. Arup Kumar Chattopadhyay, MD, National Refractories (Educationist)	Member
4.	The Director of Technical Education, West Bengal (Govt. nominee)	Member
5.	Dr. Jaya Bandyopadhyay, Maulana Abul Kalam Azad University of Technology (University Nominee)	Member
6.	Prof. Bimal Kumar Roy, Former Director, ISI, Kolkata (Educationist)	Member
7.	Dr. Rituparno Sen, Professor & HOD, Ceramic Technology	Member
8.	Dr. Mousumi Maitra, Professor & HOD, Information Technology	Member
9.	Dr. Kalpana Saha Roy, Assistant Professor & HOD, Computer Science and Engineering	Member
10.	Dr. Debdarpan Khan, Associate Professor of Geology & HOD of Basic Science, Engineering and Humanities	Member
11.	Mr. Ranjan Ray, Associate Professor of Chemical Technology	Member
12.	Controller of Examinations, Govt. College of Engg. & Ceramic Technology	Member
13.	Mr. Jayanta Kumar Chowdhury, Registrar	Member
14.	The Principal, Govt. College of Engg. & Ceramic Technology	Ex-Officio Member Secretary

### 2. Academic Council

1.	Prof. (Dr.) Krishnendu Chakrabarty, Principal	Ex-Officio Chairman
2.	Prof. Rajat Pal (MAKAUT Nominee)	Member
3.	Prof. Subhasish Basu Majumdar (MAKAUT Nominee)	Member
4.	Prof. Bimal Ray (MAKAUT Nominee)	Member
5.	Prof. Urmila Kar (NITTTR, Kolkata)	Member
6.	Prof. Manoj Kumar Mitra (Ex Professor Jadavpur University)	Member
7.	Dr. Arup Kumar Chattopadhyay, MD, National Refractories	Member
8.	Mr. Prasanta Dutta, Sr. GM, International Business, TRL Krosaki Refractories Limited	Member
9.	Mr. Debasis Majumdar, Associate Director, CDAC Kolkata	Member
10.	Prof. (Dr.) Rituparno Sen, HOD, Ceramic Technology	Member

11.	Prof. (Dr.) Mousumi Maitra, HOD, Information Technology	Member
12.	Dr. Kalpana Saha Roy, HOD, Computer Science and Engineering	Member
13.	Dr. Debdarpan Khan, HOD of Basic Science, Engineering and Humanities	Member
14.	Prof. Srimanta Kumar Patra, Associate Professor of Ceramic Technology	Member
15.	Prof. Ritwik Mondal, Assistant Professor of Information Technology	Member
16.	Prof. Pinaki Mukherjee, Associate Professor of Electronics	Member
17.	Prof. Bimal Pal, Assistant Professor of Computer Science and Engineering	Member
18.	Prof. Partha Halder, Controller of Examination	Member
19.	Mr. Ranjan Ray (Faculty nominated by the Principal)	Member Secretary

### 3. Internal Quality Assurance Cell (IQAC)

1.	Prof. (Dr.) Krishnendu Chakrabarty	Chairman
	Prof. (Dr.) Rituparno Sen	Coordinator
2.	Prof. (Dr.) Mousumi Maitra	Member
3.	Dr. Kalpana Saha Roy	Member
4.	Dr. Debdarpan Khan	Member
5.	Mr. Ranjan Ray	Member
6.	Dr. Kaberi Das	Member
7.	Dr. Partha Halder	Member
8.	Dr. Srimanta Kumar Patra	Member
9.	Dr. Paramita Dey	Member
10.	Dr. Kingshuk Chatterjee	Member
11.	Mr. Alok Mukherjee	Member
12.	Mr. Biswarup Das	Member
13.	Mr. Jayanta Kumar Chowdhury	Member
14.	Ms. Sulagna Chatterjee	Member
15.	Mr. Amit Kr. De, President, A. K. industrial Corporation	Member
16.	Dr. A. K. Chattopadhyay, MD, National Refractories	Member
17.	Local MLA or his representative	Member
18.	Mr. Prasanta Dutta, Sr. GM, International Marketing, TRL Krosaki Refractories	Member
19.	Mr. Dipankar Banerjee, Marketing Director, Fosbel India Limited	Member
20.	Mr. Ritesh Mukherjee, Associate Director, C-DAC, Kolkata	Member
21.	Smt. Sarada Chatterjee, Guardian	Member
22.	Ms. Rajashi Chatterjee, Student	Member

#### 4. Board of Studies (BoS)

##### (i) Department of Ceramic Technology

1.	Prof. (Dr.) Rituparno Sen (HOD)	Chairman
2.	All Faculty members of the department	Members
3.	Mr. Prasanta Dutta, Senior GM, International Business, TRL Krosaki Refractories	Member
4.	Dr. Siddhartha Mukherjee, Former Professor of Metallurgy, JU	Member
5.	Dr. Arup Ghosh, Former Chief Scientist & Head, Refractories Division, CSIR-CGCRI, Kolkata	Member
6.	Mr. Srikrishna Manna, CSIR-CGCR, Kolkata	Member
7.	Dr. Sankar Ghatak, Former Scientist, CSIR-CGCRI, Kolkata	Member
8.	Dr. Devendra Kumar, Professor & Head, Ceramic Engineering, IIT-BHU	Invitee Member

##### (ii) Department of Information Technology

1.	Prof. (Dr.) Mausumi Maitra Mazumdar (HOD)	Chairman
2.	All Faculty members of the department	Members
3.	Dr. Sushmita Mitra, Professor, Machine Intelligence Unit, ISI, Kolkata: Subject Expert (nominated by the Academic Council)	Member
4.	Dr. Devadatta Sinha, Ex-Professor, Dept. of Computer Science & Engineering, C.U.: Subject Expert (nominated by the Academic Council)	Member
5.	Dr. Nabendu Chaki, Professor, Dept. of Computer Science & Engineering, C.U. - Subject Expert (nominated by the Vice-Chancellor)	Member
6.	Mr. Sagar Dutta, Assistant Manager, TCS – Representative from Industry	Member
7.	Dr. Aditya Bagchi, Ex-Professor, Dept. of Electronics and Communication Engineering, ISI, Kolkata (Invitee) - Subject Expert (nominated by the Principal)	Member
8.	Dr. Kamarujjaman – Post Graduate Alumnus of IT department	Member

### (iii) Department of Computer Science and Engineering

1.	Dr. Kalpana Saha (Roy) (HOD)	Chairman
2.	All Faculty members of the department	Members
3.	Prof. Mita Nasipuri, Professor, Jadavpur University	Member
4.	Prof. Nabendu Chaki, Professor, Calcutta University	Member
5.	Prof. Sankhayan Choudhury, Professor Calcutta University	Member
6.	Mr. Arijit Ukil, Senior Scientist at TCS Research	Member

### 5. Administrative and Academic Positions

1.	Principal	Prof. (Dr.) Krishnendu Chakrabarty
2.	Controller of Examinations	Dr. Partha Halder
3.	HOD of Ceramic Technology	Prof. (Dr.) Rituparno Sen
4.	HOD of Information Technology	Prof. (Dr.) Mousumi Maitra (Majumdar)
5.	HOD of Computer Science & Engineering	Dr. Kalpana Saha (Roy)
6.	HOD of Basic Science, Engineering & Humanities	Dr. Debdarpan Khan
7.	Registrar	Mr. Jayanta Kumar Chowdhury
8.	Accounts Officer	Ms. Sulagna Chatterjee
9.	Librarian	Dr. Nikhil Kumar Jas
10.	Advisor of Training & Placement Cell	Mr. Prithwijit Guha

### 6. Faculty Members

<b>Department of Ceramic Technology</b>		
<b>Sl.</b>	<b>Name</b>	<b>Designation</b>
1.	Dr. Rituparno Sen	Professor and Head
2.	Dr. Saikat Maitra (On Lien to MAKAUT as V.C.)	Professor
3.	Mr. Ranjan Ray	Associate Professor
4.	Dr. Srimanta Kumar Patra	Associate Professor
5.	Mr. Ram Chandra Das	Associate Professor
6.	Dr. Kaberi Das	Associate Professor
7.	Dr. Tapas Kumar Bhattacharya	Assistant Professor
8.	Dr. Barun Kumar Sanfui	Assistant Professor
9.	Dr. Madhu Sudan Dutta	State Aided College Teacher (SACT)
10.	Ms. Ruma Mallik	SACT
11.	Mr. Pappu Halder	SACT
12.	Ms. Sangita Ghosh	SACT

**Department of Information Technology**

Sl.	Name	Designation
1.	Dr. Mausumi Maitra (Majumdar)	Professor and Head
2.	Dr. Paramita Dey	Assistant Professor
3.	Mr. Ritwik Mondal	Assistant Professor
4.	Mrs. Shyama Mondal	Assistant Professor
5.	Mr. Pranay Adak	Assistant Professor
6.	Mr. Atanu Kumar Paul	Assistant Professor
7.	Ms. Shampa Mahato	SACT
8.	Ms. Maumita Maity	SACT
9.	Mr. Sudip Kuila	SACT
10.	Ms. Ananya Biswas	SACT
11.	Ms. Bidisha Ghosh	SACT
12.	Mrs. Minakshi Acharya	SACT
13.	Dr. Rayan Saptarshi Roy	SACT
14.	Mrs. Susmita Samaddar	SACT

**Department of Computer Science & Engineering**

Sl.	Name	Designation
1.	Dr. Kalpana Saha (Roy)	Assistant Professor
2.	Mr. Bimal Pal	Assistant Professor
3.	Dr. Soumit Chowdhury	Assistant Professor
4.	Mrs. Sohini Dasgupta (On Leave)	Assistant Professor
5.	Dr. Partha Ghosh	Assistant Professor
6.	Mr. Ranjit Kumar Mandal	Assistant Professor
7.	Dr. Kingshuk Chatterjee	Assistant Professor
8.	Mr. Bishwarup Das	SACT
9.	Dr. Bijoy Kumar Mandal	SACT
10.	Mrs. Rima Bhowmick	SACT
11.	Mrs. Sucharita Mondal	SACT
12.	Mrs. Pallavi Pyne	SACT
13.	Mrs. Amrita Biswas	SACT
14.	Mr. Aritra Mahapatra	SACT

**Department of Basic Science, Engineering & Humanities**

Sl.	Name	Designation
1.	Dr. Krishnendu Chakrabarty	Professor of Electrical Engineering and Principal
2.	Dr. Debdarpan Khan	Associate Professor of Geology and Head
3.	Dr. Partha Haldar	Assistant Professor of Mechanical Engineering
4.	Dr. Pinaki Mukherjee	Associate Professor of Electronics
5.	Dr. Alok Mukherjee	Assistant Professor of Electrical Engineering
6.	Dr. Saibal Ray	Associate Professor of Physics
7.	Dr. Rajkumar Chakraborty	Associate Professor of Physics
8.	Dr. Prasenjit Paul	Assistant Professor of Physics
9.	Dr. Nilesh Mazumder	Assistant Professor of Physics
10.	Mr. Ambika Prasad Mukhopadhyay	Assistant Professor of Chemistry
11.	Mrs. Indrani Nag Chaudhuri	Assistant Professor of Economics
12.	Mrs. Sonali Sarkar	SACT (Ethics)
13.	Mrs. Ipsita Pathak	SACT (Communicative English)
14.	Mr. Firoj Mahamud	SACT (Mathematics)

**7. Supporting Staff of the college**

1.	Mr. Samir Biswas	UDC & Storekeeper
2.	Mr. Krishnendu Chatterjee	P.A. to Principal
3.	Mr. Rajib Chakraborty	Technical Assistant
4.	Mr. Jiban Chandra Dey	Lab Attendant
5.	Mr. Rahul Mitra	Fitter
6.	Mr. Jibit Changdar	Supervisor Instructor
7.	Mrs. Jhunu Rani Pramanick	Group D
8.	Ms. Kismatara Khatun	Group D
9.	Mrs. Tumpa Sarkar	Group D
10.	Mr. Soumya Chatterjee	Group D
11.	Mr. Tarak Paul	Group D
12.	Supriya Kanrar	Group D
13.	Mr. Jiwat Kr. Rajbhar	Durwan
14.	Mr. Birbal Das	Durwan
15.	Ms. Suman Jamadarni	Sweeper
16.	Mr. Amar Karan	Cook

## **PART 2: ACADEMICS**



## ACADEMICS

### 1. Academic Programmes

	Type of programme	Name of Department	Approved student strength
i)	Bachelor of Technology	Ceramic Technology	40 + 02 (TFW)
ii)		Information Technology	40 + 02 (TFW)+01 (DQ)
iii)		Computer Science and Engineering	40 + 02 (TFW)
iv)	Master of Technology	Ceramic Technology	18
v)		Information Technology	18

TFW: Tuition Fee Waiver, DQ: Defence Quota

### 2. Admission Process

- (i) B.Tech. students are admitted based on rank of West Bengal Joint Entrance Examination and subsequent Counseling conducted by West Bengal Joint Entrance Examination Board.
- (ii) Selection to M. Tech. students are done on the basis of a valid score in GATE or PGET conducted by MAKAUT.

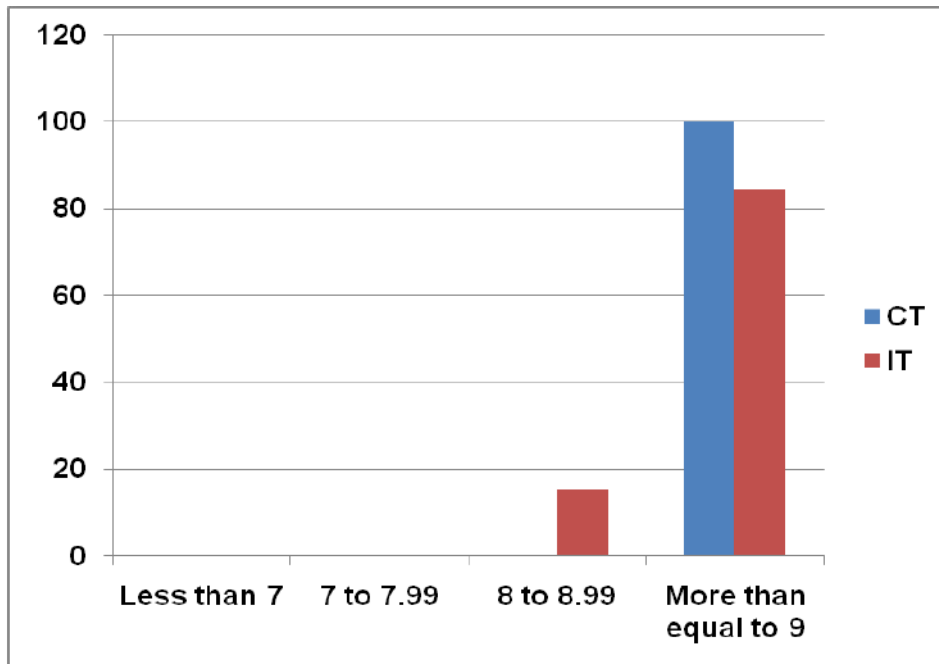
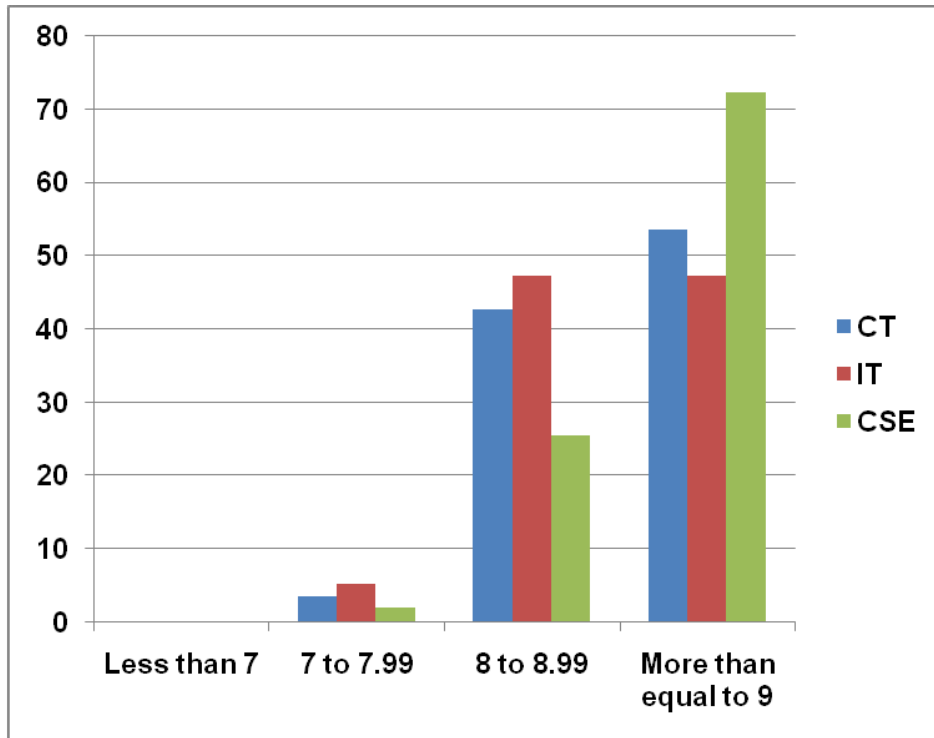
### 3. Academic performance of the Final Year students (2021-22)

#### B.Tech. Students

Stream/DGPA	< 7	7-7.99	8-8.99	≥ 9	Total
CT (Total 45 students)	0	1	12	15	28
Percentage	0	3.6	42.8	53.6	100
IT (Total 32 students)	0	2	18	18	38
Percentage	0	5.2	47.4	47.4	100
CSE (Total 32 students)	0	1	12	34	47
Percentage	0	2.1	25.5	72.4	100

#### M.Tech. Students

Stream/DGPA	< 7	7-7.99	8-8.99	≥ 9	Total
CT (Total 45 students)	0	0	0	4	4
Percentage	0	0	0	100	100
IT (Total 32 students)	0	0	2	11	13
Percentage	0	0	15.4	84.6	100



The results depicted in the Bar Diagram exhibit that majority of the students attains a DGPA more than 8 on a 10 point scale.

#### 4. Modalities of holding examinations during COVID-19 pandemic

The academic session 2021-22, similar to the earlier session 2020-21, was partially affected by the COVID-19 pandemic; especially the initial part of the session, where the institution was forced to take the following measures:

1. There was a shift from existing examination system due to the pandemic of COVID-19. The following changes were implemented:
  - (i) The continuous evaluation / internal assessment remained as it was as per existing old or new academic regulations.
  - (ii) Instead of 75 marks of each theory paper in Semester-End examination, it was decided to hold:
    - a) 50 marks online MCQ test, and
    - b) 25 marks viva-voce, for each theory paper.
2. Google Form template was used for Online MCQ examinations with Marks of MCQ varying depending upon the type of questions.
3. In the event of an issue of poor net connectivity or some other unforeseen reasons, if few students were unable to appear in the online test, a similar test was arranged after few days, repeating the whole process for the particular students.
4. Project evaluation was decided to be held by arranging Online presentation in Google G Suite Platform and / or organizing Viva Voce in Google Meet / WhatsApp video calling mode for awarding grades.
5. Comprehensive (Grand) Viva examination was conducted by a panel of teachers on different subject groups, viz. Science, General Engineering, Specific technological / engineering subjects' clusters, only through online mode (Google Meet / WhatsApp Video Call).
6. The practical examinations (other than Project and Grand Viva) were assessed in the same manner as the Project assessment.

The college resumed normal classes during the end of the session 2021-22. The end semester examination was also conducted off line following the earlier pattern of examination, as well as distribution of marks.

#### 5. Industrial Training/Internship programme

*Students undergo Industrial Training/Internship after 6<sup>th</sup> Semester. The following Table indicates the name of the Industries/Companies and students participated and duration.*

<b>(i) Internship details of B.Tech. CT (2021-2022)</b>		
<i>Name of the activity</i>	<i>Participant</i>	<i>Name of the Industries/Companies/Organizations</i>
Industrial Training	3	Aditya Birla Insulators
	4	Vesuvius India LTD
	2	Saint gobain glass Pvt. LTD
	4	OCL
	6	SRU ( IFICO )/Ranchi Road
	3	SRU ( Bhilai )
	2	HR Johnson
	4	RHI magnesita

<b>(ii) Internship programme of B.Tech. IT (2021-2022)</b>		
<i>Name of the activity</i>	<i>Participant</i>	<i>Name of the Industries/Companies/Organizations</i>
Industrial Training	1	Indian Statistical Institute
	31	Internshala
	8	Ogmatech lab
	1	Udemy

<b>(iii) Internship programme of B.Tech. CSE (2021-2022)</b>		
<i>Name of the activity</i>	<i>Participant</i>	<i>Name of the Industries/Companies/Organizations</i>
	1	Advanced Tensorflow Custom Models, Layers, and Loss Functions with TensorFlow
	1	Core Java internshala
	1	Data Science
	1	Front-End Web UI Frameworks and Tools: Bootstrap 4
	1	HTML, CSS, and Javascript for Web Developers
	1	Introduction to machine learning
	2	Java programming- solving problems with software
	1	Learn data science Deep learning, Machine learning, NLP & R
	1	Learn JAVA Programming - Beginner to Master
	1	Machine Learning & Deep Learning in Python & R
	2	Machine Learning A-Z: Hands on Python & R In Data Science
	1	Machine Learning Certification Course for Beginners
	1	Machine Learning for All
	1	Machine Learning-Stanford University-Coursera
	2	Mastering Data Structures & Algorithms using C and C++
	1	Modern JavaScript From The Beginning
	1	Natural Language Processing with Sequence Models
	2	Neural Networks and Deep Learning (Coursera)
	3	Object-Oriented Data Structures in c++
	4	Programming Foundations with JavaScript, HTML and CSS
	1	PYTHON BASICS
	1	R Programming
	1	SQL for Data Science
	1	The Ultimate MySQL Bootcamp : Go From SQL Beginner to expert
	1	The Complete 2021 Web Development Bootcamp
	1	The Complete React Native Course
	1	THE COMPLETE REACT NATIVE COURSE(2021 EDITION)

	1	The React Bootcamp
	1	The Ultimate MySQL bootcamp: Go from SQL beginner to expert (Udemy)
	2	Web Development
	2	Web Development and Designing

## 6. Students' Placement status

*There is a Placement Cell in the College for three streams, i.e. CT, IT and CSE, which arranges On Campus and Off Campus Interviews for students. The following Table indicates the name of the Industries/Companies and number of students accepted job.*

**Name of the Student Placed for 2022 outgoing batch of Government College of Engg. & Ceramic Technology**

### Department of Ceramic Technology

Sl. No.	Roll No.	Name	Name of the Employer
1	GCECTB-R18-1002	ANIKET HALDER	RHI MAGNESITE
2	GCECTB-R18-1004	AVIK MANNA	PGP
3	GCECTB-R18-1005	AYAN CHITRAKAR	ARAVIND CERAMICS
4	GCECTB-R18-1006	BIKRAM DAS	IFGL
5	GCECTB-R18-1007	DEBJOY BARDHAN	RIL(Reliance Ind.Ltd.)
6	GCECTB-R18-1008	DEBOJYOTI GOON	Saint Gobain
7	GCECTB-R18-1009	DIPANKAR CHAUHAN	CALDARYS
8	GCECTB-R18-1012	MAINAK GHOSH	RIL(Reliance Ind.Ltd.)
9	GCECTB-R18-1013	MRITWIK BHATTACHARYYA	RIL(Reliance Ind.Ltd.)
10	GCECTB-R18-1014	PARANTAP DEV	TRL Krosaki
11	GCECTB-R18-1016	PRATIM KUMAR MONDAL	TRL Krosaki
12	GCECTB-R18-1017	PRAYASH SAHA	CALDARYS
13	GCECTB-R18-1018	PURBA SAHA	RHI MAGNESITE
14	GCECTB-R18-1019	RAHUL ROY	CUMI
15	GCECTB-R18-1021	RICK ROY	TRL Krosaki
16	GCECTB-R18-1022	ROHIT ROUTH	RIL(Reliance Ind.Ltd.)
17	GCECTB-R18-1023	RUPRAG KUNDU	TDK
18	GCECTB-R18-1024	SAMIUL SARDAR	Saint Gobain
19	GCECTB-R18-1025	SANJIB KUMAR MAITY	CUMI
20	GCECTB-R18-1027	SHREYA BARUA	TDK
21	GCECTB-R18-1028	SOURAV MONDAL	Saint Gobain
22	GCECTB-R18-1029	SOURAV NASKAR	CUMI
23	GCECTB-R18-1030	SUDIP KUMAR NAYAK	IFGL
24	GCECTB-R18-1031	SURAJIT DAS	M. N. DASTUR
25	GCECTB-R18-1033	SWARALIPI KUMAR	Saint Gobain

26	GCECTB-L19-1001	LABANI SARDAR	TDK
27	GCECTB-L19-1002	NABABRATO DAS	BALCO

**Department of Information Technology**

Sl. No.	Roll No.	Name	Name of the Employer
1	GCECTB-R18-2001	ADITI MANDAL	Cognizant
2	GCECTB-R18-2002	ALI AYESH PERVEZ	Wipro
3	GCECTB-R18-2003	AMAN SHARMA	Infosys, TCS
4	GCECTB-R18-2004	ANIRUDDHA CHATTERJEE	Cognizant, Wipro
5	GCECTB-R18-2005	ARIJIT GHOSH	Cognizant, Wipro, Cloud Kaptaan
6	GCECTB-R18-2006	AYAN MONDAL	Cognizant
7	GCECTB-R18-2007	BAPUN MAHATA	Infosys
8	GCECTB-R18-2008	BINITA PRATI HAR	Cognizant, TCS, Wipro
9	GCECTB-R18-2009	BITAN CHAKRABORTY	Wipro, HCL
10	GCECTB-R18-2010	BRATATI CHAKRABORTY	Cognizant, Wipro, TCS, IBM, Clud Kaptaan
11	GCECTB-R18-2011	DEBARAN DAS	Cognizant
12	GCECTB-R18-2012	DEBASHIS GANGULY	Wipro
13	GCECTB-R18-2014	DIMITRI GHOSH	Cognizant, Wipro
14	GCECTB-R18-2019	MANIK GOENKA	Infosys, TCS
15	GCECTB-R18-2021	NITESH KUMAR RAI	Wipro, TCS
16	GCECTB-R18-2024	RIKTAM KUNDU	Wipro, TCS
17	GCECTB-R18-2025	RONAK BANERJEE	HCL, Infosys
18	GCECTB-R18-2026	SANKHADEEP MAZUMDER	Cognizant, Wipro
19	GCECTB-R18-2027	SANKHADEEP RAY	Cognizant, Wipro, LTI
20	GCECTB-R18-2028	SAYAN PAUL	Cognizant, Wipro, Cloud Kaptaan
21	GCECTB-R18-2029	SHREYA GANGOPADHYAY	Cognizant, Wipro
22	GCECTB-R18-2030	SOHAM DAS	Infosys, Cognizant
23	GCECTB-R18-2031	SOHAM SINHA	Cognizant, Wipro, TCS
24	GCECTB-R18-2033	SOURAV SARANGI	Cognizant
25	GCECTB-R18-2035	SUBRATA MAJI	Cognizant
26	GCECTB-L19-2008	RITUL DE	Nihilent

**Department of Computer Science & Engineering**

Sl. No.	Roll No.	Name	Name of the Employer
1	GCECTB-R18-3003	AKASH ROY	TCS
2	GCECTB-R18-3004	ARIJIT DUTTA	Cognizant
3	GCECTB-R18-3005	AVISEK MONDAL	Wipro

4	GCECTB-R18-3008	DEBSMITA BANERJEE	Cognizant
5	GCECTB-R18-3013	MANTHAN CHOWDHARY	Mindtree
6	GCECTB-R18-3015	MONISH GHOSH	TCS, INFOSYS
7	GCECTB-R18-3019	REET ROY	Cloudkaptan
8	GCECTB-R18-3021	SANGRAM MODAK	TCS
9	GCECTB-R18-3023	SAYAK MUKHOPADHYAY	CloudKaptan
10	GCECTB-R18-3026	SINJINI DAM	Capgemini
11	GCECTB-R18-3030	SUBHADIP NAYEK	Nihilent limited
12	GCECTB-R18-3035	AKASH MUKHERJEE	Applied Research Works - COZEVA
13	GCECTB-R18-3037	RAJASHI CHATTERJEE	Wipro, IBM, Cognizant, Epam Systems
14	GCECTB-R18-3038	SOUHARDYA MANDAL	Kreeti Technologies
15	GCECTB-L19-3005	PUSPITA POLLEY	Qualtech Consultants Pvt. Ltd.
16	GCECTB-L19-3007	RUBINA KHATOON	Infosys, Neebal technology , Cloud kaptan

## 7. Students in higher studies

*A few students opted for higher studies in India and/or abroad. The list below is for the academic year 2021-22.*

Name of student enrolled for higher education	Programme completed	Name of institution joined	Name of programme admitted to
Sambit Bose	B.Tech in Computer Science Engg.	IIT, Kharagpur	M.Tech
Debmalya Sur	B.Tech in Computer Science Engg.	ISM, Dhanbad	M.Tech
Gourab Chatterjee	B.Tech in Computer Science Engg.	IIT, Patna	M.Tech
Akash Roy	B.Tech in Computer Science Engg.	IIT, Kanpur	M.Tech

## 8. Details of students who qualified in state/ national/ international examinations

Sl No	Name	Registration number for the exam	Qualifying Examination
1	DEBASISH DAS	XE22S66507074	GATE
2	JOYDEEO BANERJEE	CS22S14039057	GATE
3	PROLAY MALLIK	CS22S16509150	GATE
4	ABHINANDAN PATRA	CS22S16507560	GATE
5	AKASH ROY	CS22S16520251	GATE
6	DEBMALYA SUR	CS22S14039144	GATE
7	ARUNIMA CHAUDHURI	CS22S16509515	GATE

8	DEBDOOT ROY CHOWDHURY	CS22S16511243	GATE
9	ARCHIT KUMAR	CS22S16510527	GATE
10	GOURAB CHATTERJEE	CS22S16508229	GATE
11	SOMBIT BOSE	CS22S16511390	GATE
12	SUBHODEEP CHANDA	CS22S16516144	GATE
13	SAYAN MONDAL	CS22S16508080	GATE

## 9. A few facts regarding the academic performance of students

- Number of students benefitted by scholarships and freeships provided by the Government during the year: 98
- Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year: 60
- Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year: 11
- Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year : 13
- Number of students who appeared in state/ national/ international examinations (e.g.: IIT-JAM/ NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations) during the year: 13



## **PART 3: RESEARCH PROGRAMMES**

## RESEARCH PROGRAMMES

### 1. Sponsored / Consultancy projects

<i>Funding Agency</i>	<i>Type of Project</i>	<i>Project Title</i>	<i>Role in Project</i>	<i>Grant (Rs.)</i>	<i>Duration</i>
DST	Major Research Project	Development of Insulating Refractories and Abrasion Resistant Ceramics from Coal Ash	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	61,52,450	07.05.2016 - 06.08.2020
SERB	Minor Research Project	Development of Pre/In-situ Formed CNT Reinforced MgAl <sub>2</sub> O <sub>4</sub> Spinel Matrix Composites	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	30,06,000	04.05.2017 - 03.11.2020
IREL	Major Research Project	Study of Sinterability and Product Development based on Zirconia Powders to be Supplied by IREL	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	58,73,800	28.08.2019 - 27.08.2022
SERB	Major Research Project	Synthesis, Characterizations and Evaluation of Pre/In-Situ Formed YAG-CNT Reinforced Al <sub>2</sub> O <sub>3</sub> based Nanostructured Composites	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	23,24,560	26.03.2021 - 25.03.2024
WB-DST	Minor Research Project	Fabrication of CuPc nanotube based all-organic flexible photodiode for light detection and solar energy conversion	Dr. Nilesh Mazumder, Assistant Professor, Principal Investigator	12,55,000	2019-2022
WB-DST	Minor Research Project	Studies on Compact Stellar Objects	Dr. Saibal Ray, Associate Professor, Principal Investigator	4,48,800	02.05.2019 - 01.05.2021
WB-DST	Minor Research Project	Studies on the Microstructural characterization of ceramic materials using Image processing Technique	Dr. T.K. Bhattacharya, Assistant Professor, Principal Investigator	8,68,800	28.01.2019 - 27.01.2021

### 2. Ph.D. supervision by the teachers

<i>Name of the Supervisor</i>	<i>Name of the student with qualification</i>	<i>Title of the thesis</i>	<i>University where registered</i>	<i>Status of the programme</i>
Dr. Krishnendu Chakrabarty, <i>Principal</i>	Amlan Chakrabarti	Study and development of some energy management schemes in electrical power system	MAKAUT	Awarded
Dr. R. Sen, <i>Professor</i>	Pulak Barua	Development and characterisation of inorganic-organic nano-biocomposites for craniofacial applications	MAKAUT	Enrolled
Dr. R. Sen, <i>Professor</i>	Sudipto Saha	Effect of solid waste on sintering and properties of tri-axial porcelain body	MAKAUT	Enrolled

<i>Name of the Supervisor</i>	<i>Name of the student with qualification</i>	<i>Title of the thesis</i>	<i>University where registered</i>	<i>Status of the programme</i>
Dr. R. Sen, <i>Professor</i>	Sovan Khan	Development of high alumina castable by partial substitution of alumina aggregate by electrical porcelain waste	MAKAUT	Enrolled
Dr. K. Das, <i>Associate Professor</i>	Ram Karan (M.Tech)	Some studies on the Preparation and Characterizations of Melt Derived Bioactive Glass and Glass-ceramics In SiO <sub>2</sub> -Na <sub>2</sub> O-CaO-P <sub>2</sub> O <sub>5</sub> System	University of Calcutta	Awarded
Dr. K. Das, <i>Associate Professor</i>	Pameli Pal	Studies on Lithium Disilicate Glass-ceramics	University of Calcutta	Pursuing
Dr. T.K. Bhattacharya, <i>Assistant Professor</i>	Partha Haldar M.E. (Mechanical Engineering)	The Effect of Nano-oxide addition in Alumina Ceramics and its impact on Mechanical and Tribological Properties	Jadavpur University	Awarded
Dr. B.K. Sanfui, <i>Assistant Professor</i>	Paramita Das M.Tech. (Ceramics)	Synthesis and Characterization of YAG and CNT reinforced Magnesium aluminate Spinel Composites	Calcutta University	Pursuing
Dr. B.K. Sanfui, <i>Assistant Professor</i>	Savan Kumar Sharma M.Tech. (Ceramics)	Studies on Nano-porous alumina based ceramics membrane for separation of flue gas	MAKAUT	Pursuing
Dr. Mausumi Maitra <i>Professor</i>	Kamarujjaman	Studies on Image De-noising and Segmentation of Medical Images	MAKAUT	Awarded

### 3. Research/Review papers published in National/International Journals

<b>Name of the Author(s)</b>	<b>Department of the Author(s)</b>	<b>Title of the Paper</b>	<b>Name of the Journal</b>	<b>Month and Year of publication</b>	<b>ISSN</b>
<b>Tapas kumar Bhattacharya et al</b>	CT, GCECT	Tribological behaviour of MgO doped alumina ceramics in dry sliding	Materials Today: Proceedings, Scopus, Elsevier	Available online 20 May 2022	2214-7853
<b>Tapas kumar Bhattacharya et al</b>	CT, GCECT	Tribological Behaviour of Alumina Ceramics with Nano TiO <sub>2</sub> as a sintering aid in Non-Conformal Contact	Journal of Tribology, ASME, SCIE, IF: 2.045	08.12.2021	0742-4787
<b>Tapas kumar Bhattacharya et al</b>	CT, GCECT	Innovative approach to evaluate the wearing of nano TiO <sub>2</sub> doped alumina ceramics in the light of image modelling	Journal of Tribology, ASME, SCIE, IF: 2.045		0742-4787
<b>Barun Kumar</b>	CT, GCECT	Unveiling the role of structure–property correlation and its validation towards	Molecular System Design	Oct-21	2058-9689

<b>Sanfui et al</b>		engineering the application potential of sol-gel derived mesoporous gamma-alumina DOI: 10.1039/d1me00102g	and Engineering		
<b>Barun Kumar Sanfui et al</b>	CT, GCECT	Engineering of the structural and morphological characteristics of MWCNTs employing a nano dimensional binary oxide coating with enhanced thermal oxidation resistance properties for the tailoring of their reinforcement potential DOI: 10.1039/d1nj05807j	New Journal of Chemistry	Mar-22	1144-0546
<b>Barun Kumar Sanfui et al</b>	CT, GCECT	Fabrication, characterization and optimization of industrial alpha alumina powders based ceramic membrane supports and its applicative potential for CO <sub>2</sub> /N <sub>2</sub> separation <a href="https://doi.org/10.1016/j.jcou.2022.102121">https://doi.org/10.1016/j.jcou.2022.102121</a>	Journal of CO <sub>2</sub> Utilisation	June, 2022	2212-9820
<b>Soumit chowdhury et al</b>	CSE, GCECT	INNOVATIVE LOW-COST PERIMETER SECURITY GADGET WITH IN-BUILT MECHANISM TO ENSURE CONFIDENTIALITY, AUTHENTICITY AND NON-REPUDIATION	International Journal of Computer Networks & Communications (indexed in scopus)	conditionally accepted for publication	ISSN 0974 - 9322 (Online) ; 0975 - 2293 (Print)
<b>Soumit chowdhury et al</b>	CSE, GCECT	Multi Layer Digital Validation of Candidate Service Appointment With Digital Signature and Bio Metric Authentication Approach	International Journal of Computer Networks & Communications (indexed in scopus)	conditionally accepted for publication	ISSN 0974 - 9322 (Online) ; 0975 - 2293 (Print)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Application of Poincaré analogous time-split signal based statistical correlation for transmission line fault classification. doi: <a href="https://doi.org/10.1007/s00202-021-01369-4">https://doi.org/10.1007/s00202-021-01369-4</a>	Electrical Engineering, 104 (2), 1057–1075	August, 2021	1432-0487 (E) 0948-7921 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Indoor cardiovascular health monitoring system under Covid-19 situations. doi: <a href="https://doi.org/10.33263/BRIAC123.34883500">https://doi.org/10.33263/BRIAC123.34883500</a>	Biointerface Research in Applied Chemistry, 12(3), 3488-3500	Accepted: 29 July, 2021 Published: 09 August, 2021	2069-5837
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Supervised Learning Aided Multiple Feature Analysis for Freshness Class Detection of Indian Gooseberry ( <i>Phyllanthus emblica</i> ). doi: <a href="https://doi.org/10.1007/s40030-021-00585-2">https://doi.org/10.1007/s40030-021-00585-2</a>	Journal of The Institution of Engineers (India): Series A, 103 (1), 247–261	October, 2021	2250-2157 (E) 2250-2149 (P)
<b>Kinshuk</b>	CSE,	Freshness Assessment of Indian Gooseberry	Journal of	Oct-21	2234-

<b>Chatterje et al</b>	GCECT	(Phyllanthus emblica) Using Probabilistic Neural Network. doi: <a href="https://doi.org/10.1007/s42853-021-00116-8">https://doi.org/10.1007/s42853-021-00116-8</a>	Biosystems Engineering, 46 (4), 399–416		1862 (E) 1738-1266 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Comparative Analysis of Statistical and Supervised Learning Models for Freshness Assessment of Oyster Mushrooms. doi: <a href="https://doi.org/10.1007/s12161-021-02161-7">https://doi.org/10.1007/s12161-021-02161-7</a>	Food Analytical Methods.	November, 2021	1936-976X (E) 1936-9751 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Edge Detection Aided Geometrical Shape Analysis of Indian Gooseberry (Phyllanthus emblica) for Freshness Classification. doi: <a href="https://doi.org/10.1007/s12161-021-02206-x">https://doi.org/10.1007/s12161-021-02206-x</a>	Food Analytical Methods.	January, 2022	1936-976X (E) 1936-9751 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Artificial Neural Network based Dimension Prediction of Rectangular Microstrip Antenna. doi: <a href="https://doi.org/10.1007/s40031-021-00710-6">https://doi.org/10.1007/s40031-021-00710-6</a>	Journal of The Institution of Engineers (India): Series B	February, 2022	2250-2114 (E) 2250-2106 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Development of Artificial Vision System for Quality Assessment of Oyster Mushrooms. doi: <a href="https://doi.org/10.1007/s12161-022-02241-2">https://doi.org/10.1007/s12161-022-02241-2</a>	Food Analytical Methods.	March, 2022	1936-976X (E) 1936-9751 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Correlation-Aided 3D Vector Distance Estimation-Based Quality Assessment of Indian Gooseberry. doi: <a href="https://doi.org/10.1007/s40030-022-00616-6">https://doi.org/10.1007/s40030-022-00616-6</a>	Food Analytical Methods.	March, 2022	2250-2157 (E) 2250-2149 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	Quality Assessment of Tindora (Coccinia indica) Using Poincare Plot and Cartesian Quadrant Analysis. doi: <a href="https://doi.org/10.1007/s12161-022-02287-2">https://doi.org/10.1007/s12161-022-02287-2</a>	Food Analytical Methods	April, 2022	1936-976X (E) 1936-9751 (P)
<b>Kinshuk Chatterje et al</b>	CSE, GCECT	DETECTION OF EDIBILITY OF AMLA (Emblca officinalis) THROUGH PCA BASED IMAGE ANALYSIS. doi: <a href="https://doi.org/10.24818/18423264/56.2.22.06">https://doi.org/10.24818/18423264/56.2.22.06</a>	Economic Computation & Economic Cybernetics Studies & Research, 56(2)	June, 2022	0424-267X (P) 1842-3264 (E)

<b>Mousumi Maitra et al</b>	IT, GCECT	MRI-based brain tumour image detection using CNN based deep learning method	Neuroscience Informatics	March, 2022	2772-5286
<b>Paramita Dey et al</b>	IT, GCECT	A Survey on the Role of Centrality as Seed Nodes for Information Propagation in Large Scale Network	ACM/IMS Transactions on Data Science	August, 2021	<a href="https://doi.org/10.1145/3465374">https://doi.org/10.1145/3465374</a>
<b>Partha Haldar et al</b>	BSEH, GCECT	Tribological behaviour of MgO doped alumina ceramics in dry sliding	Materials Today: Proceedings, Scopus, Elsevier	Available online 20 May 2022	2214-7853
<b>Partha Haldar et al</b>	BSEH, GCECT	Scope for Cupola Slag Reuse in Construction: A Sustainable Green Solution	International Journal of Environmental Science and Technology, SCIE, Springer, I.F: 2.860	Accepted on 24.04.2022	1735-1472
<b>Partha Haldar et al</b>	BSEH, GCECT	Tribological Behaviour of Alumina Ceramics with Nano TiO <sub>2</sub> as a sintering aid in Non-Conformal Contact	Journal of Tribology, ASME, SCIE, IF: 2.045	08.12.2021	0742-4787
<b>Partha Haldar et al</b>	BSEH, GCECT	Experimental Investigation and Optimization of MRR in $\mu$ -ECDM Process by Taguchi, RSM, PSO and ANN	Suranaree Journal of Science and Technology; Scopus	Accepted on 04.10.2021	0858-849X
<b>Partha Haldar et al</b>	BSEH, GCECT	Potential of Pumped Hydro Storage as an Electrical Energy Storage in India	Journal of the Institution of Engineers (India): Series C; Scopus	01-Sep-21	2250-0545
<b>Partha Haldar et al</b>	BSEH, GCECT	Innovative approach to evaluate the wearing of nano TiO <sub>2</sub> doped alumina ceramics in the light of image modelling	Journal of Tribology, ASME, SCIE, IF: 2.045	#####	0742-4787
<b>Partha Haldar et al</b>	BSEH, GCECT	Cupola Slag Reutilization for Sustainable Waste Management: Review and Economic Analysis	International Journal of Environmental Science and Technology, SCIE, Springer, I.F: 2.860	Jul-21	1735-1472
<b>Alok Mukherjee</b>	BSEH, GCECT	Innovative approach to evaluate the wearing of nano TiO <sub>2</sub> doped alumina ceramics in the	Journal of Tribology,	August, 2021	1528-8897

<b>et al</b>		light of image modelling. doi: <a href="https://doi.org/10.1115/1.4051904">https://doi.org/10.1115/1.4051904</a>	Vol. 144(5) / 054501.		(E) 0742-4787 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Application of Poincaré analogous time-split signal based statistical correlation for transmission line fault classification. doi: <a href="https://doi.org/10.1007/s00202-021-01369-4">https://doi.org/10.1007/s00202-021-01369-4</a>	Electrical Engineering, 104 (2), 1057–1075	August, 2021	1432-0487 (E) 0948-7921 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Bilingualism as a Protective Factor in Aphasia. doi: <a href="https://doi.org/10.1080/23279095.2021.1960837">https://doi.org/10.1080/23279095.2021.1960837</a>	Applied Neuropsychology: Adult.	August, 2021	2327-9109 (E) 2327-9095 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Indoor cardiovascular health monitoring system under Covid-19 situations. doi: <a href="https://doi.org/10.33263/BRIAC123.34883500">https://doi.org/10.33263/BRIAC123.34883500</a>	Biointerface Research in Applied Chemistry, 12(3), 3488-3500	Accepted: 29 July, 2021 Published: 09 August, 2021	2069-5837
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Supervised Learning Aided Multiple Feature Analysis for Freshness Class Detection of Indian Gooseberry ( <i>Phyllanthus emblica</i> ). doi: <a href="https://doi.org/10.1007/s40030-021-00585-2">https://doi.org/10.1007/s40030-021-00585-2</a>	Journal of The Institution of Engineers (India): Series A, 103 (1), 247–261	October, 2021	2250-2157 (E) 2250-2149 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Freshness Assessment of Indian Gooseberry ( <i>Phyllanthus emblica</i> ) Using Probabilistic Neural Network. doi: <a href="https://doi.org/10.1007/s42853-021-00116-8">https://doi.org/10.1007/s42853-021-00116-8</a>	Journal of Biosystems Engineering, 46 (4), 399–416	October, 2021	2234-1862 (E) 1738-1266 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Comparative Analysis of Statistical and Supervised Learning Models for Freshness Assessment of Oyster Mushrooms. doi: <a href="https://doi.org/10.1007/s12161-021-02161-7">https://doi.org/10.1007/s12161-021-02161-7</a>	Food Analytical Methods.	November, 2021	1936-976X (E) 1936-9751 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Edge Detection Aided Geometrical Shape Analysis of Indian Gooseberry ( <i>Phyllanthus emblica</i> ) for Freshness Classification. doi: <a href="https://doi.org/10.1007/s12161-021-02206-x">https://doi.org/10.1007/s12161-021-02206-x</a>	Food Analytical Methods.	January, 2022	1936-976X (E) 1936-9751 (P)
<b>Alok Mukherjee</b>	BSEH, GCECT	Artificial Neural Network based Dimension Prediction of Rectangular Microstrip Antenna.	Journal of The Institution of	February, 2022	2250-2114

<b>et al</b>		doi: <a href="https://doi.org/10.1007/s40031-021-00710-6">https://doi.org/10.1007/s40031-021-00710-6</a>	Engineers (India): Series B		(E) 2250-2106 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Application of bio-inspired optimization algorithms in food processing. doi: <a href="https://doi.org/10.1016/j.crfs.2022.02.006">https://doi.org/10.1016/j.crfs.2022.02.006</a>	Current Research in Food Science.	February, 2022	2665-9271
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Development of Artificial Vision System for Quality Assessment of Oyster Mushrooms. doi: <a href="https://doi.org/10.1007/s12161-022-02241-2">https://doi.org/10.1007/s12161-022-02241-2</a>	Food Analytical Methods.	March, 2022	1936-976X (E) 1936-9751 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Correlation-Aided 3D Vector Distance Estimation-Based Quality Assessment of Indian Gooseberry. doi: <a href="https://doi.org/10.1007/s40030-022-00616-6">https://doi.org/10.1007/s40030-022-00616-6</a>	Food Analytical Methods.	March, 2022	2250-2157 (E) 2250-2149 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	Quality Assessment of Tindora ( <i>Coccinia indica</i> ) Using Poincare Plot and Cartesian Quadrant Analysis. doi: <a href="https://doi.org/10.1007/s12161-022-02287-2">https://doi.org/10.1007/s12161-022-02287-2</a>	Food Analytical Methods	April, 2022	1936-976X (E) 1936-9751 (P)
<b>Alok Mukherjee et al</b>	BSEH, GCECT	DETECTION OF EDIBILITY OF AMLA ( <i>Embllica officinalis</i> ) THROUGH PCA BASED IMAGE ANALYSIS. doi: <a href="https://doi.org/10.24818/18423264/56.2.22.06">https://doi.org/10.24818/18423264/56.2.22.06</a>	Economic Computation & Economic Cybernetics Studies & Research, 56(2)	June, 2022	0424-267X (P) 1842-3264 (E)
<b>S. Ray et al.</b>	BSEH, GCECT	Analytic radiation model for perfect fluid under homotopy perturbation method	Ind. J. Phys.	2021	ISSN: 0974-9845
<b>S. Ray et al.</b>	BSEH, GCECT	Anisotropic stars in Brans-Dicke gravity	Chin. J. Phys.	2021	ISSN: 0577-9073
<b>S. Ray et al.</b>	BSEH, GCECT	Role of anisotropy on the tidal deformability of compact stellar objects	Phys. Sci. Forum	2021	ISSN: 2673-9984
<b>S. Ray et al.</b>	BSEH, GCECT	Decoupling gravitational sources in $f(R,T)$ gravity under class I spacetime	Phys. Dark Univ.	2021	ISSN: 212-6864
<b>S. Ray et al.</b>	BSEH, GCECT	Anisotropic compact stars: Constraining model parameters to account for physical features of tidal Love numbers	Ann. Phys.	2021	ISSN: 0003-4916
<b>S. Ray et</b>	BSEH,	A relativistic compact stellar model of	Adv. High		ISSN:



al.	GCECT	anisotropic quark matter mixed with dark energy	Energy Phys		1687-7357
S. Ray et al.	BSEH, GCECT	Tidal effect in ADM formulation under the foliations of spacetime	Chin. J. Phys.	2022	ISSN: 0577-9073
S. Ray et al.	BSEH, GCECT	Traversable wormhole on the brane with non-exotic matter: a broader view	Class. Quantum Grav.	2022	ISSN (print): 1361-6382 ISSN (online): 0264-9381
S. Ray et al.	BSEH, GCECT	Anisotropic compact star with a linear pressure–density relationship	Int. J. Mod. Phys. D	2022	ISSN (print): 0218-2718 ISSN (online): 1793-6594
S. Ray et al.	BSEH, GCECT	Relativistic charged stellar model of the Pant interior solution via gravitational decoupling and Karmarkar conditions	Mod. Phys. Lett. A	2022	ISSN: 0217-7323
S. Ray et al.	BSEH, GCECT	Traversable wormhole models in gravity	Int. J. Mod. Phys. A	2022	ISSN: 0217-751X
S. Ray et al.	BSEH, GCECT	Anisotropic stars in modified gravity: An extended gravitational decoupling approach	Chin. Phys. C	2022	ISSN 1674-1137
Pinaki Mukherjee et al	Electronics & Communication Engineering	Artificial Neural Network based Dimension Prediction of Rectangular Microstrip Antenna. doi: <a href="https://doi.org/10.1007/s40031-021-00710-6">https://doi.org/10.1007/s40031-021-00710-6</a>	Journal of The Institution of Engineers (India): Series B	February, 2022	2250-2114 (E) 2250-2106 (P)

#### 4. Book Chapter Published / Accepted

Sl. No.	Name of the Teacher	Title of the Book published	Year	ISBN	Name of the Publisher
1	Tapas Kumar Bhattacharya et al	Lecture Notes in Mechanical Engineering. in Friction Coefficient Analysis of Nano-crystalline TiO <sub>2</sub> -Added Alumina Ceramics	2021	978-981-16-2346-2; DOI: 10.1007/978-981-16-2347-9_20	Springer, Singapore.
2	Saibal Ray	Classical Extensions and Alternative Theories of Gravity	2021	ISSN: 724059	AHEP, Hindawi

3	Saibal Ray	String Theory and Mathematical Physics	2021	ISSN: 2075-1680	AXIOMS, MDPI
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### 5. Additional information regarding the research works in this institute:

*Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed*

- *Total number of Citations in Scopus during the year: 41*
- *Total number of Citations in Web of Science during the year: 45*
- *Total number of Publications in Scopus during the year: 33*
- *Total number of Publications in Web of Science during the year: 35*

*Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University*

- *h-index of Scopus during the year: 45*
- *h-index of Web of Science during the year: 26*

## **PART 4: EXTENSION PROGRAMMES**

## EXTENSION PROGRAMMES

### 1. Award / recognition of the teacher

Name of the teacher awarded national/ international fellowship/financial support	Name of the Award/Fellowship	Month and Year of Award	Awarding Agency
Saibal Ray	Top Ten Scientist	01/07/2021 -- 31/06/2022	AD Scientific Index, USA
Saibal Ray	Fellow of Royal Astronomical Society	01/07/2021 -- 31/06/2022	Royal Astronomical Society, London
Saibal Ray	Associateship	01/08/2020 -- 31/07/2023	UGC affiliated IUCAA, Pune

### 2. Details of grants received from Government and Non-governmental agencies for research projects, endowments, Chairs in the institution during the year

Name of the Principal Investigator/ Co-Investigator (if applicable)	Department of the Principal Investigator/ Co-Investigator	Name of the Funding Agency	Type (Government /Non-Government)	Funds provided	Month and Year of receiving the grant	Duration of the Project (in days)
N. Mazumder	Physics	WB-DST	Government	281400	Mar-22	1095
T.K. Bhattacharya	Ceramic Technology	WB-DST	Government	314400	Jun-22	1095
B.K. Sanfui	Ceramic Technology	IREL	Government	673400	Mar-22	1460
B.K. Sanfui	Ceramic Technology	SERB	Government	Nil	N.A.	1095

### 3. National Service Scheme (NSS)

Name of the activity	Dates	Number of participants
International Women's Day Celebration	08-03-2022	20
Rally on Environmental Awareness	26.04.2022	30
World Environment Day Celebration	05.06.2022	10
International Yoga Day Celebration	21.06.2022	8

### 4. The College journal: *Scientific Voyage*

A quarterly research journal published in the college under an editorial board with national and international experts in the fields [URL: <http://www.scientificvoyage.net/index.php/sv>].

## 5. Sports and cultural events / competitions organized by the institution

Name of the event/competition	Date of event/competition
Rap Battle Aakriti( Inter College Fashion Show) 3 team, 10 members per team	29.04.2022
Battle of bars ( Inter college)4 Participants,	29.04.2022
Musicon(Inter College Singing Competition), 8 participants	30.04.2022
Badminton(Inter College Competition) 40 teams, 02 Players each team	30.04.2022
Cricket(Inter college Tournament), 12 teams, 8 players each teams	30.04.2022
Footbal ( Inter College Tournament))12 teams, 10 players in each team	30.04.2022
Karmatek (Inter College Competiton)	01.05.2022

## 6. College Events

Date	Title	Venue
09.04.22	Sky Watching Camp by Science Club of GCECT	GCECT Campus
28.05.22	Farewell Ceremony of pass out students of 2022	Conference Room, GCECT
21.06.22	Celebration of the International day of Yoga 2022	GCECT 5th Floor
08.07.22	One-day workshop on Teaching-Learning process	Conference Room, GCECT
26.07.22	Inaugural programme of student club, ByteMonk (under the sponsorship of AICTE-SPICES)	Auditorium, GCECT
29.07.22	Teaching - learning methods in the context of present days learners	Conference Room, GCECT
05.08.22	Essay Completion with a theme of 'Education system in 21st century in Indian perspective: Prospects and Problems' as a part of celebrating the 75 years of Independence of India	GCECT
05.08.22	Painting/Collage exhibition with a theme of '75 years of Independence' as a part of celebrating the 75 years of Independence of India	GCECT
15.08.22	Independence Day Celebration	GCECT campus & Auditorium
22.08.22 - 27.08.22	One Week Faculty Development Programme on AWS (Amazon Web Services)	Online (organized at GCECT)
05.09.2022	Teachers' Day celebration	GCECT Auditorium
15.09.2022	Engineer's Day celebration: Entrepreneurship a tool for empowerment	GCECT Auditorium
16.09.2022	Student's Grooming Session 1	GCECT Auditorium
17.09.2022	1st Plantation Drive by the Alumni Association	GCECT Auditorium
17.09.2022	Biswakarma Puja	GCECT campus
11.10.2022	Induction Programme	GCECT, Excursion

01.12.2022	Rally by NSS unit	GCECT campus & Locality
21.12.2022	Raman-Armstrong Memorial Lecture on Space - Sciences, Technology & Industries (3rd Edition)	GCECT Auditorium
04.01.2023	Intra College Quiz on Science & Astronomy	GCECT Auditorium
06.01.2023	Sky Watching Camp	GCECT Hostel
13.01.2023	Symposium (Essay competition) on Swami Vivekananda - A role model for the youth in India	GCECT Auditorium
18-19.01.23	Intra college football competition	GCECT Campus
24.01.2023	Intra College Debate Competition	GCECT Auditorium
26.01.2023	Republic Day & Saraswati Puja celebration	GCECT Campus

## 7. College Event Gallery

### Engineer's Day Celebration, 2022:







**Teachers' Day Celebration, 2022:**







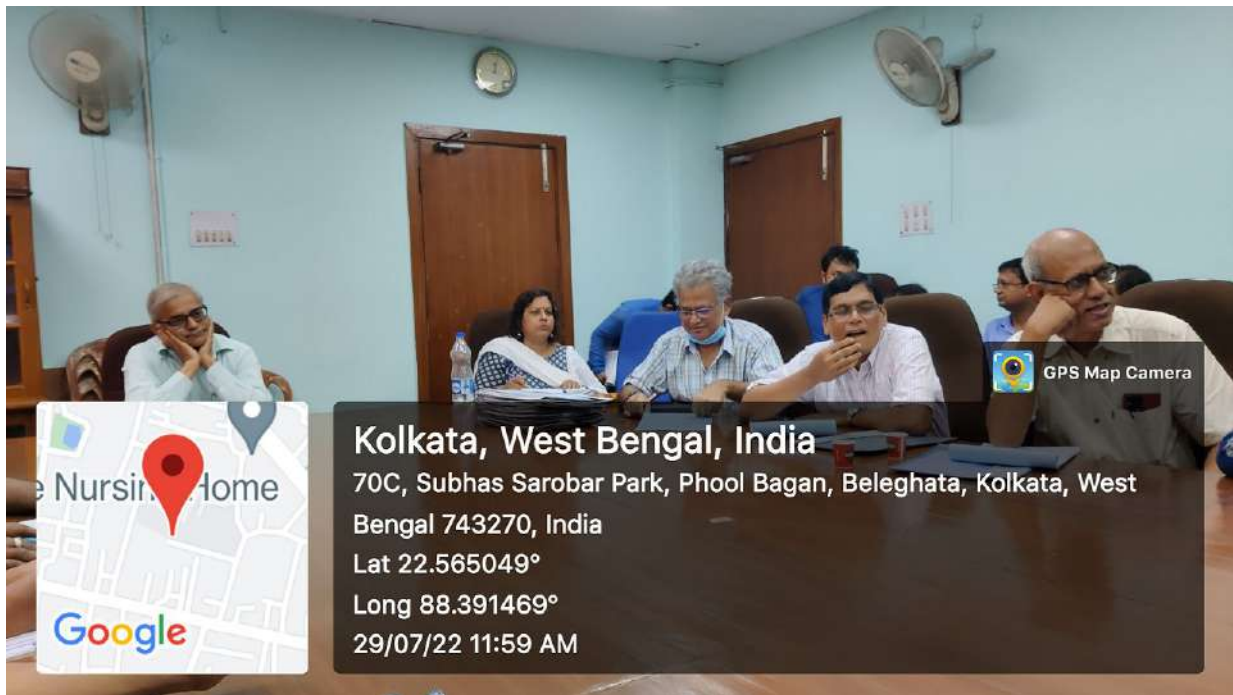
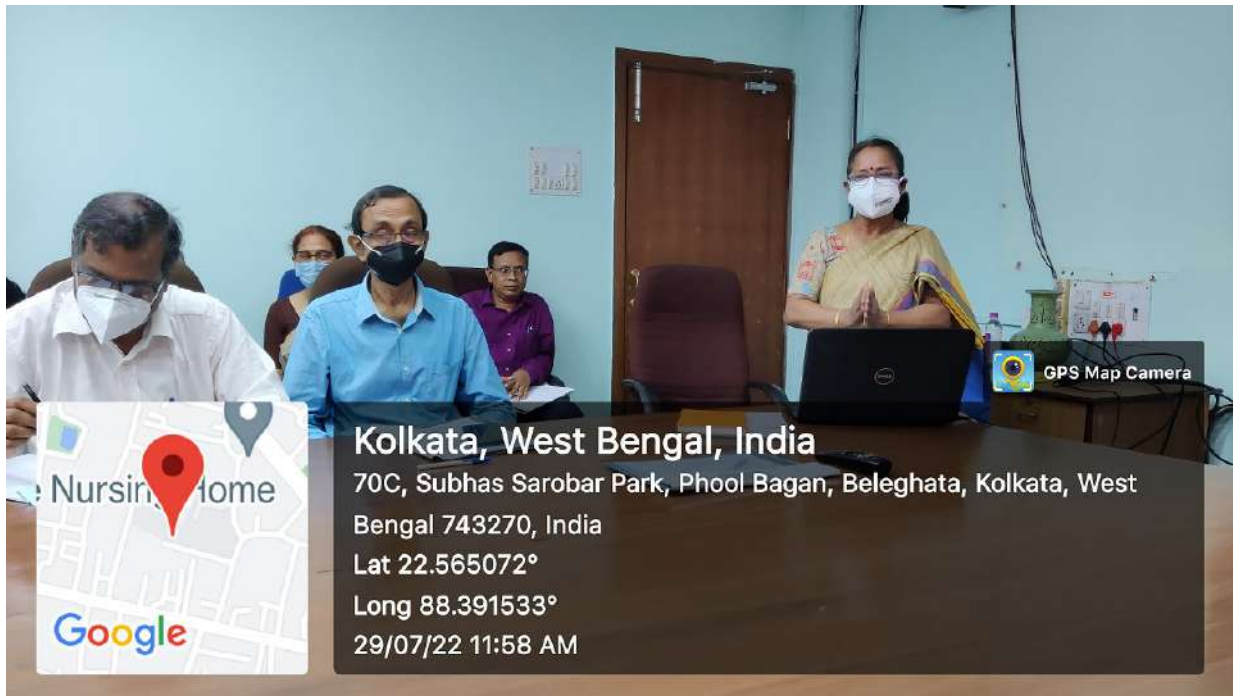
Inaugural programme of student club, ByteMonk (under the sponsorship of AICTE-SPICES):





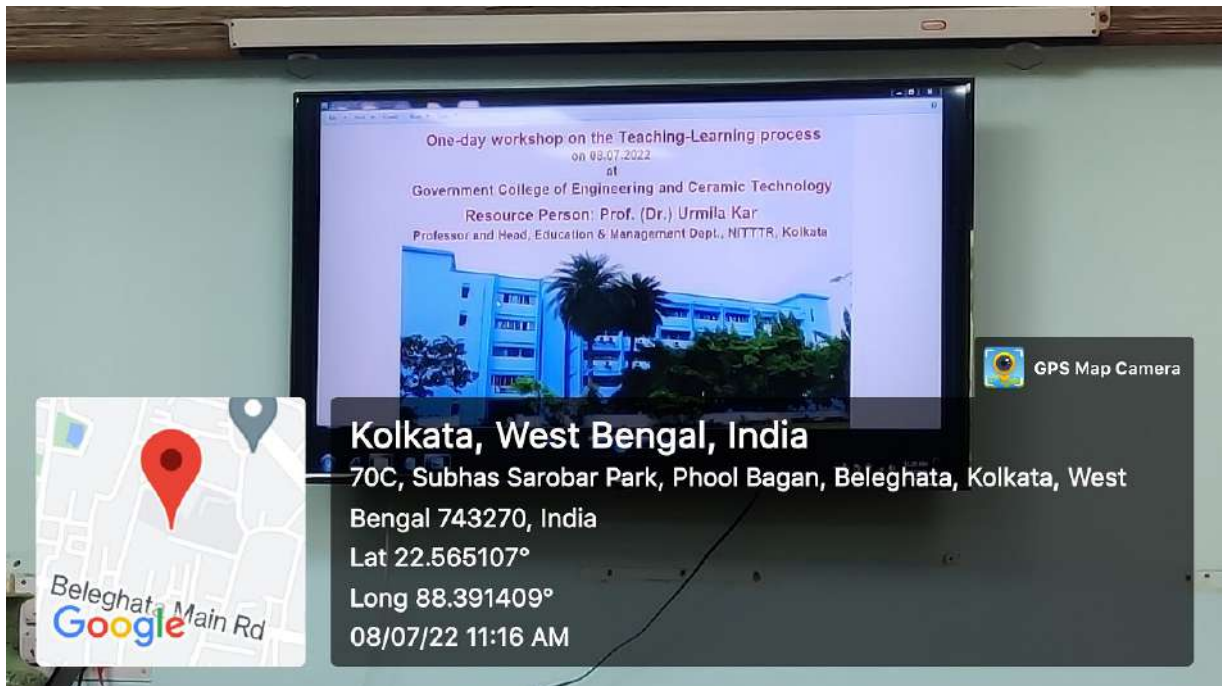
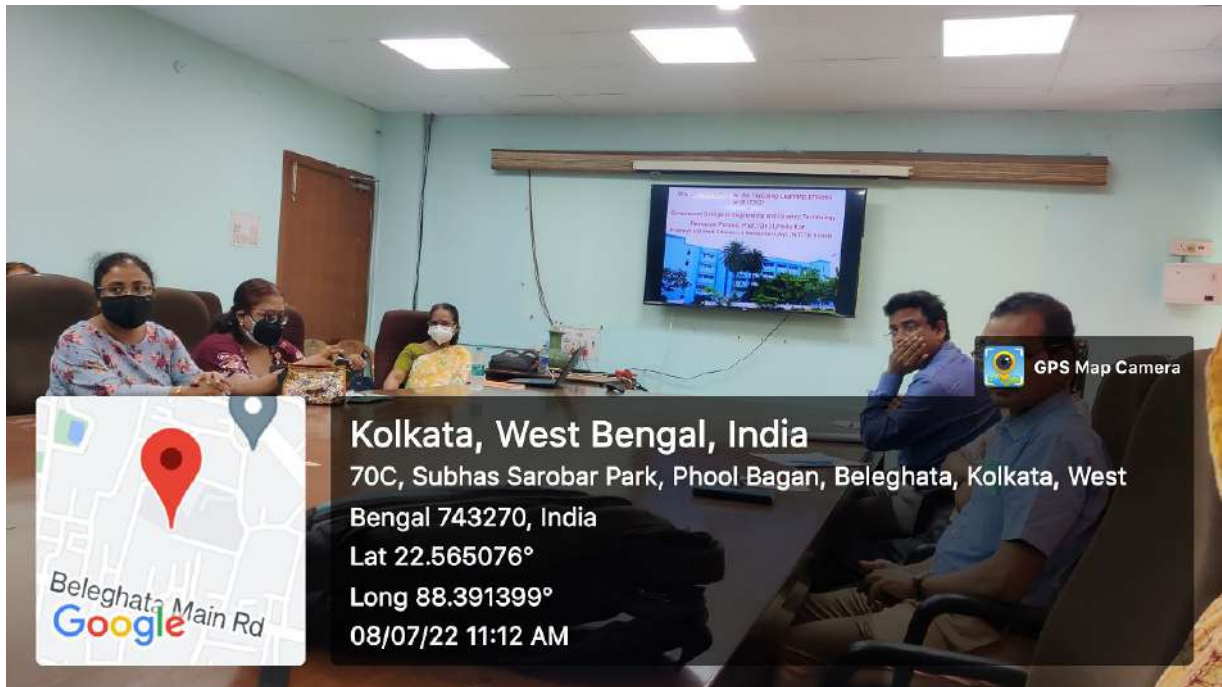


**Teaching - learning methods in the context of present day's learners:**





**One-day workshop on Teaching-Learning process:**





## Sky watching camp





## Raman-Armstrong Memorial Lecture on Space - Sciences, Technology & Industries (3rd Edition)







**Students' Induction Programme, 2022:**















**List of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the session 2021-22**

<b>Name of the Faculty</b>	<b>Type of Program (Professional Development Programmes, Orientation/Induction Programmes, Refresher Course, Short Term Course )</b>	<b>Duration (in No. of days)</b>	<b>start Date and end date</b>	<b>Name of the Organising Institution</b>
Prof. Bimal Pal	IP Practical Aspects - Patent drafting & filing, trademark & copyright filing, organised by NPTEL	6 days	13-07-2021 to 18-07-2021	NPTEL
Prof. Bimal Pal	Environmental Engineering Laboratory: Equipment & Procedure. Organised by NITTTR Kolkata	12 days	26-07-2021 to 06-08-2021	NITTTR, Kolkata
Prof. Bimal Pal	Inculcating Universal Human Values in Technical Education Organised by AICTE	5 days	27-09-2021 to 01-10-2021	AICTE
Prof. Partha Haldar	Induction program on "Modern Concept on Refractory Lining in Iron and Steel making" and "Spectrum of Application of Ceramic Engineering" organised by the Department of Ceramic Technology GCECT	1 day	18.09.2021 to 18.09.2021	Department of Ceramic Technology GCECT
Prof. Partha Haldar	e-National Level Awareness Programme on "SAMBHAV" organised by the Ministry of micro, small and medium enterprises, Govt. of India	1 day	24.11.2021 to 24.11.2021	Ministry of micro, small and medium enterprises, Govt. of India
Prof. Partha Haldar	FDP on "New Age Materials and its Advanced Applications" organised by the Department of Mechanical Engineering, Karunya Institute of Technology.	6 days	12.08.2021 to 17.08.2021	Department of Mechanical Engineering, Karunya Institute of Technology
Prof. Partha Haldar	short term training programme on "Community Development through Technical Institutes" by National Institute of Technical Teachers' Training and Research, Kolkata	5 days	23.08.2021 to 27.08.2021	NITTTR, Kolkata
Prof. Partha Haldar	completed FDP on "Patent Search for Engineers and Lawyers" offered by NPTEL-AICTE		August to October, 2021	NPTEL-AICTE
Prof. Partha Haldar	completed the short term training programme on "Engineering Drawing using Software" by National Institute of Technical Teachers' Training and Research, Kolkata	5 days	24.01.2022 to 28.01.2022	NITTTR, Kolkata
Prof. Partha Haldar	completed the short term training programme on "Introduction to Finite Element method in Engineering" by National Institute of Technical Teachers' Training and Research, Kolkata	12 days	07.02.2022 to 18.02.2022	NITTTR, Kolkata
Prof. Partha Haldar	completed the short term training programme on "Estimating & Costing of Non-conventional Energies" by National Institute of Technical Teachers' Training and Research, Kolkata	5 days	21.02.2022 to 25.02.2022	NITTTR, Kolkata
Prof. Soumit Chowdhury	How to Write Thesis and Research paper (organized by NITTTR-Kolkata)	5 days	02-08-2021 to 06-08-2021	NITTTR, Kolkata

Prof. Soumit Chowdhury	Education for Post-Millennial Learner (organized by Govt. General Degree College, Kalna)	1 day	19-07-2021 to 19-07-2021	Govt. General Degree College, Kalna
Prof. Soumit Chowdhury	Induction Program (organized by Dept. of CT, Govt. College of Engg. & Ceramic Technology)	1 day	18-09-2021 to 18-09-2021	Dept. of CT, Govt. College of Engg. & Ceramic Technology
Prof. Soumit Chowdhury	Induction Program (organized by Dept. of IT & CSE, Govt. College of Engg. & Ceramic Technology)	1 day	18-09-2021 to 18-09-2022	Dept. of IT & CSE, Govt. College of Engg. & Ceramic Technology
Prof. Soumit Chowdhury	Wipro Certified Faculty Programme on Java Full Stack Top Up (organized by wipro)	12 days	13-06-22 to 24-06-22	Wipro Ltd
Prof. Kingshuk Chatterjee	Theory of Computation (FDP organized by NPTEL)		July to September, 2021	NPTEL
Prof. Partha Ghosh	FDP on Data Science (ATAL)	5 days	22-2-22 to 26-2-22	School of Computer Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University under AICTE Training And Learning (ATAL) Academy
Prof. Partha Ghosh	FDP on Computational Mathematics using Computer Algebra Systems with Application to Machine Learning (ATAL)	5 days	11-2-22 to 15-2-22	Institute of Chemical Technology under AICTE Training And Learning (ATAL) Academy





# ANNUAL REPORT

## 2020-2021



**GOVERNMENT COLLEGE OF ENGINEERING**  
**&**  
**CERAMIC TECHNOLOGY**

**73 A.C. Banerjee Lane, Kolkata 700 010, West Bengal, India**

Tele/Fax: 033-2370-1264; E- mail: [gcctwb@gmail.com](mailto:gcctwb@gmail.com)



## **PREFACE**

This Institute (established on 3<sup>rd</sup> April, 1941), the then College of Ceramic Technology (Bengal Ceramic Institute) has been one of the oldest technological colleges in Kolkata and the only full-fledged college in India offering B. Tech, M. Tech. and Ph. D. programs in Ceramic Technology along with hands on trainings in traditional potteries and other ceramic products since its inception. The college has already completed 75 years of its glorious existence. The alumni of the institute are well established in their professional career and spread all over the world. They are the flag bearers of the institute.

Initiating as a Diploma level institute, it was then elevated to a Degree college under Higher Education Department, Government of West Bengal and was affiliated to the University of Calcutta in the year 1962.

The institute has emerged as one of the best temples of learning and started transforming from mono-discipline institute to multi-discipline institute with the introduction of Information Technology and Computer Science & Engineering programs in 2000 and 2001 respectively. Now, the institute was affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT), formerly West Bengal University of Technology since 2001.

Research & Development are an integral part of this institute of higher learning. The institute has good research activities in the under-graduate level. From 2006-2007, students from different background are reaping the benefit of M. Tech. program in Ceramic Technology. The introduction of M. Tech program in Ceramic Technology has enormously increased the scope & possibilities for research and development. Almost all teachers, students and scholars of the college are involved in research and development activities. M. Tech. program in Information Technology has also started its journey since 2014.

GCECT received World Bank assistance under Technical Education Quality Improvement Programme (TEQIP) Phase- I and successfully reaped tangible benefits by implementing various reform measures as per guidelines resulting into development and upgradation of various laboratories and infrastructure of the whole college in recent past.

The institute also acquired one acre of land from adjacent West Bengal Small Industries Development Corporation Limited (WBSIDCL) to augment its infrastructure.

The institute received prestigious NAAC grad 'A' accreditation, a certification of the quality of the institute in the national benchmark. As a consequence, the institute received the autonomous status from the University grant commission and a substantial grant from Rashtriya Uchchatar Shiksha Abhiyan (RUSA). The grant has been used for the construction of hostel and other infrastructure. Now-a-days, the college has been able to establish its proud position in the country. This institute is not only providing latest technology oriented courses but also is equipped with good laboratory, library and other students' amenities. The students get the scope of being guided by renowned and eminent faculties to build their career.

The annual report of the institute is a reflection of the activities done in a particular year. The year 2020-21 has been an eventful year in which we had to change our conventional teaching learning and administrative processes and adapt a new process in the pandemic situation due to COVID-19.

Several steps have been taken to manage academics including examination during COVID-19 (post March 25, 2020). The institute devised an academic system to ensure the continuity of the academic activities in the best possible ways.

All members of GCECT put their best effort to ensure that the student of the institute receive the best training to become globally competitive professional with all human values to be useful for the society.

**Prof. (Dr.) Krishnendu Chakrabarty**

*Principal*

Govt. College of Engg. & Ceramic Technology

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### ***Vision of the Institute:***

To cultivate excellence in various fields of engineering and technology by imparting core knowledge to the students and to transform the institution into a centre of academic excellence and advanced research apart from producing skilled technologists.

### ***Mission of the Institute:***

- To impart high quality technical education that will produce globally competitive engineers & technologists.
- To inculcate entrepreneurial skill and leadership quality amongst potential students.
- To stress upon acquiring advanced knowledge and research acumen among faculties and students.
- To create compassionate, responsible and innovative global citizens.

## **(i) Department of Ceramic Technology**

### ***Vision***

To emerge as a world class centre for education and research in the field of Ceramics, Glass and allied materials to serve the Industry and the society at large.

### ***Mission***

- To generate an environment in the department for advanced research and innovation with a view to imparting quality teaching and training in the area of Ceramics, Glass and allied materials.
- To produce graduates with a strong foundation in the area of Ceramic and Glass Technology to cater to the needs of Industry, Academia and Research organization in India and abroad.
- To emphasize Institute-Industry interaction to make the students aware of real problems in the Industries and solutions thereof.
- To motivate the faculties for meeting the requirement of leaders in industry, academic & research institutes and society.

## **(ii) Department of Information Technology**

### ***Vision***

The Department of Information Technology of this institute envisions itself to be in the top tier departments of the country that will be recognized for its technological advancement in teaching, learning, research and innovation and serve to address evolving global needs.

### ***Mission***

- To give high quality education to educate future leaders and contribute to the professional workforce in engineering and technology.
- To inspire learners to excel in research and innovation, collaborative activities, technologies and systems with a positive contribution to the society.

## **(iii) Department of Computer Science & Engineering**

### ***Vision***

The Computer Science & Engineering department of this Institute is committed to become a centre of excellence to meet the sprouting global challenges by imparting education and research of highest quality and thus ensures to maintain its status as a pivotal or nodal agency or a nucleus of the overall technological growth in the domain of Computer Science.

### ***Mission***

- To present our student with up-to-date curricula and pedagogy in the computer science and thus ensure that they have a solid foundation in the core concepts, equip them with problem solving and decision-making skills, and prepare them for lifelong learning in the discipline.
- To produce graduates that are knowledgeable, articulate, principled, innovative, confident, and able to think critically
- To provide for and encourages collegial, intellectual and academic growth of its faculty.
- To perform research that advances the state-of-the-art in computer science.
- To inculcates the values enshrined in the Constitution and demonstrate a sense of societal and ethical responsibility in all professional endeavors.

# **PART 1: COLLEGE ADMISTRATION**

## **PART 1: COLLEGE ADMISTRATION**

### **1. Board of Governors (BoG)**

1.	Prof. Binay K. Dutta, Former Chairman, West Bengal Pollution Control Board (Educationist)	Chairman
2.	Prof. Mehtab Alam, Jamia Milla University, New Delhi (UGC Nominee)	Member
3.	Dr. Arup Kumar Chattopadhyay, MD, National Refractories (Educationist)	Member
4.	The Director of Technical Education, West Bengal (Govt. nominee)	Member
5.	Dr. Jaya Bandyopadhyay, Maulana Abul Kalam Azad University of Technology (University Nominee)	Member
6.	Prof. Bimal Kumar Roy, Former Director, ISI, Kolkata (Educationist)	Member
7.	Dr. Rituparno Sen, Professor & HOD, Ceramic Technology	Member
8.	Dr. Mousumi Maitra, Professor & HOD, Information Technology	Member
9.	Dr. Kalpana Saha Roy, Assistant Professor & HOD, Computer Science and Engineering	Member
10.	Dr. Debdarpan Khan, Associate Professor of Geology & HOD of Basic Science, Engineering and Humanities	Member
11.	Mr. Ranjan Ray, Associate Professor of Chemical Technology	Member
12.	Controllor of Examinations, Govt. College of Engg. & Ceramic Technology	Member
13.	Mr. Jayanta Kumar Chowdhury, Registrar	Member
14.	The Principal, Govt. College of Engg. & Ceramic Technology	Ex-Officio Member Secretary

### **2. Academic Council**

1.	Prof. (Dr.) Krishnendu Chakrabarty, Principal	Chairman
2.	Prof. Manoj Kumar Mitra, Former Dean, Jadavpur University	Member
3.	Prof. Rajat Kr. Pal, Professor, Department of C.S.E, University of Calcutta	Member
4.	Dr. Subhasish Basu Majumdar, Professor, Materials Science Centre, IIT Kharagpur	Member
5.	Mr. Debasis Mazumdar, Associate Director, CDAC, Kolkata	Member
6.	Mr. Prasanta Dutta, Sr. GM, International Marketing, TRL Krosaki Refractories	Member



7.	Dr. Arup Kumar Chattopadhyay, MD, National Refractories	Member
8.	Dr. S.R. Bhadra Chowdhury, Department of Electronics, IEST, Shibpur	Member
9.	Prof. (Dr.) Rituparno Sen, HOD, Ceramic Technology	Member
10.	Prof. (Dr.) Mousumi Maitra, HOD, Information Technology	Member
11.	Dr. Kalpana Saha Roy, HOD, Computer Science and Engineering	Member
12.	Dr. Debdarpan Khan, HOD of Basic Science, Engineering and Humanities	Member
13.	Controller of Examinations	Member
14.	Dr. Srimanta Patra	Member
15.	Dr. Rajkumar Chakraborty	Member
16.	Dr. Paramita Dey	Member
17.	Dr. Soumit Chowdhury	Member
18.	Mr. Ranjan Ray	Member Secretary

### 3. Internal Quality Assurance Cell (IQAC)

1.	Prof. (Dr.) Krishnendu Chakrabarty	Chairman
2.	Prof. (Dr.) Mousumi Maitra	Member
3.	Dr. Debdarpan Khan	Member
4.	Dr. Kalpana Saha Roy	Member
5.	Mr. Ranjan Ray	Member
6.	Dr. Kaberi Das	Member
7.	Mr. Biswarup Das	Member
8.	Mr. Jayanta Kumar Chowdhury	Member
9.	Accounts Officer, GCECT	Member
10.	Mr. Amit Kr. De, President, A. K. industrial Corporation	Member
11.	Dr. A. K. Chattopadhyay, MD, National Refractories	Member
12.	Local MLA or his representative	Member

13.	Mr. Prasanta Dutta, Sr. GM, International Marketing, TRL Krosaki Refractories	Member
14.	Mr. Dipankar Banerjee, Marketing & Technology Director, Vesuvius India Ltd	Member
15.	Mr. Ritesh Mukherjee, Associate Director, C-DAC, Kolkata	Member
16.	Mr. Nanda Paul, Guardian	Member
17.	Mr. Ranabir Paul, Student Representative	Member
18.	Controller of Examinations, GCECT	Member
19.	Prof. (Dr.) Rituparno Sen	Coordinator

#### 4. Board of Studies (BOS)

##### (i) Department of Ceramic Technology

1.	Prof. (Dr.) Rituparno Sen (HOD)	Chairman
2.	All Faculty members of the department	Members
3.	Mr. Prasanta Dutta, Senior GM, International Business, TRL Krosaki Refractories	Member
4.	Dr. Siddhartha Mukherjee, Former Professor of Metallurgy, JU	Member
5.	Dr. Arup Ghosh, Former Chief Scientist & Head, Refractories Division, CSIR-CGCRI, Kolkata	Member
6.	Mr. Srikrishna Manna, CSIR-CGCR, Kolkata	Member
7.	Dr. Sankar Ghatak, Former Scientist, CSIR-CGCRI, Kolkata	Member
8.	Dr. Devendra Kumar, Professor & Head, Ceramic Engineering, IIT-BHU	Invitee Member

##### (ii) Department of Information Technology

1.	Prof. (Dr.) Mausumi Maitra Mazumdar (HOD)	Chairman
2.	All Faculty members of the department	Members
3.	Dr. Sushmita Mitra, Professor, Machine Intelligence Unit, ISI, Kolkata: Subject Expert (nominated by the Academic Council)	Member

4.	Dr. Devadatta Sinha, Ex-Professor, Dept. of Computer Science & Engineering, C.U.: Subject Expert (nominated by the Academic Council)	Member
5.	Dr. Nabendu Chaki, Professor, Dept. of Computer Science & Engineering, C.U. - Subject Expert (nominated by the Vice-Chancellor)	Member
6.	Mr. Sagar Dutta, Assistant Manager, TCS – Representative from Industry	Member
7.	Dr. Aditya Bagchi, Ex-Professor, Dept. of Electronics and Communication Engineering, ISI, Kolkata (Invitee) - Subject Expert (nominated by the Principal)	Member
8.	Sri Joyanta Das – Postgraduate alumnus of the Department	Member

### (iii) Department of Computer Science and Engineering

1.	Dr. Kalpana Saha (Roy) (HOD)	Chairman
2.	All Faculty members of the department	Members
3.	Prof. Mita Nasipuri, Professor, Jadavpur University	Member
4.	Prof. Nabendu Chaki, Professor, Calcutta University	Member
5.	Prof. Sankhayan Choudhury, Professor Calcutta University	Member
6.	Mr. Arup Roy, Principal Consultant at Ericsson	Member

## 5. Recommendations by BOS

The BOS of all departments have approved the syllabi of 5<sup>th</sup> and 6<sup>th</sup> semester under new academic regulation after inclusion of modifications and suggestions of the expert of the BOS.

## 6. Administrative and Academic Positions

1.	Principal	Prof. (Dr.) Krishnendu Chakrabarty
2.	Controller of Examinations	Mr. Partha Halder
3.	HOD of Ceramic Technology	Prof. (Dr.) Rituparno Sen
4.	HOD of Information Technology	Prof. (Dr.) Mousumi Maitra (Majumdar)

5.	HOD of Computer Science & Engineering	Dr. Kalpana Saha (Roy)
6.	HOD of Basic Science, Engineering & Humanities	Dr. Debdarpan Khan
7.	Registrar	Mr. Jayanta Kumar Chowdhury
8.	Accounts Officer	Ms. Sulagna Chatterjee
9.	Librarian	Dr. Nikhil Kumar Jas
10.	Advisor of Training & Placement Cell	Mr. Prithwijit Guha

## 7. Faculty Members

<i>Department of Ceramic Technology</i>		
Sl.	Name	Designation
1.	Dr. Rituparno Sen	Professor and Head
2.	Dr. Saikat Maitra (On Lien to MAKAUT as V.C.)	Professor
3.	Mr. Ranjan Ray	Associate Professor
4.	Dr. Srimanta Kumar Patra	Associate Professor
5.	Mr. Ram Chandra Das	Associate Professor
6.	Dr. Kaberi Das	Associate Professor
7.	Dr. Tapas Kumar Bhattacharya	Assistant Professor
8.	Dr. Barun Kumar Sanfui	Assistant Professor
9.	Dr. Madhu Sudan Dutta	State Aided College Teacher (SACT)
10.	Ms. Ruma Mallik	SACT
11	Mr. Pappu Halder	SACT
12	Ms. Sangita Ghosh	SACT

<i>Department of Information Technology</i>		
Sl.	Name	Designation
1.	Dr. Mausumi Maitra (Majumdar)	Professor and Head
2.	Dr. Paramita Dey	Assistant Professor
3.	Mr. Ritwik Mondal	Assistant Professor
4.	Mrs. Shyama Mondal	Assistant Professor
5.	Mr. Pranay Adak	Assistant Professor

6.	Mr. Atanu Kumar Paul	Assistant Professor
7.	Ms. Shampa Mahato	SACT
8.	Ms. Maumita Maity	SACT
9.	Mr. Sudip Kuila	SACT
10.	Ms. Ananya Biswas	SACT
11.	Ms. Bidisha Ghosh	SACT
12.	Mrs. Minakshi Acharya	SACT
13.	Dr. Rayan Saptarshi Roy	SACT
14.	Mrs. Susmita Samaddar	SACT

***Department of Computer Science & Engineering***

Sl.	Name	Designation
1.	Dr. Kalpana Saha (Roy)	Assistant Professor
2.	Mr. Bimal Pal	Assistant Professor
3.	Dr. Soumit Chowdhury	Assistant Professor
4.	Mrs. Sohini Dasgupta (On Leave)	Assistant Professor
5.	Dr. Partha Ghosh	Assistant Professor
6.	Mr. Ranjit Kumar Mandal	Assistant Professor
7.	Dr. Kingshuk Chatterjee	Assistant Professor
8.	Mr. Bishwarup Das	SACT
9.	Dr. Bijoy Kumar Mandal	SACT
10.	Mrs. Rima Bhowmick	SACT
11.	Mrs. Sucharita Mondal	SACT
12.	Mrs. Pallavi Pyne	SACT
13.	Mrs. Amrita Biswas	SACT
14.	Mr. Aritra Mahapatra	SACT
15.	Dr. Rajib Biswas	SACT

***Department of Basic Science, Engineering & Humanities***

Sl.	Name	Designation
1.	Dr. Krishnendu Chakrabarty	Professor of Electrical Engineering and Principal
2.	Dr. Debdarpan Khan	Associate Professor of Geology and Head
3.	Dr. Krishnendu Dutta	Associate Professor of Mathematics

4.	Mr. Partha Haldar	Assistant Professor of Mechanical Engineering
5.	Dr. Pinaki Mukherjee	Associate Professor of Electronics
6.	Mr. Alok Mukherjee	Assistant Professor of Electrical Engineering
7.	Dr. Saibal Ray	Associate Professor of Physics
8.	Dr. Rajkumar Chakraborty	Associate Professor of Physics
9.	Dr. Prasenjit Paul	Assistant Professor of Physics
10.	Dr. Nilesh Mazumder	Assistant Professor of Physics
11.	Dr. Debdulal Maity	Assistant Professor of Chemistry
12.	Mr. Ambika Prasad Mukhopadhyay	Assistant Professor of Chemistry
13.	Mrs. Indrani Nag Chaudhuri	Assistant Professor of Economics
14.	Mrs. Sonali Sarkar	SACT (Ethics)
15.	Mrs. Ipsita Pathak	SACT (Communicative English)
16.	Mr. Firoj Mahamud	SACT (Mathematics)

## 7. Supporting Staff of the college

1.	Mr. Samir Biswas	UDC & Storekeeper
2.	Mr. Krishnendu Chatterjee	P.A. to Principal
3.	Mr. Rajib Chakraborty	Technical Assistant
4.	Mr. Rahul Mitra	Fitter
5.	Mr. Jiban Chandra Dey	Lab Attendant
6.	Mrs. Jhunu Rani Pramanick	Peon
7.	Ms. Kismatara Khatun	Peon
8.	Mrs. Pampa Sarkar	Peon
9.	Mr. Soumya Chatterjee	Peon
10.	Mr. Jiwat Kr. Rajbhar	Durwan
11.	Mr. Birbal Das	Durwan
12.	Ms. Suman Jamadarni	Sweeper

## **PART 2: ACADEMICS**

## **PART 2: ACADEMICS**

### **1. Academic Programmes**

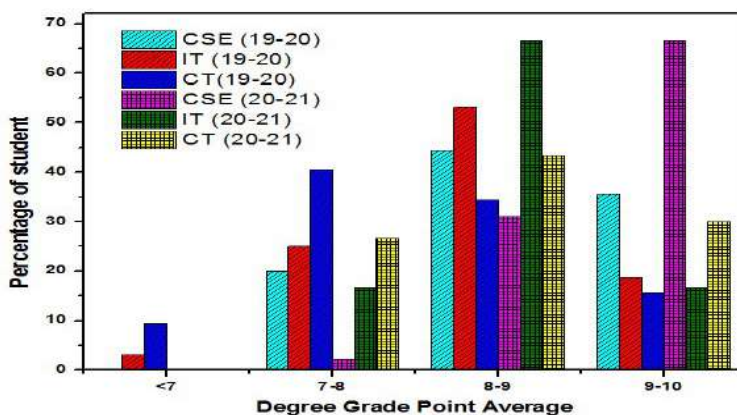
	Type of programme	Name of Department	Approved student strength
i)	Bachelor of Technology	Ceramic Technology	40 + 02 (TFW)
ii)		Information Technology	40 + 02 (TFW)+01 (DQ)
iii)		Computer Science and Engineering	40 + 02 (TFW)
iv)	Master of Technology	Ceramic Technology	18
v)		Information Technology	18

TFW: TUITION FEE WAIVER, DQ: DEFENCE QUOTA

### **2. Admission Process**

- (i) B.Tech. students are admitted based on rank of West Bengal Joint Entrance Examination and subsequent Counseling conducted by West Bengal Joint Entrance Examination Board.
- (ii) Selection to M. Tech. students are done on the basis of a valid score in GATE or PGET conducted by MAKAUT.

### **3. Academic performance of the Final Year students (2019-20 & 2020-21)**



The results depicted in the Bar Diagram exhibit that majority of the students attains a DGPA more than 8 on a 10 point scale.



## 4. Modalities of holding examinations during COVID-19 pandemic

1. There was a shift from existing examination system due to the pandemic of COVID-19. The following changes were implemented:
  - (i) The continuous evaluation / internal assessment remained as it was as per existing old or new academic regulations.
  - (ii) Instead of 75 marks of each theory paper in Semester-End examination, it was decided to hold:
    - a) 50 marks online MCQ test, and
    - b) 25 marks viva-voce, for each theory paper.
2. Google Form template was used for Online MCQ examinations with Marks of MCQ varying depending upon the type of questions.
3. In the event of an issue of poor net connectivity or some other unforeseen reasons, if few students were unable to appear in the online test, a similar test was arranged after few days, repeating the whole process for the particular students.
4. Project evaluation was decided to be held by arranging Online presentation in Google G Suite Platform and / or organizing Viva Voce in Google Meet / WhatsApp video calling mode for awarding grades.
5. Comprehensive (Grand) Viva examination was conducted by a panel of teachers on different subject groups, viz. Science, General Engineering, Specific technological / engineering subjects' clusters, only through online mode (Google Meet / WhatsApp Video Call).
6. The practical examinations (other than Project and Grand Viva) were assessed in the same manner as the Project assessment.

## 5. Industrial Training/Internship programme

*Students undergo Industrial Training/Internship after 6<sup>th</sup> Semester. The following Table indicates the name of the Industries/Companies and students participated and duration.*

<b>(i) Training details of B.Tech. CT (2020-2021)</b>		
<b><i>Name of the activity</i></b>	<b><i>Participant</i></b>	<b><i>Name of the Industries/Companies/Organizations</i></b>
Industrial Training	7	TATA Steel
	6	ABI
	4	H&R Johnson
	3	OCL
	2	PGP Glass
	4	SRU

**(ii) Internship programme of B.Tech. IT (2020-2021)**

<i>Name of the activity</i>	<i>Participant</i>	<i>Name of the Industries/Companies/Organizations</i>
Internship programme	2	SmartBridge
	1	Tablt.com
	1	MinimumQue
	1	International Model UN
	6	Udemy
	1	Webel
	5	Coursera
	8	Internshala Trainings
	3	CodeAcademy
	3	NPTEL
	1	TCSION
	2	Globsyn
Talent Next Prog	55	Wipro Technologies

**(iii) Internship programme of B.Tech. CSE (2020-2021)**

<i>Name of the activity</i>	<i>Participant</i>	<i>Name of the Industries/Companies/Organizations</i>
Internship programme	1	React Bootcamp
	2	Web Development
	2	Web Development and Designing
	2	Ultimate MySQL bootcamp: Go from SQL beginner to expert (Udemy)
	2	Neural Networks and Deep Learning (Coursera)
	3	Object-Oriented Data Structures in C++
	1	Advanced Tensorflow Custom Models, Layers, and Loss Functions with TensorFlow
	1	Machine Learning for All
	1	SQL for Data Science
	2	Java programming- solving problems with software
	1	Python Basics
	1	Complete React Native Course (2021 Edition)
	1	Modern JavaScript From The Beginning
	1	Machine Learning & Deep Learning in Python & R
	4	Programming Foundations with JavaScript, HTML and CSS
	1	HTML, CSS, and Javascript for Web Developers
1	Machine Learning-Stanford University (Coursera)	

<i>Name of the activity</i>	<i>Participant</i>	<i>Name of the Industries/Companies/Organizations</i>
Internship programme	1	Data Science
	1	R Programming
	1	Front-End Web UI Frameworks and Tools: Bootstrap 4
	1	Complete 2021 Web Development Bootcamp
	1	Complete React Native Course
	1	Natural Language Processing with Sequence Models
	2	Mastering Data Structures & Algorithms using C and C++
	1	Learn data science Deep learning, Machine learning, NLP & R
	1	Learn JAVA Programming - Beginner to Master
	2	Machine Learning A-Z: Hands on Python & R in Data Science
	1	Machine Learning Certification Course for Beginners
	1	Introduction to machine learning
	1	Core Java (Internshala)
	1	Java Programming: Solving Problem with software
	1	Computer science and engineering

## 6. Students' Placement status

*There is a Placement Cell in the College for three streams, i.e. CT, IT and CSE, which arranges On Campus and Off Campus Interviews for students. The following Table indicates the name of the Industries/Companies and number of students accepted job.*

<b>(i) Placement details of B.Tech. CT (2020-2021)</b>	
<i>Offer from On campus</i>	<i>Number of students accepted job offer</i>
Champion Ceramics	5
FOSBEL	2
RHI	3
Heat Works	2
Calderys	4
Vesuvius	2
Vishakha	2
HR Johnson	1
PGP Glass	1
Saint Gobain	1
National Refractories	1
Mohakoshal Refractories	1

<b>(ii) Placement details of B.Tech. IT (2020-2021)</b>	
<i>Offer from On campus</i>	<i>Number of students accepted job offer</i>
TCS	4
Infosys	1
Wipro	1
CTS	1
Tablt.Com	1
Nihilent Technologies Limited	1
Pwc	1

<b>(iii) Placement details of B.Tech. CSE (2020-2021)</b>	
<i>Offer from On campus</i>	<i>Number of students accepted job offer</i>
Infosys	4
TCS	12
Cognizant	2
GEOGO	1
Hitachi Vantara	1
WIPRO	2
CredAble	1
PwC	1

## 7. Students in higher studies

*A few students opted for higher studies in India and/or abroad. The list below is for the academic year 2020-21.*

<i>Name of the students</i>	<i>Name of the institutions/organizations</i>
Amitava Chatterjee	MBA
Ritesh Kumar Jha	MTech
Ritika Sinha	MTech
Subhajit Halder	MTech
Subhajit Jana	Qualified GRE
Sweta Sarkar	MTech
Avijit Kuila	MTech

## 8. Students' award/recognition

*Every year some students show their talent in various Innovative Projects and thus have been selected for award/recognition by different Awarding Agencies. The list below is for the academic year 2020-21.*

<i>Title of Innovation</i>	<i>Name of Awardees</i>	<i>Awarding agency</i>
Preparation and characterization of Aluminium Borate Refractory	K.A. Ahmed and M.R. Gazi	Winner of Inter-College Technical Paper Presentation Competition @ CALDECONCLAVE 2020 (online)
Comparative Study of Open CV Inpainting Algorithms	P. Chatterjee, S. Jana and S. Ghosh	Glob. J. Comput. Sci. Tech. (2021)

## **PART 3: RESEARCH PROGRAMMES**

## **PART 3: RESEARCH PROGRAMMES**

### **1. Sponsored / Consultancy projects**

<i>Funding Agency</i>	<i>Type of Project</i>	<i>Project Title</i>	<i>Role in Project</i>	<i>Grant (Rs.)</i>	<i>Duration</i>
DST	Major Research Project	Development of Insulating Refractories and Abrasion Resistant Ceramics from Coal Ash	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	61,52,450	07.05.2016 - 06.08.2020
SERB	Minor Research Project	Development of Pre/In-situ Formed CNT Reinforced MgAl <sub>2</sub> O <sub>4</sub> Spinel Matrix Composites	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	30,06,000	04.05.2017 - 03.11.2020
IREL	Major Research Project	Study of Sinterability and Product Development based on Zirconia Powders to be Supplied by IREL	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	58,73,800	28.08.2019 - 27.08.2022
SERB	Major Research Project	Synthesis, Characterizations and Evaluation of Pre/In-Situ Formed YAG-CNT Reinforced Al <sub>2</sub> O <sub>3</sub> based Nanostructured Composites	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	23,24,560	26.03.2021- 25.03.2024
WB-DST	Minor Research Project	Fabrication of CuPc nanotube based all-organic flexible photodiode for light detection and solar energy conversion	Dr. Nilesh Mazumder, Assistant Professor, Principal Investigator	12,55,000	2019-2022
WB-DST	Minor Research Project	Studies on Compact Stellar Objects	Dr. Saibal Ray, Associate Professor, Principal Investigator	4,48,800	02.05.2019 - 01.05.2021
WB-DST	Minor Research Project	Studies on the Microstructural characterization of ceramic materials using Image processing Technique	Dr. T.K. Bhattacharya, Assistant Professor, Principal Investigator	8,68,800	28.01.2019 - 27.01.2021

### **2. Ph.D. supervision by the teachers**

<i>Name of the Supervisor</i>	<i>Name of the student with qualification</i>	<i>Title of the thesis</i>	<i>University where registered</i>	<i>Status of the programme</i>
Dr. S. Ray, Associate Professor	Sourav Roy Chowdhury, M.Sc. (Physics)	Compact Stars under Finslers Geometry	IEST, Shibpur	Awarded
Dr. S. Ray, Associate Professor	Suparna Biswas, M.Sc. (Physics)	Studies on strange compact stars	IEST, Shibpur	Awarded

<i>Name of the Supervisor</i>	<i>Name of the student with qualification</i>	<i>Title of the thesis</i>	<i>University where registered</i>	<i>Status of the programme</i>
Dr. S. Ray, <i>Associate Professor</i>	Biplab Paik, M.Sc. (Physics)	Semi-classical inflation and black holes	Aliah University	Pursuing
Dr. S. Ray, <i>Associate Professor</i>	Rikpratik Sengupta, M.Sc. (Physics)	Studies on wormholes in braneworld gravity	Aliah University	Pursuing
Dr. K. Das, <i>Associate Professor</i>	Ram Karan (M.Tech)	Some studies on the Preparation and Characterizations of Melt Derived Bioactive Glass and Glass-ceramics In SiO <sub>2</sub> -Na <sub>2</sub> O-CaO-P <sub>2</sub> O <sub>5</sub> System	University of Calcutta	Thesis submitted in March 2021
Dr. K. Das, <i>Associate Professor</i>	Pameli Pal	Studies on Lithium Disilicate Glass-ceramics	University of Calcutta	Pursuing
Dr. T.K. Bhattacharya, <i>Assistant Professor</i>	Partha Haldar M.E. (Mechanical Engineering)	The Effect of Nano-oxide addition in Alumina Ceramics and its impact on Mechanical and Tribological Properties	Jadavpur University	Pursuing
Dr. B.K. Sanfui, <i>Assistant Professor</i>	Paramita Das M.Tech. (Ceramics)	Synthesis and Characterization of YAG and CNT reinforced Magnesium aluminate Spinel Composites	Calcutta University	Pursuing
Dr. B.K. Sanfui, <i>Assistant Professor</i>	Savan Kumar Sharma M.Tech. (Ceramics)	Studies on Nano-porous alumina based ceramics membrane for separation of flue gas	MAKAUT	Pursuing
Dr. Mausumi Maitra <i>Professor</i>	Kamarujjaman	Studies on Image De-noising and Segmentation of Medical Images	MAKAUT	Pursuing

### 3. Research/Review papers published in National/International Journals

<i>Name of the author</i>	<i>Title of the paper</i>	<i>Name of the journal</i>	<i>Impact Factor</i>
K. Das et al.	Structure, properties and in-vitro response of SiO <sub>2</sub> -Na <sub>2</sub> O-CaO-P <sub>2</sub> O <sub>5</sub> system based glass-ceramics after partial replacement of Na <sub>2</sub> O by Li <sub>2</sub> O	<i>J. Non-Crystal. Solids</i> (2021)	2.6
T.K. Bhattacharya and K. Maity	Calcination characteristics of limestone in relation with the reactivity of quick lime	<i>Sci. Voy.</i> (2020)	---
T.K. Bhattacharya et al.	A novel approach toward microstructure evaluation of sintered ceramic materials through image processing techniques	<i>Int. J. Appl. Cer. Tech.</i> (2021)	1.968



<b>Name of the author</b>	<b>Title of the paper</b>	<b>Name of the journal</b>	<b>Impact Factor</b>
T.K. Bhattacharya et al.	Non-isothermal decomposition kinetics of nano-scale CaCO <sub>3</sub> as a function of particle size variation	<i>Cera. Int.</i> (2021)	3.830
T.K. Bhattacharya et al.	Effect of nano CuO addition on the tribo-mechanical behavior of alumina ceramics in non-conformal contact	<i>Int. J. Appl. Cer. Tech.</i> (2021)	1.968
M. Maitra et al.	A Novel Spatial FCM-Based Method for Brain MRI Image Segmentation in the Presence of Noise and Inhomogeneity	<i>Proc.I3CS-Springer, NEHU</i> (2020)	---
M. Maitra et al.	A novel decision-based adaptive feedback median filter for high density impulse noise suppression	<i>J. Multimed. Tool. Appl.</i> (2021)	2.757
S. Chowdhury et al.	An overview of cybersecurity risks during the COVID-19 pandemic period	<i>Scientific Voyge</i> (2020)	-
S. Chowdhury et al.	A novel approach towards microstructure evaluation of sintered ceramic materials through image processing techniques	<i>Int. J. Appl. Cer. Tech.</i> (2021)	1.968
S. Chowdhury et al.	Digitized data validation using dual color images with improved robustness and error correction facility	Sadhana (2021)	1.88
K.Saha (Roy) and S. Khan	Study of Dynamicity of Call Management and System Resource Management Using Call Admission Control (CAC) Protocol	<i>Adv. Wire. Mob. Commun.</i> (2020)	---
K. Saha (Roy) and R. Hazra	An approach of Searching Mobile User Location with QoS provisioning in 5G Cellular Networks	<i>Int. Conf. Mob. Comput. Sustain. Info.</i> (2020)	---
K. Saha (Roy) and R. Mukhopadhyay	Study of Reinforcement Learning based Call Admission Control (CAC) protocol in Wireless/ Cellular Networks	<i>Int. Conf. Adv. Comput. Techno. Sci. Eng.</i> (2021)	---
K. Saha (Roy) and S. Malakar	Comparative Study of Different Machine Learning Models for Measurement of QoE Based on MOS in Wireless Networks	<i>2<sup>nd</sup> Int. Conf. Adv. Comput. Appl.</i> (2021)	---
Bimal Pal	Residue number system and its application to signal processing for high speed communication	<i>Int. J. of Advanced Research in Engg. and Tech.</i> (2021)	0.1
Bimal Pal et al.	Comparison of Discrete Fourier Transform and Fast Fourier Transform with Reduced Number of Multiplication and Addition Operations	<i>Int. J. of App. Math.and Info.</i> (2021)	0.0

<b>Name of the author</b>	<b>Title of the paper</b>	<b>Name of the journal</b>	<b>Impact Factor</b>
K. Chatterjee et al.	Probabilistic Neural Network aided fast classification of transmission line faults using differencing of current signal	<i>J. Inst. Engineers: Series B</i> (2020)	0.17
K. Chatterjee et al.	A novel approach toward microstructure evaluation of sintered ceramic materials through image processing techniques	<i>Int. J. Appl. Cer. Tech.</i> (2020)	1.762
K. Chatterjee et al.	Entropy-Aided Assessment of Amla ( <i>Emblica officinalis</i> ) Quality Using Principal Component Analysis	<i>Biointer. Res. Appl. Chem.</i> (2020)	0.22
A. Mukherjee et al.	A Differential Signal-Based Fault Classification Scheme Using PCA for Long Transmission Lines	<i>J. Inst. Engineers: Series B</i> (2021)	0.17
A. Mukherjee et al.	A supervised principal component analysis-based approach of fault localization in transmission lines for single line to ground faults	<i>Electric. Engg.</i> (2021)	0.35
A. Mukherjee et al.	Probabilistic Neural Network aided fast classification of transmission line faults using differencing of current signal	<i>J. Inst. Engineers: Series B</i> (2021)	0.17
A. Mukherjee et al.	Classification and localization of transmission line faults using curve fitting technique with Principal Component Analysis features	<i>Electric. Engg.</i> (2021)	0.35
A. Mukherjee et al.	Transmission Line Fault Classification under High Noise in Signal: A Direct PCA-Threshold-Based Approach	<i>J. Inst. Engineers: Series B</i> (2021)	0.17
A. Mukherjee et al.	Entropy-Aided Assessment of Amla ( <i>Emblica officinalis</i> ) Quality Using Principal Component Analysis	<i>Biointer. Res. Appl. Chem.</i> (2021)	0.22
P. Haldar et al.	A Novel Approach towards Microstructure Evaluation of Sintered Ceramic Materials through Image Processing Techniques	<i>Int. J. Appl. Cer. Tech.</i>	1.762
P. Haldar et al.	Effect of Nano CuO Addition on the Tribo-Mechanical Behavior of Alumina Ceramics in Non-Conformal Contact	<i>Int. J. Appl. Cer. Tech.</i>	1.762
P. Haldar et al.	Pneumonia detection based on X-Ray image classification using Convolutional Neural Network based Deep Learning Model	<i>Sci. Voy.</i>	---
S. Ray et al.	Plane symmetric cosmological Model	<i>Sci. Voy.</i> (2020)	---
S. Ray et al.	Cosmological models with squared trace in modified gravity	<i>Int. J. Mod. Phys. D</i> (2020)	2.154

<b>Name of the author</b>	<b>Title of the paper</b>	<b>Name of the journal</b>	<b>Impact Factor</b>
S. Ray et al.	Nonsingular solution with anisotropic fluid in mini bang cosmology	<i>Int. J. Mod. Phys. D</i> (2020)	2.154
S. Ray et al.	Cosmological models with variable anisotropic parameter in $f(R;T)$ gravity	<i>Ind. J. Phys.</i> (2020)	1.242
S. Ray et al.	Compact stellar models in modified gravity	<i>Int. J. Mod. Phys. D</i> (2021)	2.154
S. Ray et al.	Charged strange stellar model with Tolman $V$ metric potential in the Einstein-Maxwell space-time	<i>Res. Phys.</i> (2021)	3.280
S. Ray et al.	Noncommutative black hole in the Finslerian spacetime	<i>Class. Quantum Grav.</i> (2021)	3.487
S. Ray et al.	Anisotropic charged strange stars in Krori-Barua spacetime under $f(R,T)$ gravity'	<i>Ann. Phys.</i> (2021)	2.267
S. Ray et al.	Dilaton-axion black hole under the Solar system tests	<i>New Astron.</i> (2021)	1.058
S. Ray et al.	A semi-classical model of regular inflationary cosmology	<i>Phys. Dark Univ.</i> (2021)	5.430
S. Ray et al.	Bouncing universe models in the extended gravity	<i>Chin. J. Phys.</i> (2021)	2.560
S. Ray et al.	Cosmological models with a Hybrid Scale Factor	<i>Int. J. Mod. Phys. D</i> (2021)	2.154
S. Ray et al.	A gederalized form of Raychoudhuri equation	<i>Int. J. Mod. Phys. D</i> (2021)	2.154
S. Ray et al.	Decoupling gravitational sources in $f(R,T)$ gravity under class I spacetime	<i>Phys. Dark Univ.</i> (2021)	5.430
S. Ray et al.	Anisotropic compact stars: Constraining model parameters to account for physical features of tidal Love numbers	<i>Ann. Phys.</i> (2021)	2.267
S. Ray et al.	Role of anisotropy on the tidal deformability of compact stellar objects	<i>Phys. Sci. Forum</i> (2021)	---
S. Ray et al.	Wormhole solutions in $f(R)$ Gravity	<i>Int. J. Mod. Phys. D</i> (2021)	2.154
S. Ray et al.	Anisotropic stars in Brans-Dicke gravity	<i>Chin. J. Phys.</i> (2021)	2.56

<i>Name of the author</i>	<i>Title of the paper</i>	<i>Name of the journal</i>	<i>Impact Factor</i>
S. Ray et al.	Analytic radiation model for perfect fluid under homotopy perturbation method	<i>Ind. J. Phys.</i> (2021)	1.242
S. Ray et al.	Non-isothermal decomposition kinetics of nano-scale CaCO <sub>3</sub> as a function of particle size variation,	<i>Cera. Int.</i> (2021)	3.830
S. Ray et al.	N.R. Sen: Father of Indian Applied Mathematics	<i>Eur. Phys. J. H</i> (2021)	0.780
P. Paul et al.	Modified Chaplygin gas in anisotropic universes on the brane	<i>In. J. Mod. Phys. D</i> (2021)	2.461
N. Mazumder et al.	Resonant energy transfer in a van der Waals stacked MoS <sub>2</sub> -functionalized graphene quantum dot composite with ab initio validation	<i>Nanoscale</i> (2020)	7.790
N. Mazumder et al.	CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> as a radio frequency decoupling capacitor: interplay between Maxwell–Wagner polarization and a pseudo inductive response	<i>J. Phys. D: Appl. Phys.</i> (2021)	3.170
N. Mazumder et al.	Experimental observation of valence band dispersion and increased hole conductivity in CuCr <sub>1-x</sub> Li <sub>x</sub> O <sub>2-y</sub> S <sub>y</sub>	<i>Current Appl. Phys.</i> (2021)	2.480
N. Mazumder et al.	Observation of polarization dependent excitonic luminescence in few-layered WS <sub>2</sub> flakes	<i>Chem. Phys. Lett.</i> (2021)	2.030

#### 4. Seminar/workshop attended/papers presented in National/International Conferences:

<i>Name of the faculty</i>	<i>Title of the seminar/ workshop/ Name of the article</i>	<i>Place/ Organized by</i>	<i>Date</i>
Bimal Pal	FDP on Internet of Things Security	MAKAUT, West Bengal	07.11.2020-11.11.2020
Alok Mukherjee	2nd International conference on emerging technologies in data mining and information security, IEMIS 2020 / A Correlation based Classification of power system faults in a long transmission line	IEM, Kolkata	02.07.2020 - 04.07.2020
Alok Mukherjee	2nd International conference on emerging technologies in data mining and information security, IEMIS 2020 / A wavelet entropy based power system fault classification for long transmission lines	IEM, Kolkata	02.07.2020 - 04.07.2020

<i>Name of the faculty</i>	<i>Title of the seminar/ workshop/ Name of the article</i>	<i>Place/ Organized by</i>	<i>Date</i>
Alok Mukherjee	International Conference on Thermal Engineering and Management Advances, ICTEMA 2020/New Heuristics to Minimise Makespan of Permutation Flowshop Scheduling Problem with Uniformly Distributed Processing Times	JGEC, Jalpaiguri	19.12.2020 - 20.12.2020
Alok Mukherjee	International Conference on Thermal Engineering and Management Advances, ICTEMA 2020/ Intelligent Control of Air Conditioner for Reduced Energy Consumption using Pressure Sensor	JGEC, Jalpaiguri	19.12.2020 - 20.12.2020
Alok Mukherjee	International Conference on Thermal Engineering and Management Advances, ICTEMA 2020 / Random Iterated Greedy Local Search Algorithm for N×M Flow-shop Scheduling, International Conference on Thermal Engineering and Management Advances	JGEC, Jalpaiguri	19.12.2020 - 20.12.2020
Alok Mukherjee	International Conference on Innovations in Energy Management and Renewable Resources (IEMRE 2021) / Maximum power point tracking of photovoltaic system by Perturb & Observe and Incremental Conductance methods under normal and partial shading conditions	IEEE, Kolkata	05.02.2021 - 07.02.2021
Soumit Chowdhury	Future generation Computing and applications	GCECT, Kolkata	08.08.2020- 09.08.2020
Soumit Chowdhury	Short term Course on ``Artificial Intelligence using Python``	GCECT & Brain-O-Vision	14.09.2020- 19.09.2020
Soumit Chowdhury	Short term Course on ``Foundation and Advancements in Cyber Security``	Greater Kolkata College of Engineering & Management	04.05.2021 - 08.05.2021
Partha Haldar	Entrepreneurship Development Program on Renewable Energy	MAKAUT, West Bengal	20.09.2020
Partha Haldar	Recent Trends in CNC Technology	Ranaghat Government Polytechnic, Nadia	19.09.2020
Partha Haldar	Outcome Based Education and Accreditation for Engineering Colleges	G.H. Raisonni Institute of Engineering & Technology, Nagpur	11.09.2020
Partha Haldar	Orientation and Adoption of NISP at HEI Level & Policy Implementation Strategy and Progress Monitoring at HEI level	MoE's Innovation Cell, Government of India	07.08.2020 - 21.08.2020

<i>Name of the faculty</i>	<i>Title of the seminar/ workshop/ Name of the article</i>	<i>Place/ Organized by</i>	<i>Date</i>
Partha Haldar	Smart Learning: A New Paradigm	The Institution of Engineers (India) & IE Malaysia	10.08.2020
P. Mukherjee	Advanced Optimization techniques and hands on MATLAB/Scilab	MNIT Jaipur, NIT PATNA and PDPM IIIT DM Jabalpur	13.07.2020-24.07.2020
P. Mukherjee	Artificial Intelligence using Python	GCECT, Brainovision Solutions India Pvt. Ltd. & National Youth Council of India	14.09.2020-19.09.2020
P. Mukherjee	Simulation in Engineering Education and Research	COMSOL Multiphysics	03.03 2021

## 5. Book Chapter Published / Accepted

<i>Name of the author</i>	<i>Title of the Book/Chapter</i>
B.K. Sanfui et al.	Development of Commercial Alumina Based Sol-Gel Derived Multilayer CO <sub>2</sub> Selective Ceramic Membrane, Indo Canadian Research Conclave on Carbon Capture Sequestration and Utilization (ICRC-CCSU), Pt Deendayal Energy University, Gandhinagar, 12-13 March 2021
P. Haldar et al.	Simulation and Validation of Castings in Shop Floor, In "Casting Processes and Modelling of Metallic Materials", DOI:10.5772/intechopen.94596, IntechOpen
A. Mukherjee et al.	New Heuristics to Minimise Makespan of Permutation Flowshop Scheduling / In International Conference on Thermal Engineering and Management Advances (pp. 395-404). Springer, Singapore. doi: 10.1007/978-981-16-2347-9_34
A. Mukherjee et al.	A Correlation based Classification of power system faults in a long transmission line / In Emerging Technologies in Data Mining and Information Security: Proceedings of IEMIS 2020, Volume 2, pp. 113-121, Springer Singapore. doi: <a href="https://doi.org/10.1007/978-981-33-4367-2_12">https://doi.org/10.1007/978-981-33-4367-2_12</a> , Online ISBN: 978-981-33-4367-2
A. Mukherjee et al.	A wavelet entropy based power system fault classification for long transmission lines / In Emerging Technologies in Data Mining and Information Security: Proceedings of IEMIS 2020, Volume 2, pp. 123 - 131, Springer Singapore. doi: <a href="https://doi.org/10.1007/978-981-33-4367-2_12">https://doi.org/10.1007/978-981-33-4367-2_12</a> , Online ISBN: 978-981-33-4367-2

<i>Name of the author</i>	<i>Title of the Book/Chapter</i>
A. Mukherjee et al.	Maximum power point tracking of photovoltaic system by Perturb & Observe and Incremental Conductance methods under normal and partial shading conditions / In 2021 Innovations in Energy Management and Renewable Resources (52042) (pp. 1-6). IEEE. doi: 10.1109/IEMRE52042.2021.9386964
P. Ghosh	“Deep Learning to Diagnose Diseases and Security in 5G Healthcare Informatics” been Accepted in MACHINE LEARNING AND DEEP LEARNING TECHNIQUES FOR MEDICAL SCIENCE, CRC Press, Taylor & Francis (2021)
P. Ghosh	"Early Stage Diabetes Risk Prediction using Machine Learning" has been accepted in UGC care listed Journal, "VIGYAN PRAKASH 2021"
P. Ghosh et al.	"A STUDY ON MUSIC GENRE CLASSIFICATION USING MACHINE LEARNING" has been accepted in International Conference on "Mathematical and Computational Models - ICMCM'21" (2021)
Soumit Chowdhury	“A Novel High-Density Multilayered Audio Steganography Technique in Hybrid Domain”, Published in – “Proceedings of International Conference on Frontiers in Computing and Systems” (COMSYS 2020)
Soumit Chowdhury	“Multi Data Driven Validation of E-Document Using Concern Authentic Multi-signature Combinations”, Published in – “Proceedings of International Conference on Frontiers in Computing and Systems” (COMSYS 2020)



## **PART 4: EXTENSION PROGRAMMES**

## **PART 4: EXTENSION PROGRAMMES**

### **1. Award / recognition of the teacher**

<i>Type</i>	<i>Name of the teacher awarded the fellowship</i>	<i>Name of the award</i>	<i>Date of award</i>	<i>Awarding agency</i>
National	Dr. Saibal Ray	Visiting Associateship	01/08/2020 - 31/07/2023	UGC via IUCAA, Pune
International	Dr. Saibal Ray	Fellow of the Royal Astronomical Society	14/05/2021	The Royal Astronomical Society, London

### **2. National Service Scheme (NSS)**

<b>Name of the activity</b>	<b>Dates (dd/mm/yyyy)</b>	<b>Number of student participated</b>	<b>Number of teachers coordinated the programs</b>
Quiz on HIV & AIDS	18.02.2021 & 08.03.2021	38 & 39	2
Celebration of International Women's Day	08.03. 2021	30	2
Celebration of International Yoga Day	21.06. 2021	29	2

### **3. The College journal: *Scientific Voyage***

A quarterly research journal published in the college under an editorial board with national and international experts in the fields [URL: <http://www.scientificvoyage.net/index.php/sv>].

### **4. Students' activities**

<b>Name of the activity</b>	<b>Mode</b>	<b>Year</b>	<b>Details of the programme</b>
Independence Day celebration	Offline	15 August 2020	Flag hoisting & cultural programme
Teacher's Day	Online	5 September 2020	
Biswakarma Puja	Offline	17 September 2020	
Saraswati Puja	Offline	29 & 30 January 2021	

Name of the activity	Mode	Year	Details of the programme
Quiz Competition	Online	2021	Intra college event
Debate Competition	Online	2021	Intra college event
Painting & Photography Competition	Online	2021	Intra college event
Senior-Junior Interaction	Online	2021	Inter college event
Webinars from CodeChef <i>GCECT Chapter</i>	Online inter college event	Roadmap to Competitive Coding 2021	
		A walkthrough of Coding Complexity to simplify the journey to FAANG	
		Encode	
Coding Competitions from CodeChef <i>GCECT Chapter</i>	Online inter college event	CodeScam 2021	
		Breaking Code	

**List of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the session 2020-21**

<b>Name of the Faculty</b>	<b>Type of Program (Professional Development Programmes, Orientation/Induction Programmes, Refresher Course, Short Term Course )</b>	<b>Durati on (in No. of days)</b>	<b>start Date and end date</b>	<b>Name of the Organising Institution</b>
Prof. Prasenjit Paul	Faculty Induction Programme (Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education)	30 days	01.09.2020 - 30.09.2020	Teaching Learning Centre, Ramanujan College University of Delhi, under the aegis of MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING
Prof. Prasenjit Paul	FDP on DEVELOPMENT AND IMPLEMENTATION OF MOOCS	7 days	21.10.2020 - 27.10.2020	Teaching Learning Centre, Ramanujan College University of Delhi, under the aegis of MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING
Prof. Prasenjit Paul	FDP on ADVANCED PEDAGOGICAL TECHNIQUES	8 days	29.10.2020 - 05.11.2020	Teaching Learning Centre, Ramanujan College University of Delhi, under the aegis of MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING
Prof. Prasenjit Paul	Refresher course on Astrophysics and Astronomy	33 days	10.05.2021 - 11.06.2021	Teaching Learning Centre of IUCAA
Prof. Pinaki Mukherjee	"Advanced Optimization techniques and hands on MATLAB/Scilab"	12 days	13.07.2020 - 24.07.2020	Jointly organized by MNIT Jaipur, NIT PATNA and PDPM IIIT DM Jabalpur
Prof. Partha Ghosh	AICTE-ISTE approved Orientation /Refresher Programme	7 days	25.03.2021 - 31.03.2021	KKR and KSR Institute of Technology and Science, Guntur, Andhra Pradesh

Prof. Partha Ghosh	QIP Short Term Course (online) on "Data Analytics"	6 days	01.03.2021 - 06.03.2021	Conducted by the Department of Industrial and Management Engineering, IIT Kanpur
Prof. Partha Ghosh	10-days short-term course on "Advancements in Signal Processing and Artificial Intelligence in Healthcare (ASPAIH)"	10 days	15.02.2021 - 24.02.2021	INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN AND MANUFACTURING, KANCHEEPURAM DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Prof. Partha Ghosh	AICTE - QIP Sponsored Two Weeks Online Faculty Development Programme on "Computer Vision & Image Processing: Research Issues, Innovation and Application"	14 days	10.02.2021 - 23.02.2021	PSNA College of Engineering and Technology
Prof. Partha Ghosh	AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence"	5 days	01.02.2021 - 05.02.2021	Ramakrishna Mission Vivekananda Educational and Research Institute under AICTE Training And Learning (ATAL) Academy
Prof. Partha Ghosh	AICTE Training And Learning (ATAL) Academy Online FDP on "Machine Learning (Computer Science and Engineering)"	5 days	18.01.2021 - 22.01.2021	INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DHARWAD under AICTE Training And Learning (ATAL) Academy
Prof. Partha Ghosh	AICTE Training And Learning (ATAL) Academy Online FDP on "Big Data Analytics with Deep Learning"	5 days	18.08.2020 - 22.08.2020	Poornima Institute of Engineering & Technology under AICTE Training And Learning (ATAL) Academy
Prof. Paramita Dey	Data analysis using MATLAB (NITTR Kolkata)	5 days	25.01.2021 - 29.01.2021	NITTTR, Kolkata
Prof. Paramita Dey	Applications of MATLAB in Control System, Image Processing, Fuzzy Logic and GUI(NITTR Kolkata)	5 days	18.01.2021 - 22.01.2021	NITTTR, Kolkata
Prof. Nilesh Mazumder	Use of LATEX in typesetting technical documents	5 days	31.08.2020 - 04.09.2020	Dr. B. R. Ambedkar National Institute of Technology, Jalandhar
Prof. Nilesh Mazumder	UGC-Sponsored Online Faculty Induction Programme	28 days	08.09.2020 - 05.10.2020	Guru Nanak Dev University, Amritsar under UGC, HRDC
Prof. Nilesh Mazumder	Online Refresher Course on "Materials Physics and Materials Science"	15 days	07.12.2020 - 21.12.2020	UGC-HUMAN RESOURCE DEVELOPMENT CENTRE JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
Prof. Kalpana Saha (Roy)	FDP on Data Science (ATAL)	5 days	07.01.2021 - 11.01.2021	Cochin University of Science and Technology under AICTE Training And Learning (ATAL) Academy

Prof. Kalpana Saha (Roy)	FDP on Artificial Intelligence, Machine Learning and Deep Learning (ATAL)	5 days	02.02.2021 - 06.02.2021	Karpagam College of Engineering under AICTE Training And Learning (ATAL) Academy
Prof. Kalpana Saha (Roy)	FDP on Artificial Intelligence (ATAL)	5 days	08.02.2021 - 12.02.2021	Manipal University Jaipur under AICTE Training And Learning (ATAL) Academy
Prof. Bimal Pal	Faculty Development Program on Internet of Things Security	5 days	07.11.2020 - 11.11.2020	Organized by MAKAUT, WB; IUST, Jammu & Kashmir and GCECT, Kolkata; Sponsored by TEQIP III
Prof. Bimal Pal	Faculty Development Program (Introduction to Research, NPTEL)	54 days	14.09.2020 - 06.11.2020	NPTEL
Prof. Bimal Pal	Faculty Development Program (Fundamentals Of Electronic Materials and Devices, NPTEL)	54 days	18.01.2021 - 12.03.2021	NPTEL
Prof. Atanu Kumar Paul	ARTIFICIAL INTELLIGENCE USING PYTHON	6 days	14.09.2020 - 19.09.2020	Government College of Engineering And Ceramic Technology, BrainOVision, National Youth Council of India
Prof. Barun Kumar Sanfui	Orientation/Refresher Programme on Innovative Teaching-Learning Methods	7 days	22.04.2021 - 28.04.2021	Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati, Pune, Maharashtra
Prof. Barun Kumar Sanfui	Orientation/Refresher Programme on Recent Challenges in Teaching Pedagogy	7 days	21.05.2021 - 27.05.2021	Chouksey Engineering College, Bilaspur, Chhattisgarh
Prof. Barun Kumar Sanfui	FDP on Recent developments in sustainable processes	5 days	31.05.2021 - 04.06.2021	INDIAN INSTITUTE OF CARPET TECHNOLOGY under AICTE Training And Learning (ATAL) Academy
Prof. Barun Kumar Sanfui	FDP on patent drafting and filling	5 days	14.06.2021 - 18.06.2021	Jerusalem College of Engineering, Chennai under AICTE Training And Learning (ATAL) Academy
Prof. Bishwarup Das	faculty development program on AI- Using python	6 days	14.09.2020 - 19.09.2020	Government College of Engineering And Ceramic Technology, BrainOVision, National Youth Council of India
Prof. Bishwarup Das	Short Term Course on Aldous Huxley's Perennial Philosophy: Spirituality as Unity	1 day	04.05.2021 - 04.05.2021	Osmania University Centre of International Programmes
Prof. Bishwarup Das	Faculty Development Program on Blockchain - View from Industry	1 day	24.02.2022 - 24.02.2022	TCS
Prof. Soumit Chowdhury	short term Course on "Artificial Intelligence using Python", conducted by Govt. College of Engineering & Ceramic Technology,	6 days	14.09.2020 - 19.09.2020	Government College of Engineering And Ceramic Technology, BrainOVision, National Youth Council of India

	Kolkata in collaboration with Brain-o-vision			
Prof. Soumit Chowdhury	Short Term Course on "Foundation and Advancements in Cyber Security", conducted by GREATER KOLKATA COLLEGE OF ENGINEERING & MANAGEMENT	5 days	04.05.2021 - 08.05.2021	GREATER KOLKATA COLLEGE OF ENGINEERING & MANAGEMENT
Prof. Alok Mukherjee	Faculty Development Program on Artificial Intelligence using Python, conducted by Govt. College of Engineering & Ceramic Technology, Kolkata in collaboration with Brainovision Solutions India Pvt.Ltd.	6 days	14.09.2020 - 19.09.2020	Government College of Engineering And Ceramic Technology, BrainOVision, National Youth Council of India
Prof. Kingshuk Chatterjee	Faculty Development Program on Artificial Intelligence using Python, conducted by Govt. College of Engineering & Ceramic Technology, Kolkata in collaboration with Brainovision Solutions India Pvt.Ltd.	6 days	14.09.2020 - 19.09.2020	Government College of Engineering And Ceramic Technology, BrainOVision, National Youth Council of India
Prof. Partha Haldar	short term Course on "Artificial Intelligence using Python", conducted by Govt. College of Engineering & Ceramic Technology, Kolkata in collaboration with Brain-o-vision	6 days	14.09.2020 - 19.09.2020	Government College of Engineering And Ceramic Technology, BrainOVision, National Youth Council of India
Prof. Partha Haldar	"Smart Learning: A New Paradigm" organized by The Institution of Engineers (India) in collaboration with IE Malaysia	1 day	10.08.2020 - 10.08.2020	The Institution of Engineers (India) in collaboration with IE Malaysia
Prof. Partha Haldar	"Orientation and Adoption of NISP at HEI Level & Policy Implementation Strategy and Progress Monitoring at HEI level" organized by MoE's Innovation Cell, Government of India	1 day	07.08.2020 - 07.08.2020	MoE's Innovation Cell, Government of India
Prof. Partha Haldar	"Orientation and Adoption of NISP at HEI Level & Policy Implementation Strategy and Progress Monitoring at HEI level"	1 day	21.08.2020 - 21.08.2020	MoE's Innovation Cell, Government of India



	organized by MoE's Innovation Cell, Government of India			
Prof. Partha Haldar	National Level One Day Awareness Workshop on "Outcome Based Education and Accreditation" for Engineering Colleges organized by G H Raison Institute of Engineering & Technology, Nagpur	1 day	11.09.2020 - 11.09.2020	G H Raison Institute of Engineering & Technology, Nagpur
Prof. Partha Haldar	"Entrepreneurship Development Program on Renewable Energy" organized by Maulana Abul Kalam Azad University of Technology, West Bengal	1 day	20.09.2020 - 20.09.2020	Maulana Abul Kalam Azad University of Technology, West Bengal
Prof. Mausumi Maitra	FDP on "Quantum Computing" (ATAL)	5 days	05.10.2020 - 09.10.2020	Centre for Development of Advanced Computing (C-DAC) under AICTE Training And Learning (ATAL) Academy
Prof. Ritwik Mondal	Short Term Training Programme (STTP) on "CYBERSECURITY" conducted by Maulana Abul Kalam Azad University of Technology, Kolkata	6 days	14.06.2021 - 19.06.2021	Maulana Abul Kalam Azad University of Technology, West Bengal
Prof. Ritwik Mondal	FDP on Python Programming	5 days	20.07.2020 - 24.07.2020	Jorhat Institute of Science and Technology Jorhat, Assam, Under TEQIP-3, sponsored by MHRD, Govt. Of India



# ANNUAL REPORT

## 2019-2020



### GOVERNMENT COLLEGE OF ENGINEERING & CERAMIC TECHNOLOGY

73 A.C. Banerjee Lane, Kolkata 700 010, West Bengal, India

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# PREFACE

I, on behalf of all faculties and staff, welcome you heartily to the Government College of Engineering and Ceramic Technology (GCECT), Kolkata. I also congratulate you for choosing GCECT to reach the goal. This Institute (established on 3<sup>rd</sup> April, 1941), the then College of Ceramic Technology (Bengal Ceramic Institute) has been one of the oldest technological colleges in Kolkata and the only full-fledged college in India offering B. Tech, M. Tech. and Ph. D. programs in Ceramic Technology along with hands on trainings in traditional potteries and other ceramic products since its inception. The college has already completed 75 years of its glorious existence. The alumnus of the institute are well established in their professional career and spread all over the world. They are the flag bearers of the institute.

Initiating as a Diploma level institute, it was then elevated to a Degree college under Higher Education Department, Government of West Bengal and was affiliated to the University of Calcutta in the year 1962.

The institute has emerged as one of the best temples of learning and started transforming from mono-discipline institute to multi-discipline institute with the introduction of Information Technology and Computer Science & Engineering programs in 2000 and 2001 respectively. Now, the college is affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT), formerly West Bengal University of Technology since 2001.

Research & Development are an integral part of this institute of higher learning. The institute has good research activities in the under-graduate level. From 2006-2007, students from different background are reaping the benefit of M. Tech. program in Ceramic Technology. The introduction of M. Tech program in Ceramic Technology has enormously increased the scope & possibilities for research and development. Almost all teachers, students and scholars of the college are involved in research and development activities. M. Tech. program in Information Technology has also started its journey since 2014.

GCECT received World Bank assistance under Technical Education Quality Improvement Programme (TEQIP) Phase- I and successfully reaped tangible benefits by implementing various reform measures as per guidelines resulting into development and upgradation of various laboratories and infrastructure of the whole college in recent past.

The college also acquired one acre of land from adjacent West Bengal Small Industries Development Corporation Limited (WBSIDCL) to augment its infrastructure.

Recently, the college received prestigious NAAC grad 'A' accreditation, a certification of the quality of the institute in the national benchmark. As a consequence, the college received a substantial grant from Rashtriya Uchchar Shiksha Abhiyan (RUSA). The grant has been used for the construction of hostel and other infrastructure. Now-a-days, the college has been able to establish its proud position in the country. This college is not only providing latest technology oriented courses but also is equipped with good laboratory, library and other students' amenities. The student get the scope of being guided by renowned and eminent faculties to build their career.

All members of GCECT will put their best effort to ensure that the student of the institute receive the best training to become globally competitive professional with all human values to be useful for the society.

**Prof. (Dr.) Krishnendu Chakrabarty**  
*Principal*  
Govt. College of Engg. & Ceramic Technology

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## ***Vision of the Institute***

To cultivate excellence in various fields of engineering and technology by imparting core knowledge to the students and to transform the institution into a centre of academic excellence and advanced research apart from producing skilled technologists.

## ***Mission of the Institute***

- To impart high quality technical education that will produce globally competitive engineers & technologists.
- To inculcate entrepreneurial skill and leadership quality amongst potential students.
- To stress upon acquiring advanced knowledge and research acumen among faculties and students.
- To create compassionate, responsible and innovative global citizens.

## **(i) CT Department**

### ***Vision Statement:***

To emerge as a world class centre for education and research in the field of Ceramics, Glass and allied materials to serve the Industry and the society at large.

### ***Mission Statement:***

- To generate an environment in the department for advanced research and innovation with a view to imparting quality teaching and training in the area of Ceramics, Glass and allied materials.
- To produce graduates with a strong foundation in the area of Ceramic and Glass Technology to cater to the needs of Industry, Academia and Research organization in India and abroad.
- To emphasize Institute-Industry interaction to make the students aware of real problems in the Industries and solutions thereof.
- To motivate the faculties for meeting the requirement of leaders in industry, academic & research institutes and society.



## **(ii) IT Department**

### ***Vision Statement:***

The Department of Information Technology of this institute envisions itself to be in the top tier departments of the country that will be recognized for its technological advancement in teaching, learning, research and innovation and serve to address evolving global needs.

### ***Mission Statement:***

- To give high quality education to educate future leaders and contribute to the professional workforce in engineering and technology.
- To inspire learners to excel in research and innovation, collaborative activities, technologies and systems with a positive contribution to the society.

## **(iii) CSE Department**

### ***Vision Statement:***

The Computer Science & Engineering department of this Institute is committed to become a centre of excellence to meet the sprouting global challenges by imparting education and research of highest quality and thus ensures to maintain its status as a pivotal or nodal agency or a nucleus of the overall technological growth in the domain of Computer Science.

### ***Mission Statement:***

- To present our student with up-to-date curricula and pedagogy in the computer science and thus ensure that they have a solid foundation in the core concepts, equip them with problem solving and decision making skills, and prepare them for lifelong learning in the discipline.
- To produce graduates that are knowledgeable, articulate, principled, innovative, confident, and able to think critically
- To provide for and encourages collegial, intellectual and academic growth of its faculty.
- To perform research that advances the state-of-the-art in computer science.
- To inculcates the values enshrined in the Constitution and demonstrate a sense of societal and ethical responsibility in all professional endeavors.

## PART 1: ADMISTRATIONS

### 1. Board of Governors of the College

1.	Prof. Binay K. Dutta, Formerly Chairman, West Bengal Pollution Control Board (Educationist)	Chairman
2.	Prof. Mehtab Alam, Jamia Milla University, New Delhi (UGC Nominee)	Member
3	Dr. Arup Kumar Chattopadhyay, MD, National Refractories (Educationist)	Member
4.	The Director of Technical Education, West Bengal (Govt. nominee)	Member
5.	The Registrar, Maulana Abul Kalam Azad University of Technology (University Nominee)	Member
6.	Prof. Bimal Kumar Roy, Formerly Director, ISI, Kolkata (Educationist)	Member
7.	Dr. Rituparno Sen, Professor & HOD, Ceramic Technology, Govt. College of Engg. & Ceramic Technology, Kolkata (Faculty nominated by the Principal)	Member
8.	Mr. Ranjan Ray, Associate Professor of Chemical Technology, Govt. College of Engg. & Ceramic Technology, Kolkata (Faculty nominated by the Principal)	Member
9.	The Principal, Govt. College of Engg. & Ceramic Technology, Kolkata	Ex-Officio Member Secretary

### 2. Administrative and Academic Positions

1.	Principal	Prof. (Dr.) Krishnendu Chakrabarty
2.	Controller of Examinations	Mr. Partha Haldar
3.	HOD of Ceramic Technology	Prof. (Dr.) Rituparna Sen
4.	HOD of Information Technology	Prof. (Dr.) Mousumi Maitra (Majumdar)
5.	HOD of Computer Science & Engineering	Dr. Kalpana Saha (Roy)
6.	HOD of Basic Science, Humanities & Engineering	Dr. Debdarpan Khan
7.	Registrar	Mr. Jayanta Kumar Chowdhury
8.	Accounts Officer	Ms. Sulagna Chatterjee
9.	Librarian	Dr. Nikhil Kumar Jas
10.	Advisor of Training & Placement Cell	Mr. Prithwijit Guha

### 3. Faculty Members

#### (i) Permanent Teachers

<i>Ceramic Technology Department</i>			
	<i>Name</i>	<i>Designation</i>	<i>Subject</i>
1.	Dr. Rituparna Sen	Professor	Ceramic Technology
2.	Mr. Ranjan Roy	Associate Professor	Chemical Technology
3.	Dr. Srimanta Kumar Patra	Associate Professor	Ceramic Technology
4.	Mr. Ram Chandra Das	Associate Professor	Ceramic Technology
5.	Dr. Kaberi Das	Associate Professor	Ceramic Technology
6.	Dr. Tapas Kumar Bhattacharya	Assistant Professor	Ceramic Technology
7.	Dr. Barun Kumar Sanfui	Assistant Professor	Ceramic Technology
<i>Information Technology Department</i>			
	<i>Name</i>	<i>Designation</i>	<i>Subject</i>
1.	Dr. Mausumi Maitra (Majumdar)	Professor	Information Technology
2.	Mr. Paramita Dey	Assistant Professor	Information Technology
3.	Mr. Ritwik Mondal	Assistant Professor	Information Technology
4.	Mrs. Shyama Mondal	Assistant Professor	Information Technology
5.	Mr. Pranay Adak	Assistant Professor	Information Technology
6.	Mr. Atanu Kumar Paul	Assistant Professor	Information Technology
<i>Computer Science &amp; Engineering Department</i>			
	<i>Name</i>	<i>Designation</i>	<i>Subject</i>
1.	Dr. Kalpana Saha (Roy)	Assistant Professor	Computer Sc. & Engineering
2.	Mr. Bimal Pal	Assistant Professor	Computer Sc. & Engineering
3.	Mr. Soumit Chowdhury	Assistant Professor	Computer Sc. & Engineering
4.	Mrs. Sohini Dasgupta (On Leave)	Assistant Professor	Computer Sc. & Engineering
5.	Dr. Partha Ghosh	Assistant Professor	Computer Sc. & Engineering
6.	Mr. Ranjit Kumar Mandal	Assistant Professor	Computer Sc. & Engineering
7.	Dr. Kingshuk Chatterjee	Assistant Professor	Computer Sc. & Engineering
<i>Basic Science, Engineering &amp; Humanities Department</i>			
	<i>Name</i>	<i>Designation</i>	<i>Subject</i>
1.	Dr. Krishnendu Chakrabarty	Professor	Electrical Engineering
2.	Mr. Alok Mukherjee	Assistant Professor	Electrical Engineering
3.	Dr. Pinaki Mukherjee	Associate Professor	Electronics
4.	Dr. Debdarpan Khan	Associate Professor	Geology
5.	Dr. Saibal Ray	Associate Professor	Physics
6.	Dr. Rajkumar Chakraborty	Associate Professor	Physics
7.	Dr. Prasenjit Paul	Assistant Professor	Physics
8.	Dr. Nilesh Mazumder	Assistant Professor	Physics
9.	Dr. Debdulal Maity	Assistant Professor	Chemistry
10.	Mr. Ambika Prasad Mukhopadhyay	Assistant Professor	Chemistry
11.	Mrs. Indrani Nag Chaudhuri	Assistant Professor	Economics
12.	Mr. Partha Haldar	Assistant Professor	Mechanical Engineering

**(ii) State-Aided College Teachers**

<b><i>Ceramic Technology</i></b>		
1.	Dr. Madhu Sudan Dutta	Ceramic Technology
2.	Mr. Pappu Halder	Ceramic Technology
3.	Miss Ruma Mallik	Ceramic Technology
4.	Miss Sangita Ghosh	Ceramic Technology (Biology)
<b><i>Information Technology</i></b>		
1.	Miss Shampa Mahato	Information Technology
2.	Miss Maumita Maity	Information Technology
3.	Mr. Sudip Kuila	Information Technology
4.	Miss Ananya Biswas	Information Technology
5.	Miss Bidisha Ghosh	Information Technology
6.	Mrs. Minakshi Acharya	Information Technology
7.	Dr. Rayan Saptarshi Roy	Information Technology
8.	Mrs. Susmita Samaddar	Information Technology
<b><i>Computer Science &amp; Engineering</i></b>		
1	Mr. Bishwarup Das	Computer Science & Engineering
2	Dr. Bijoy Kumar Mandal	Computer Science & Engineering
3	Mrs. Rima Bhowmick	Computer Science & Engineering
4	Mrs. Sucharita Mondal	Computer Science & Engineering
5	Mrs. Pallavi Pyne	Computer Science & Engineering
6	Mrs. Amrita Biswas	Computer Science & Engineering
7.	Mr. Aritra Mahapatra	Computer Science & Engineering
<b><i>Basic Science, Engineering &amp; Humanities</i></b>		
1.	Mrs. Sonali Sarkar	Ethics
2.	Mrs. Ipsita Pathak	Communicative English
3.	Mr. Firoj Mahamud	Mathematics

**(iii) Profile of the other staff of the college**

1.	Mr. Jayanta Kr. Chowdhury	<i>Registrar</i>
2.	Ms. Sulagna Chatterjee	<i>Accounts Officer &amp; DDO (WBA &amp; AS)</i>
3.	Dr. Nikhil Kumar Jas	<i>Librarian</i>
4.	Mr. Samir Biswas	<i>UDC &amp; Storekeeper</i>
5.	Mr. Krishnendu Chatterjee	<i>P.A. to Principal</i>
6.	Mr. Rajib Chakraborty	<i>Technical Assistant</i>

7.	Mr. Rahul Mitra	<i>Fitter</i>
8.	Mr. Jiban Chandra Dey	<i>Lab Attendant</i>
9.	Mrs. Jhunu Rani Pramanick	<i>Peon</i>
10.	Miss. Kismatara Khatun	<i>Peon</i>
11.	Mrs. Pampa Sarkar	<i>Peon</i>
12.	Mr. Soumya Chatterjee	<i>Peon</i>
13.	Mr. Jiwat Kr. Rajbhar	<i>Durwan</i>
14.	Mr. Birbal Das	<i>Durwan</i>
15.	Miss. Suman Jamadarni	<i>Sweeper</i>

## PART 2: ACADEMICS

### 1. Academic Programmes Pursued

#### B. Tech and M. Tech Programmes in the following disciplines:

i)	Ceramic Technology [ <i>B. Tech. and M. Tech. Programmes</i> ]
ii)	Information Technology [ <i>B. Tech. and M. Tech. Programmes</i> ]
iii)	Computer Science and Engineering [ <i>B. Tech. Programme</i> ]

### 2. Students Profile

#### (i) B. Tech Programme in the following disciplines:

<i>Discipline</i>	<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>	<i>Forth Year</i>
Ceramic Technology	34	28	30	32
Information Technology	41	37	30	32
Computer Science and Engineering	31	49	45	45

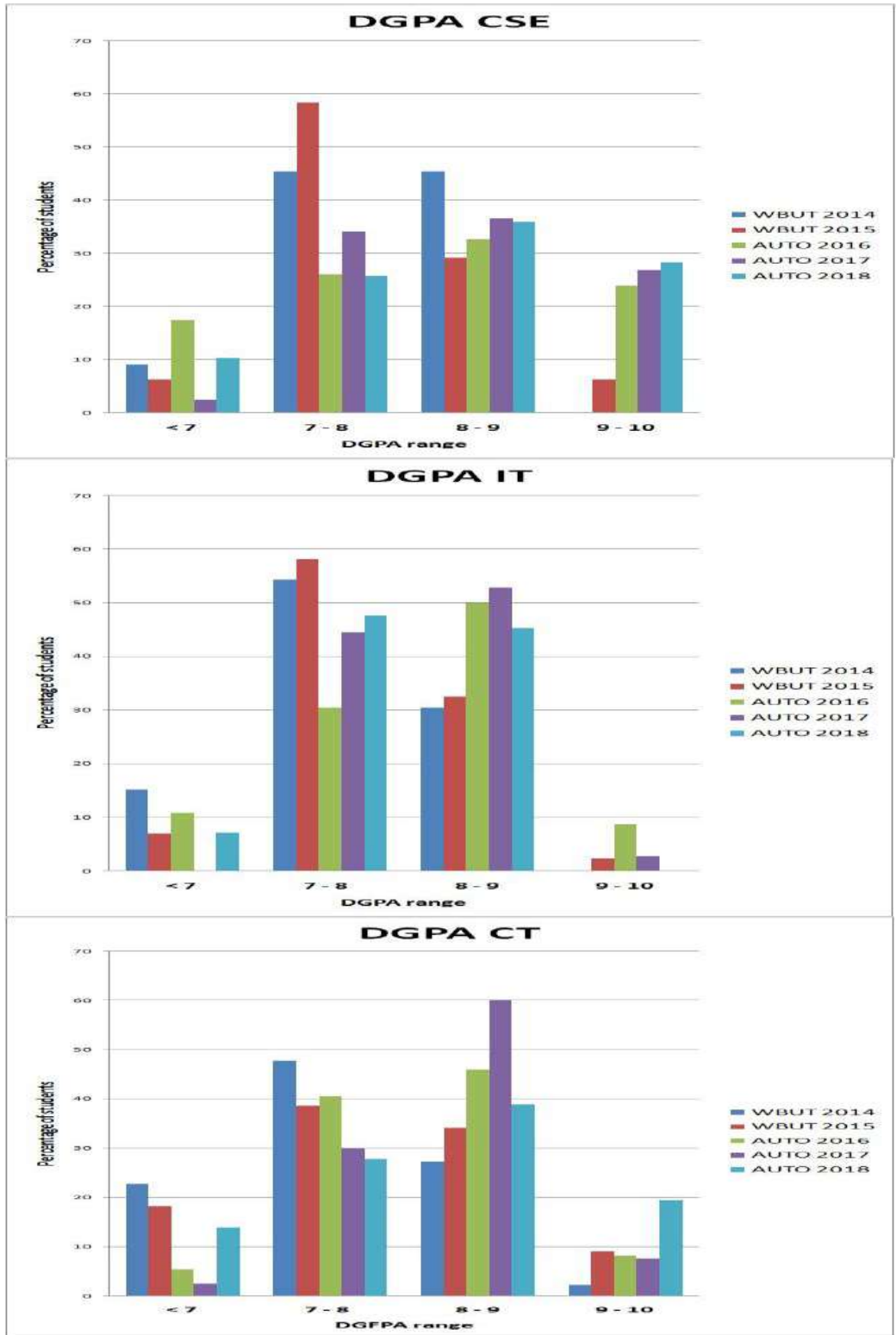
#### (ii) M. Tech Programme in the following disciplines:

<i>Discipline</i>	<i>First Year</i>	<i>Second Year</i>
Ceramic Technology	00	04
Information Technology	11	10

#### (iii) Students Results:

Stream/DGPA	< 7	7-8	8-9	9-10
CSE (Total 45 students)	0	9	20	16
Percentage	0	20	44.44	35.56
IT (Total 32 students)	1	8	17	6
Percentage	3.13	25	53.13	18.75
CT (Total 32 students)	3	13	11	5
Percentage	9.38	40.63	34.38	15.63





### 3. Exchange programme

Name of the activity	Participants	Source of financial support	Duration	Department
Internship programme	27	TCS	90	IT
Internship programme	25	WIPRO	90	IT
Internship programme	34	WIPRO	90	CSE
Summer Internship	2	Amity University	60	CT
Training Internship	1	HR Johnson	42	CT
Summer Internship	1	R.K. Mission University, Belur	60	IT

### 4. Industrial Training programmes

#### (i) CT department (25.05.2020 – 10.07.2020)

Participant	Name of the partnering institution/ industry /research lab with contact details
Aakash Dalui	SRU IFICO, RINL VIZAG
Abhinav Burman	CALDERYS
Arka Chakraborty	CGCRI, National Refractories
Debarati Dutta	RHI Magnesita, IIT Guwahati
Madhumita Dutta Chowdhury	CALDERYS
Md. Sayed Ali	CUMI, RINL VIZAG
Pallabi Mondal	H&R Johnson, RINL VIZAG
Partha Das	VESUVIUS, National Refractories
Payel Sarkar	CGCRI, National Refractories
R. Srinivas	CGCRI, National Refractories
Rajib Dutta	CGCRI, National Refractories
Ram Prasad Pal	CUMI

Ranabir Paul	SRU IFICO, RINL VIZAG
Reek Chatterjee	OCL, National Refractories
Sabitabrata Chatterjee	RHI Magnesita, National Refractories
Sagnik Roy	CGCRI
Sagnik Gangopadhyay	IIT KANPUR & IIT BHU
Semanti Banerjee	H&R Johnson
Sreya Datta	TRL, National Refractories
Souradeep Ghosh	TU DRESDEN, GERMANY
Souradip Mondal	VESUVIUS, HINDALCO
Sudip Mandal	TRL, RINL (VISAG), National Refractories
Susanta Mahata	ABI , Halol, National Refractories
Swastika Paul	OCL. IIT Guwahati
Udayan Mukherjee	SRU IFICO
Suman Beniya	CALDERYS, IIT Guwahati
Sunanda Nandi	SRU IFICO, National Refractories
Mousumi Ghosh	National Refractories
Pabitra Mali	TRL, National Refractories
Puspendu Sinha	OCL, National Refractories
Sarmistha Das	CGCRI

**(ii) IT department (01.06.2020 – 10.07.2020)**

<b>Participant</b>	<b>Name of the partnering institution/ industry /research lab with contact details</b>
Aman Deep Gahlot	Globsyn Finishing School
Argha Pal	Globsyn Finishing School
Biaswayan Saha	Globsyn Finishing School

Bumba Kar	Globsyn Finishing School
Debarchan Maiti	Globsyn Finishing School
Debdoot Sen	Globsyn Finishing School
Dipankar Ghosh	Globsyn Finishing School
Mainak Singha	Globsyn Finishing School
Priyam Mukherjee	Globsyn Finishing School
Rajarshi Bhowmik	Globsyn Finishing School
Rajat Saha	Globsyn Finishing School
Sayan Kumar Saha	Globsyn Finishing School
Shawan Basu	Globsyn Finishing School
Shubhadeep Nandy	BSNL
Silvia Sultana	IIT Patna
Somlata Saha	Globsyn Finishing School
Somnath Chakraborty	Globsyn Finishing School
Subham Mondal	Globsyn Finishing School
Sucheta Panda	Globsyn Finishing School
Suvam Das	Globsyn Finishing School
Swarnendu Biswas	Globsyn Finishing School
Swastik Chatterjee	Globsyn Finishing School
Urmila Kewat	Eastern Railway
Ankita Hansda	Globsyn Finishing School
Asish Bera	Globsyn Finishing School
Jamuna Majhi	Globsyn Finishing School
Krishnendu Nandy	Globsyn Finishing School
Rajdeep Paul	Globsyn Finishing School
Rupam Ganguly	Eastern Railway

Subhankar Naskar	Globsyn Finishing School
Subrata Paul	Globsyn Finishing School

**(iii) CSE department (14.04.2020 – 27.05.2020)**

<b>Participant</b>	<b>Name of the partnering institution/ industry /research lab with contact details</b>
Rose Dhar	Internshala
Anulekha Ghosh	Internshala
Ishan Biswas	Udemy and NPTEL
Aritra Roy	Udemy
Subrata Sarkar	IISER Bhopal(under Kushal Shah)
Soumya Mukherjee	Internshala
Saranya Naha Roy	Internshala
Shreya Saha	Internshala
UTTAM SHARMA	SmartBridge
Surajit Sarkar	Internshala
Ritika Sinha	TCS iON
Shabdik Chakraborty	Supraja Technologies
Sibeswar Prasad Singha	MyWBUT, Globsyn & Internshala
Amitava Chatterjee	Forage
Dipanjan Panja	QriocytBox education service, RII Technology pvt ltd, GeoGo Techsolutions pvt ltd
Sweta Sarkar	Internshala
Rashed Mehdi	NA
Pratyusha Sinha	Internshala
Soham Mahapatra	GUVI
Ritesh Kumar	Coursera

Aditya Kumar Shaw	Courses on HackerRank and Edx
Anirban Chakraborty	Webtek Labs , TCS ION

## 5. Placement status:

Off campus Placement details of B.Tech IT, 2019-2020					
Sl No.	College Roll Number	Student Name	Name of Company for on Campus Drive	No of Student Participated	No of Student Placed
1	GCECTB-R16-2034	Suvam Das	Allied Media	5	1
2	GCECTB-R16-2036	Swastik Chatterjee	Asmaka Ventures	6	1
3	GCECTB-R-16-2037	Urmila Kewat	Ayoconnect	5	1
4	GCECTB-L17-2003	Krishnendu Nandy	Byjus	4	1
5	GCECTB-R16-2011	Debarchan Maiti	Capgemini	6	1
6	GCECTB-R16-2021	Rajat Saha	Cognizant	12	5
7	GCECTB-R16-2008	Bishwayan Saha			
8	GCECTB-R16-2017	Mainak Sinha			
9	GCECTB-R16-2032	Subham Mondal			
10	GCECTB-R16-2029	Somlata Saha	Infosys	12	3
11	GCECTB-R16-2012	Debdoot Sen			
12	GCECTB-R16-2020	Rajarshi Bhowmik			
13	GCECTB-R16-2033	Sucheta Panda	Intelmetic	4	1
14	GCECTB-R16-2009	Bumba Kar			
15	GCECTB-L17-2006	Rupam Ganguly	Sensibol	3	1
16	GCECTB-R16-2035	Swarnendu Biswas	TCS	12	4
17	GCECTB-R16-2024	Sayan Kumar Saha			
18	GCECTB-R16-2019	Priyam Mukherjee			
19	GCECTB-R16-2003	Amandeep Gahlot			
On Campus Placement details of B.Tech CT, 2019-2020					
Sl No.	College Roll Number	Student Name	Name of Company for on Campus Drive	No of Student Participated	No of Student Placed
1	GCECTB-R-16-1001	Aakash Dalui	Maithan Ceramics Ltd	12	4
2	GCECTB-R-16-1004	Debarati Dutta			
3	GCECTB-R-16-1015	Ram Prosad Pal			
4	GCECTB-R-16-1027	Sudip Mandal			
5	GCECTB-R-16-1003	Arka Chakraborty	OCL	5	1
6	GCECTB-R-16-1006	Madhumita Dutta Chowdhury	IFGL	7	2
7	GCECTB-R-16-1018	Sabitabrata Chatterjee			
8	GCECTB-R-16-1007	Md Ismail Ali	Castwel Industries	6	2

9	GCECTB-R-16-1008	Md Sayed Mandal			
10	GCECTB-R-16-1009	Pallabi Mandal	RAK Ceramics	4	1
11	GCECTB-R-16-1010	Partho Das	Havells India Ltd	5	2
12	GCECTB-R-16-1019	Sagnick Roy			
13	GCECTB-R-16-1011	Payel Sarkar	Accenture Solutions	4	1
14	GCECTB-R-16-1012	R. Srinivas	Lizmontangens India Pvt Ltd	5	2
15	GCECTB-L17-1002	Pabitra Mali			
16	GCECTB-R-16-1013	Rajib Dutta	Sree Radhe Shyam Ceramics	3	1
17	GCECTB-R-16-1016	Ranabir Paul	Special Ceramics Pvt Ltd	4	1
18	GCECTB-R-16-1017	Reek Chatterjee	Heatworks Pvt Ltd	5	2
19	GCECTB-R-16-1022	Semanti Banerjee			
20	GCECTB-R-16-1020	Sagnik Gangopadhyay	H&R Johnson	5	2
21	GCECTB-R-16-1023	Shreya Datta			
22	GCECTB-R-16-1024	Souradeep Ghosh	Creative Chemicals ( Rep. Sojitz Corp.)	6	2
23	GCECTB-L17-1001	Mousumi Ghosh			
24	GCECTB-R-16-1026	Souryadip Mondal	Modern Insulators	3	1
25	GCECTB-R-16-1031	Swastika Paul	TRL	4	1
26	GCECTB-R-15-1033	Sunanda Nandi	RASHMI METALLIKS	2	1
27	GCECTB-L17-1003	Pushpendu Sinha	Balaji Ceramics	3	1

**Off campus Placement details of B.Tech CSE, 2019-2020**

Sl No.	College Roll Number	Student Name	Name of Company for on Campus Drive	No of Student Participated	No of Student Placed
1	GCECTB-R16-3005	Amit Chakraborty	Infosys	15	6
2	GCECTB-R16-3017	Pratiksha Das	Infosys		
3	GCECTB-R16-3019	Rajab Ali Mondal	Infosys		
4	GCECTB-R16-3020	Riya Karan	Infosys		
5	GCECTB-R16-3025	Satendra Sharma	Infosys		
6	GCECTB-R16-3030	Soumya Sarkar	Infosys		
7	GCECTB-R16-3010	Debalekha Chakraborty	TCS	20	13
8	GCECTB-R16-3012	Devanshi Gupta	TCS		
9	GCECTB-R16-3014	Md Shamsheer Alam	TCS		
10	GCECTB-R16-3021	Romok Das	TCS		
11	GCECTB-R16-3041	Saheli Chakraborty	TCS		
12	GCECTB-R16-3023	Santanu Banik	TCS		
13	GCECTB-R16-3027	Sayan Sanyal	TCS		
14	GCECTB-R16-3028	Sontu Mistry	TCS		
15	GCECTB-R16-3031	Soumyadeep Malakar	TCS		
16	GCECTB-R16-3032	Sreemoyee Chakrabarti	TCS		

17	GCECTB-R16-3042	Sushrima Datta	TCS		
18	GCECTB-R16-3035	Tama Raychowdhury	TCS		
19	GCECTB-R16-3038	Zeba Iqbal	TCS		
20	GCECTB-R16-3039	Arunjyoti Sanyal	CTS	5	2
21	GCECTB-R16-3040	Kojagori Maity	CTS		
22	GCECTB-R16-3008	Apromit Mukherjee	Wipro	4	1
23	GCECTB-R16-3036	Tanvir Raihan Islam	CAPGEMINI	3	1
24	GCECTB-R16-3016	Nilagnik Chakraborty	American Express	4	1
25	GCECTB-R16-3001	Abhi Goswami	Embibe	3	1

### 6. Students progression:

Sl No.	Student's Name	Programme graduated from	Exam. passed	Name of programme admitted to	Name of institution joined
1	Devanshi Gupta	B.Tech in CSE	GATE	M.Tech	IIT Delhi
2	Sontu Mistry	B.Tech in CSE	GATE	M.Tech	IIT Khargapur
3	Tama Ray Chowdhury	B.Tech in CSE	GATE	M.Tech	IIT PATNA
4	Sufal Sikder	B.Tech in CSE	GATE	M.Tech	IIT PATNA
5	Deep Bhuinya	B.Tech in CSE	GATE	M.Tech	IIT Guwahati
6	Subrata Maity	B.Tech in CSE	GATE	M.Tech	NIT Durgapur
7	Saheli Chakraborty	B.Tech in CSE	GATE	M.Tech	IIT Hyderabad
8	Kojagori Maity	B.Tech in CSE	GATE	M.Tech	IIT Bhubaneswar
9	Abhinav Burman	B.Tech in CT	CAT	MBA	IIM Bodh Gaya
10	Semanti Banerjee	B.Tech in CT	IELTS	MSC	Technical University of Dresden
11	Bishwayan Saha	B.Tech in IT	GATE	M.Tech	IEST, Shibpur
12	Subrata Paul	B.Tech in IT	GATE	M.Tech	IEST, Shibpur
13	Silvia Sultana	B.Tech in IT	GRE	Masters in Datata Sc. And AI	Technische Universitet of Eindhoven



### 7. Students award:

Title of Innovation	Name of Awardees	Awarding agency
B.Tech Project Work on "Effects of Cr <sub>2</sub> O <sub>3</sub> on the densification and microstructure of Alumina ceramics"	Tilak Matabbar & Abhishek Das	INDIAN REFRACTORY MAKERS' ASSOCIATION
B.Tech project work on "Effect of Bauxite and Zirconia additions on the densification and microstructural properties of Mullite aggregates derived from Sillimanite beach sand"	Dipika Sarkar & Safikul Islam	INDIAN REFRACTORY MAKERS' ASSOCIATION

### 8. Students scholarship:

Name of the Scheme	Year	Class	Department	Full Freeship	Per head sanction amount	Half Freeship	Per head sanction amount	Financial Aid Available on time (Y/N)
Freeship	2019 - 2020	1st Yr	CT	1	500	4	250	Y
			CSE	0		1	500	Y
			IT	0		2	1000	Y
		2nd Yr	CT	0		3	250	Y
			CSE	0		4	500	Y
			IT	4	2000	4	1000	Y
		3rd Yr	CT	0		1	250	Y
			CSE	0		2	500	Y
			IT	3	2000	3	1000	Y
		4th Yr	CT	3	500	4	250	Y
			CSE	4	1000	5	500	Y
			IT	3	2000	4	1000	Y
						<b>Total amount</b>	576000	

Name of the Scheme	Year	Class	No of students benefitted	Per head sanction amount	Total amount	Financial Aid Available on time (Y/N)		
Swami Vivekananda Merit-Cum-Means Scholarship	2019 - 2020	Btech & Mtech	37	60000	2220000	Y		
Name of the Scheme	Year	Class	No of students benefitted	Per head sanction amount	Total amount	Financial Aid Available on time (Y/N)		
SC/ST/OBC	2019 - 2020	SC	39		1141600	Y		
		ST	3			Y		
		OBC-A	4			Y		
		OBC-B	13			Y		
Name of the Scheme	Year	No of students benefitted	Total amount	Financial Aid Available on time (Y/N)				
International Scholarship from Islamic Development Bank, SAUDI ARABIA	2019 - 2020	1	65000	Y				
Name of the Scheme	Year	No of students benefitted	Total amount	Financial Aid Available on time (Y/N)				
Muslim Education Trust, Delhi	2019 - 2020	2	72000	Y				
Name of the Scheme	Year	No of students benefitted	Total amount	Financial Aid Available on time (Y/N)				
Minority Development Trust, WB	2019 - 2020	3	66000	Y				

## PART 3: RESEARCH PROGRAMMES

### 1. Sponsored/ Consultancy projects:

Funding Agency	Type of Project	Project Title	Role in Project	Grant (Rs.)	Duration
DST	Major Research Project	High Strength Light Weight Building Blocks From Agricultural Waste	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	60,00,450	31.03.2016 - 30.06.2020
DST	Major Research Project	Development of Insulating Refractories and Abrasion Resistant Ceramics from Coal Ash	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	61,52,450	07.05.2016 - 06.08.2020
DST	Minor Research Project	Development of CO <sub>2</sub> selective Ceramic Membrane for Separation of CO <sub>2</sub> from Flue gas and Natural Gas (With IIT-G)	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	54,78,750	14.10.2016 - 13.10.2019
SERB	Minor Research Project	Development of Pre/In-situ Formed CNT Reinforced MgAl <sub>2</sub> O <sub>4</sub> Spinel Matrix Composites	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	30,06,000	04.05.2017 - 03.11.2020
IREL	Major Research Project	Study of Sinterability and Product Development based on Zirconia Powders to be Supplied by IREL	Dr. B.K. Sanfui, Assistant Professor, Principal Investigator	58,73,800	28.08.2019 - 27.08.2022
WB-DST	Minor Research Project	Design optimization of broadband microstrip antenna	Dr. Pinaki Mukherjee, Assistant Professor, Principal Investigator	5,48,000	2018-2020
WB-DST	Minor Research Project	Fabrication of CuPc nanotube based all-organic flexible photodiode for light detection and solar energy conversion	Dr. Nilesh Mazumder, Assistant Professor, Principal Investigator	12,55,000	2019-2022
WB-DST	Minor Research Project	Studies on Compact Stellar Objects	Dr. Saibal Ray, Associate Professor, Principal Investigator	4,48,800	02.05.2019 - 01.05.2021
WB-DST	Minor Research Project	Studies on the Microstructural characterization of ceramic materials using Image processing Technique	Dr. T.K. Bhattacharya, Assistant Professor, Principal Investigator	8,68,800	28.01.2019 - 27.01.2021

## 2. Ph. D. supervision by the teachers:

Sl. No.	Name of the Supervisor	Name of the student with qualification	Title of the thesis	University where registered	Status of the programme
1.	Dr. S. Ray, <i>Associate Professor</i>	Debabrata Deb, M.Sc. (Physics)	Studies on strange stars in general relativity and alternative gravity	IEST, Shibpur	Awarded
2.	Dr. S. Ray, <i>Associate Professor</i>	Shounak Ghosh, M.Sc. (Physics)	Gravastars in general relativity	IEST, Shibpur	Awarded
3.	Dr. S. Ray, <i>Associate Professor</i>	Abdul Aziz, M.Sc. (Physics)	Homotopy Theorem in Astrophysical system	IEST, Shibpur	Awarded
4.	Dr. S. Ray, <i>Associate Professor</i>	Rikpratik Sengupta, M.Sc. (Physics)	Studies on Wormholes in braneworld gravity	Aliah University	Pursuing
5.	Dr. S. Ray, <i>Associate Professor</i>	Biplab Paik, M.Sc. (Physics)	Semi-classical inflation and black holes	Aliah University	Pursuing
6.	Dr. T.K. Bhattacharya, <i>Assistant Professor</i>	Partha Haldar M.Tech. (Mechanical Engineering)	The Effect of Nano-oxide addition in Alumina Ceramics and its impact on Mechanical and Tribological Properties	Jadavpur University	Pursuing
7.	Dr. B.K. Sanfui, <i>Assistant Professor</i>	Paramita Das M.Tech. (Ceramics)	Synthesis and Characterization of YAG and CNT reinforced Magnesium aluminate Spinel Composites	Calcutta University	Pursuing
8.	Dr. B.K. Sanfui, <i>Assistant Professor</i>	Savan Kumar Sharma M.Tech. (Ceramics)	Studies on Nano-porous alumina based ceramics membrane for separation of flue gas	MAKAUT	Pursuing
9.	Dr. Mausumi Maitra <i>Professor</i>	Kamarujjaman	Studies on Image De-noising and Segmentation of Medical Images	MAKAUT	Pursuing

## 3. Research/Review papers published in National/International Journals:

Name of the author	Title of the paper	Name of the journal	Impact Factor
B.K. Sanfui et al.	Fabrication and Performance Evaluation of Industrial Alumina-Based Graded Ceramic Substrate for CO <sub>2</sub> Selective Amine Silicate Membrane	<i>ACS Appl. Mater. Interfaces</i>	9.229
K. Das et al.	Microstructure and phase evolution of Indian magnesite-derived MgAl <sub>2</sub> O <sub>4</sub> as a function of stoichiometry and ZrO <sub>2</sub> doping	<i>Int. J. Appl. Cera. Tech.</i>	1.861

K. Das et al.	Influence of selenium dioxide (SeO <sub>2</sub> ) on properties of bioglass in SiO <sub>2</sub> -Na <sub>2</sub> O-CaO-P <sub>2</sub> O <sub>5</sub> system	<i>J. Austral. Cer. Soc.</i>	1.526
T.K. Bhattacharya et al.	Graphene oxide-ferrite hybrid framework as enhanced broadband absorption in gigahertz frequencies	<i>Nature Sci. Rept.</i>	4.379
T.K. Bhattacharya et al.	Adsorption effect of Zn <sup>+2</sup> and Co <sup>+2</sup> on the antibacterial properties of SiC-porcelain ceramics	<i>Int. J. Appl. Cer. Tech.</i>	1.968
Kamarujjaman and M. Maitra	3D unsupervised modified spatial fuzzy c-means method for segmentation of 3D	<i>Patt. Anal. Applications</i>	2.58
M. Maitra et al.	Early started hybrid denoising technique for medical images	<i>Adv. Intell. Syst. Comput.</i>	
M. Maitra et al.	An efficient wavelet and curvelet-based PET image denoising technique	<i>Med. Bio. Engg.</i>	2.602
P. Dey et al.	Influence maximization in online social network using different centrality measures as seed node of information propagation	<i>Sādhanā</i>	1.188
R. Mondal et al.	Effect of Mobility and Receive Window on TCP in Device to Device Communication	<i>ICRCICN</i>	
R.S. Ray et al.	A Study and Analysis of Lock and STM Overheads	<i>IJCSE</i>	
S. Chowdhury et al.	Digital Signature Protocol for Visual Authentication	<i>Int. Arab J. Info. Tech.</i>	1.91
S. Chowdhury et al.	Multi-Phase Digital Authentication of e-Certificate with Secure Concealment of Multiple Secret Copyright Signatures	<i>Int. J. Inno. Tech. Explor. Engg.</i>	1.27
K.Saha (Roy) and S. Banerjee	Study of Quality of Service (QoS) Measurement Using Joint Call Admission Control (CAC) Protocol	<i>Int. J. Wire. Net. Commun.</i>	0.544
K. Saha (Roy) and T. Ghosh	Study of Packet Loss Prediction using Machine Learning	<i>Int. J. Mo. Commun. Net.</i>	1.551
K. Saha (Roy) and S. Khan	Study of Dynamicity of Call Management and System Resource Management Using Call Admission Control (CAC) Protocol	<i>Adv. Wire. Mob. Commun.</i>	
K. Saha (Roy) and R. Hazra	An approach of Searching Mobile User Location with QoS provisioning in 5G Cellular Networks	<i>Int. Conf. Mob. Comput. Sustain. Info.</i>	
K. Chatterjee et al.	Watson Crick quantum finite automata	<i>Acta Informatica</i>	0.375
K. Chatterjee et al.	Effect of bilingualism on aphasia recovery	<i>Aphasiology</i>	2.773
D. Maity	Biological Applications of Schiff base Metal Complexes-A Review	<i>IJRAR</i>	5.75

D. Maity	Recent Studies on Applications of Schiff Bases and Their Complexes in Atmospheric Carbon Dioxide Capture	<i>Rus. J. Gen. Chem.</i>	0.81
A. Mukherjee et al.	Application of principal component analysis for fault classification in transmission line with ratio-based method and probabilistic neural network: a comparative analysis	<i>J. Inst. Engineers: Series B</i>	0.17
A. Mukherjee et al.	Power system fault identification and localization using multiple linear regression of principal component distance indices.	<i>Int. J. Appl. Power Eng.</i>	
A. Mukherjee et al.	Transmission line faults in power system and the different algorithms for identification, classification and localization: a brief review of methods	<i>J. Inst. Engineers: Series B</i>	0.17
A. Mukherjee et al.	Transmission line fault location using PCA-based best-fit curve analysis	<i>J. Inst. Engineers: Series B</i>	0.17
A. Mukherjee et al.	Effect of bilingualism on aphasia recovery	<i>Aphasiology</i>	0.77
A. Mukherjee et al.	Classification and fast detection of transmission line faults using signal entropy	<i>J. Inst. Engineers: Series B</i>	
P. Haldar et al.	Effect of nano-crystalline TiO <sub>2</sub> addition on reciprocating frictional behaviour of alumina ceramics	<i>IOP Conf. Series: Mater Sci. Engg.</i>	
N. Mazumder et al.	Enhancement of radiative transitions in Sm <sup>3+</sup> activated CaTiO <sub>3</sub> nanophosphor by modulating co-activator concentration	<i>J. Mater. Sci.: Mater. Electron.</i>	2.19
N. Mazumder et al.	Negative capacitance switching in size-modulated Fe <sub>3</sub> O <sub>4</sub> nanoparticles with spontaneous non-stoichiometry: confronting its generalized origin in non-ferroelectric materials	<i>Nanoscale</i>	7.79
N. Mazumder et al.	Size-modulation of functionalized Fe <sub>3</sub> O <sub>4</sub> : nanoscopic customization to devise resolute piezoelectric nanocomposites	<i>Dalton Transactions</i>	4.05
N. Mazumder et al.	Strain-induced partial phase transition in TiO <sub>2</sub> nanoparticles manifesting frequency dispersive pseudo-inductive switching of capacitance	<i>Cer. Int.</i>	3.83
R.K. Chakraborty et al.	Zener-like electrical transport in polyaniline–graphene oxide nanocomposites	<i>RSC Adv.</i>	3.361
R.K. Chakraborty et al.	Nonlinearity exponent: A phase sensitive parameter in disordered systems	<i>Phys. B: Cond. Matt.</i>	2.436
P. Paul et al.	Inflation in anisotropic brane universe using tachyon field	<i>Int. J. Mod. Phys. D</i>	2.154
P. Paul and R. Sengupta	Generalized Phenomenological Models of Dark Energy	<i>Advances in High Energy Physics</i>	1.777

P. Paul et al.	Weyl transformation: A dynamical degree of freedom in the light of Dirac's Large Number hypothesis	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Dirac's Large Number Hypothesis: a journey from concept to implication	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Strange stars in $f(R,T)$ gravity	<i>J. Cos. AstroPartphys.</i>	5.524
S. Ray et al.	Study on charged strange stars in $f(R,T)$ gravity	<i>J. Cos. AstroPartphys.</i>	5.524
S. Ray et al.	A study on charged compact stars	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Exploring physical features of anisotropic strange stars beyond standard maximum mass limit in gravity	<i>Mon. Not. R. Astron. Soc.</i>	5.231
S. Ray et al.	Strange stars in Krori-Barua space-time under $f(R;T)$ gravity	<i>Ann. Phys.</i>	2.267
S. Ray et al.	A study of anisotropic compact stars based on embedding class 1 condition	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Neutron star under homotopy perturbation method	<i>Ann. Phys.</i>	2.267
S. Ray et al.	Gravastars in (3+1) dimensions admitting Karmarkar condition	<i>Ann. Phys.</i>	2.267
S. Ray et al.	Study of compact stars with Class 1 metric under general relativity	<i>Can. J. Phys</i>	1.016
S. Ray et al.	Charged anisotropic strange stars in Finslerian geometry	<i>Eur. Phys. J. C</i>	4.843
S. Ray et al.	Gravastars with Kuchowicz metric potential	<i>Res. Phys.</i>	3.042
S. Ray et al.	Relativistic strange stars in Tolman-Kuchowicz spacetime	<i>Ann. Phys.</i>	2.267
S. Ray et al.	Constraining values of bag constant for strange star candidates	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Classical and Quantum Approaches to Black Holes	<i>Adv. High Energy Phys.</i>	1.777
S. Ray et al.	Anisotropic strange star inspired by Finsler geometry	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Gravastars in $f(T;T)$ gravity	<i>Int. J. Mod. Phys. Lett. A</i>	1.367
S. Ray et al.	Study of gravastars under $f(T)$ gravity	<i>Nucl. Phys. B</i>	3.185
S. Ray et al.	Anisotropic strange star with Tolman-Kuchowicz metric under $f(R,T)$ gravity	<i>Eur. Phys. J C</i>	4.843
S. Ray et al.	Gravastar: an alternative to black hole	<i>Int. J. Mod. Phys. D</i>	2.154

S. Ray et al.	Cosmological models with squared trace in modified gravity	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Nonsingular solution with anisotropic fluid in mini bang cosmology	<i>Int. J. Mod. Phys. D</i>	2.154
S. Ray et al.	Revisiting primordial black hole evolution	<i>Axioms</i>	1.2
S. Ray et al.	Study on anisotropic strange stars in $f(T;T)$ gravity	<i>Universe</i>	1.752
S. Ray et al.	Gravastar in the framework of braneworld gravity	<i>Phys. Rev. D</i>	4.368
S. Ray et al.	Charged perfect fluid sphere in higher-dimensional spacetime	<i>Ind. J. Phys.</i>	1.016
S. Ray et al.	Cosmological models with variable anisotropic parameter in $f(R;T)$ gravity	<i>Ind. J. Phys.</i>	1.016

**4. Seminar/workshop attended/papers presented in National/International Conferences:**

Name of the faculty	Title of the seminar/ workshop/ Name of the article	Place/ Oorganization	Date
Mausumi Maitra	Third International Conference on Computing and Communication	NEHU, Shillong	28.04.2020 - 30.04.2020
Rituparno Sen	Expert training program on NBA, AICTE	New Delhi	27.02.2020
Rituparno Sen	Sustainable Growth through making in India	Jointly organized by GCECT Alumnus with TRL-Krosaki	24.01.2020-25.01.2020
Ram Chandra Das	Expert training program on NBA, AICTE	New Delhi	27.02.2020
Ram Chandra Das	Sustainable Growth through making in India	Jointly organized by GCECT Alumnus with TRL-Krosaki	24.01.2020-25.01.2020
Partha Halder	Faculty Development Program for Student Induction (FDP-SI)	SNU, Kolkata	18.07.2019-20.07.2019
Partha Halder	INDUCTION TRAINING	NITTTR, Kolkata	06.01.2020 - 10.01.2020
Partha Halder	Introduction to Robotics	Organized by IIT Bombay	20.08.2019-21.08.2019
Partha Halder	NPTEL SPOC MEET	Organized by IIT Kharagpur	01.02.2020



Partha Halder	COVID 19 & Beyond: The new normal in HEIs	IQAC, J.C. Bose University of Science and Technology, YMCA, Faridabad	10.06.2020
Kingshuk Chatterjee	INDUCTION TRAINING	NITTTR, Kolkata	06.01.2020 - 10.01.2020
Alok Mukherjee	INDUCTION TRAINING	NITTTR, Kolkata	06.01.2020 - 10.01.2020
Soumit Chowdhury	Advanced Technology Programme	Wipro Ltd. Electronic City- Bangalore	17.02.2020 - 19.02.2020
Bimal Pal	Internet of Things Security	MAKAUT, West Bengal	07.11.2020 - 11.11.2020
Srimanta Kumar Patra	Sustainable Growth through making in India	Jointly organized by GCECT Alumnus with TRL-Krosaki	24.01.2020-25.01.2020
Nilesh Mazumder	Faculty Development Program for Student Induction (FDP-SI)	SNU, Kolkata	18.07.2019-20.07.2019
Srimanta Kumar Patra	Sustainable Growth through making in India	Jointly organized by GCECT Alumnus with TRL-Krosaki	24.01.2020-25.01.2020
Kingshuk Chatterjee	Workshop on student induction programme for teachers	UGC	6-8.11.2019
Alok Mukherjee	NPTEL SPOC MEET	Organized by IIT KGP	01.02.2020
Kingshuk Chatterjee	Introduction to Robotics	Organized by IIT BOMBAY	20.08.2019-21.08.2019
Alok Mukherjee	Introduction to Robotics	Organized by IIT BOMBAY	20.08.2019-21.08.2019
Partha Halder	Artificial Intelligence Using Python	Jointly organized by GCECT and Brainovision Solutions India Pvt. Ltd. and National Youth Council of India	14.09.2020-19.09.2020
Partha Halder	Advanced Course on Image Processing and Machine Learning	WBDST, Bikash Bhaban	23.09.2019 - 27.09.2019
Partha Halder	Sustainable Growth through making in India	Jointly organized by GCECT and GCECT alumni association	25.01.2020
Partha Halder	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Kingshuk Chatterjee	Sustainable Growth through making in India	Jointly organized by GCECT and	25.01.2020

		GCECT alumni association	
Alok Mukherjee	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Soumit Chowdhury	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Soumit Chowdhury	Image Authentication, WSN & IoT	JIS College of Engineering, West Bengal, Kalyani	22.06.2020 - 26.06.2020
Srimanta Kumar Patra	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Partha Ghosh	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Rituparno Sen	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Ram Chandra Das	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Barun Kumar Sanfui	Globalization of information Communication Technologies: Possible Threats and Opportunities	Jointly organized by GCECT and GCECT alumni association	20.09.2019
Partha Halder	Reciprocating Frictional Behaviour of Nano Crystalline MgO based Alumina Ceramics	ICAME, 2020, Aliah University, Kolkata	18.01.2020
Partha Halder	Potential of Pumped Hydro Storage as an Electrical Energy Storage in India	ICESD, 2020; Jointly organized by Jadavpur University and IEI	14.02.2020-15.02.2020
Soumit Chowdhury	COMSYS 2020: 1. Multi Data Driven Validation of E-Document Using Concern Authentic Multi-signature Combinations 2.A Novel High-Density Multilayered Audio Steganography Technique in Hybrid Domain	Jalpaiguri Govt. Engg. College	13.01.2020-15.01.2020
Paramita Dey	ANTS, 2019: Hierarchical Ego based community detection in social network	IEEE Communication Society, India. venue: BITS, Pilani, KK Birla, Goa campus	16.12.2019-19.12.2019
Partha Halder	Friction Coefficient Analysis of Nano-Crystalline Copper Oxide added Alumina Ceramics	NCETAE 2020; Organized by School of Automotive Engineering; Jadavpur University, Kolkata.	3.03.2020-4.03.2020
Partha Halder	Bayesian Inference based Tool to Identify Most Influencing Parameter Range in Combined Cycle Power Plant	4th regional science congress, MAKAUT	21.09.2019-22.09.2019

## 5. Book Chapter Published/Accepted:

Name of the author	Title of the Book/Chapter
B.K. Sanfui et al.	Synthesis and Characterization of Sol-Gel Derived Mesoporous $\gamma$ -Alumina
B.K. Sanfui et al.	Studies on the mechanical activation assisted low temperature synthesis of magnesium aluminate spinel
P. Haldar, T.K. Bhattacharya and N. Modak	The Effect of Normal Load and Sliding Frequency on the Reciprocating Friction Behavior of Nanocrystalline CuO-Based Alumina Ceramics
R. Sen et al.	Fiber Reinforced Nanocomposites: Fundamentals and Applications
P. Dey and S. Roy	Hierarchical Ego based Community Detection in Social Network
P. Dey and S. Roy	Governance in smart city: An approach based on social network. In <i>Smart Cities: A Data Analytics Perspective</i>
P. Dey	Characterization of online social network: a case study on Twitter data
S. Chowdhury et al.	A Novel High-Density Multilayered Audio Steganography Technique in Hybrid Domain, Published in Proceedings of International Conference on Frontiers in Computing and Systems
S. Chowdhury et al.	Multi Data Driven Validation of E-Document Using Concern Authentic Multi-signature Combinations
K. Chatterjee et al.	Bengali Handwritten Character Classification Using Transfer Learning on Deep Convolutional Network
K. Chatterjee et al.	A review of Steganography techniques suitable for ECG signal
K. Chatterjee et al.	How successful is a lockdown during a pandemic?
K. Chatterjee et al.	Effect of Climatic Conditions on Gender Segregated COVID-19 Infections and Fatalities
K. Chatterjee et al.	New Heuristics to Minimize Makespan of Permutation Flowshop Scheduling Problem with Uniformly Distributed Processing Times
P. Ghosh	Basic Concepts of C-Programming
A. Mukherjee et al.	New Heuristics to Minimize Makespan of Permutation Flowshop Scheduling Problem with Uniformly Distributed Processing Times
N. Mazumder et al.	En route to the Conductivity Bottleneck in p-type $\text{CuCr}_{1-x}\text{MxO}_2\text{-ySy}$ (M= Li, Mg)
P. Haldar et al.	The Effect of Normal Load and Sliding Frequency on the Reciprocating Friction Behavior of Nanocrystalline CuO-Based Alumina Ceramics
S. Ray et al.	Dark Matter and Dark Energy in General Relativity and Modified Theories of Gravity
S. Ray et al.	Theory and Mathematical Aspects of Black Holes

## 6. Research Collaboration:

Organization	Date of MOU signed	Purpose/Activities	Number of teachers participated under MOUs
West Bengal Animals and Fisheries University	12-12-2019	Collaborative Research	Dr. S. Ray & Dr. T.K. Bhattacharya

**7. Revenue generated from Consultancy during the year:**

<b>Name of consultancy project</b>	<b>Consulting/Sponsoring Agency</b>	<b>Revenue generated (amount in rupees)</b>
Development of Insulating Refractories and Abrasion Resistant Ceramics from Coal Ash	DST	9880
High Strength Light Weight Building Blocks From Agricultural Waste	DST	18728
Development of CO <sub>2</sub> selective Ceramic Membrane for Separation of CO <sub>2</sub> from Flue gas and Natural Gas	DST	9780
Development of Pre/In-situ Formed CNT Reinforced MgAl <sub>2</sub> O <sub>4</sub> Spinel Matrix Composites	SERB	24717

## PART 4: EXTENSION PROGRAMMES

### 1. Award / recognition of the teacher

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
National	Professor (Dr.) Krishnendu Chakroberty	Teacher of the Year	2019	
National	Dr. Saibal Ray	Visiting Associateship	01/08/2017 - 31/07/2020	UGC via IUCAA, Pune

### 2. Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Department	Date
Workshop on Industry- Academia Innovative Practices	CT, IT, CSE	24/09/2019

### 3. National Service Scheme (NSS):

Sl. No.	Name of the activity	Dates (dd/mm/yyyy)	Number of student participated	Number of teachers coordinated the programs
1	Karate Show	14.08.2019	67	2
2.	Safe Drive Save Program	06.08.2019	65	2
3.	Anti Drug Addiction	06.08.2019	65	2
4.	Sapling Plantation	05.06.2019	26	2
5.	Save Water Save Life Program	23.07.2019	80	2

### 4. The College journal: *Scientific Voyage*

A quarterly research journal published in the college under an editorial board with national and international experts in the fields [URL: [Scientific Voyage](#)].

## 5. Students activities

Sl. No.	Name of Event	Type	No. of Team Participate
1	Cultural Fest Jagriti	Intra	6 (Music) + 4 (Dance)
		Inter	5
2	Football Boys	Intra	8
		Inter	3
3	Football Women	Intra	2
4	Cricket Boys	Intra	8
		Inter	2

## 6. Infrastructure Augmentation and equipment added details

Item	Quantity	Amount (Rs)	G.O No.	Date
Led Screen	2	282240	357/(SANC)(HED)-20011(18)/21	22.8.2019
P sim Software	1	494892	234/(SANC)(HED)-20011(99)/15	3.7.2019
Amplifier	12	488400	235/(SANC)(HED)-20011(99)/14	3.7.2019
Furniture		2175870	360/(SANC)(HED)-20011(99)/19	27.8.2019
ISILS Software for Language Lab	1	498314	260/(SANC)(HED)-20011(99)/17	17.7.2019
Operating System Winpro	1	182789	534/(SANC)(HED)-20011(18)/27	24.10.2019
Desktop Computers	50	3146400	647/(SANC)(HED)-20011(18)/28	12.12.2019
Furnace(Spectro Photometer & pc control)	1	3255000	420/(SANC)(HED)-20011(18)/25	16.9.2019
Fully Computer Controlled high precision compressive strength testing machines	1	735000	680/(SANC)(HED)-20011(18)/50	18.12.2019
Non destructive elastic property analyzer	1	336193	129/(SANC)(HED)-20011(18)/73	4.6.2019
Fully automatic micro hardness Tester Machine	1	3234630	102/(SANC)(HED)-20011(18)/70	29.5.2019
Matlab Software	1	527680	106/(SANC)(HED)-20011(18)/83	29.5.2019
Trinocular Microscope	1	1575000	292/(SANC)(HED)-20011(18)/40	2.8.2019
Telescope	1	116912		26.11.2019

**List of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the session 2019-20**

<b>Name of the Faculty</b>	<b>Type of Program (Professional Development Programmes, Orientation/Induction Programmes, Refresher Course, Short Term Course )</b>	<b>Duration (in No. of days)</b>	<b>start Date and end date</b>	<b>Name of the Organising Institution</b>
Prof. Rituparno Sen	Experts training programme on NBA	1 day	27.02.2020 to 27.02.2020	AICTE
Prof. Ram Chandra Das	Experts training programme on NBA	1 day	27.02.2020 to 27.02.2020	AICTE
Prof. Soumit Chowdhury	Short Term Course on "Image Authentication, WSN & IoT"	5 days	22-06-2020 to 26-06-2020	JIS College of Engineering
Prof. Soumit Chowdhury	Professional Development Programme on "Advanced Technology Programme"	3 days	17-02-2020 to 19-02-2020	Wipro Ltd , Electronic City, Bangalore
Prof. Ritwik Mondal	Refresher Course on "Non-Conventional Energy-A Paradigm Shift towards Sustainability"	13 days	6-1-2020 to 18-1-2020	UGC, HRDC, Jadavpur University, Kolkata (UGC Sponsored Refresher Course)
Prof. Atanu Kumar Paul	Refresher Course on "Non-Conventional Energy-A Paradigm Shift towards Sustainability"	13 days	6-1-2020 to 18-1-2020	UGC, HRDC, Jadavpur University, Kolkata (UGC Sponsored Refresher Course)
Prof. Pranay Adak	Refresher Course on "Non-Conventional Energy-A Paradigm Shift towards Sustainability"	13 days	6-1-2020 to 18-1-2020	UGC, HRDC, Jadavpur University, Kolkata (UGC Sponsored Refresher Course)
Prof. Ambika Peasad Mukhopadhyay	Refresher Course on "Non-Conventional Energy-A Paradigm Shift towards Sustainability"	13 days	6-1-2020 to 18-1-2020	UGC, HRDC, Jadavpur University, Kolkata (UGC Sponsored Refresher Course)
Prof. Kingshuk Chatterjee	Short Term Training Programme on "Active Learning under Engineering Education"	12 days	8-7-2019 to 19-7-2019	NITTTR, Kolkata
Prof. Kingshuk Chatterjee	Short Term Training Programme on "Induction Training"	5 days	6-1-2020 to 10-1-2020	NITTTR, Kolkata
Prof. Kingshuk Chatterjee	UGC Quality Initiatives - Deeksharambh - Workshop on student induction programme	3 days	6-11-19 to 8-11-19	UGC, MHRD, Eastern regional Office, Kolkata
Prof. Alok Mukherjee	Short Term Training Programme on "Active Learning under Engineering Education"	12 days	8-7-2019 to 19-7-2019	NITTTR, Kolkata
Prof. Alok Mukherjee	Short Term Training Programme on "Induction Training"	5 days	6-1-2020 to 10-1-2020	NITTTR, Kolkata
Prof. Partha Halder	Short Term Training Programme on "Induction Training"	5 days	6-1-2020 to 10-1-2020	NITTTR, Kolkata

