



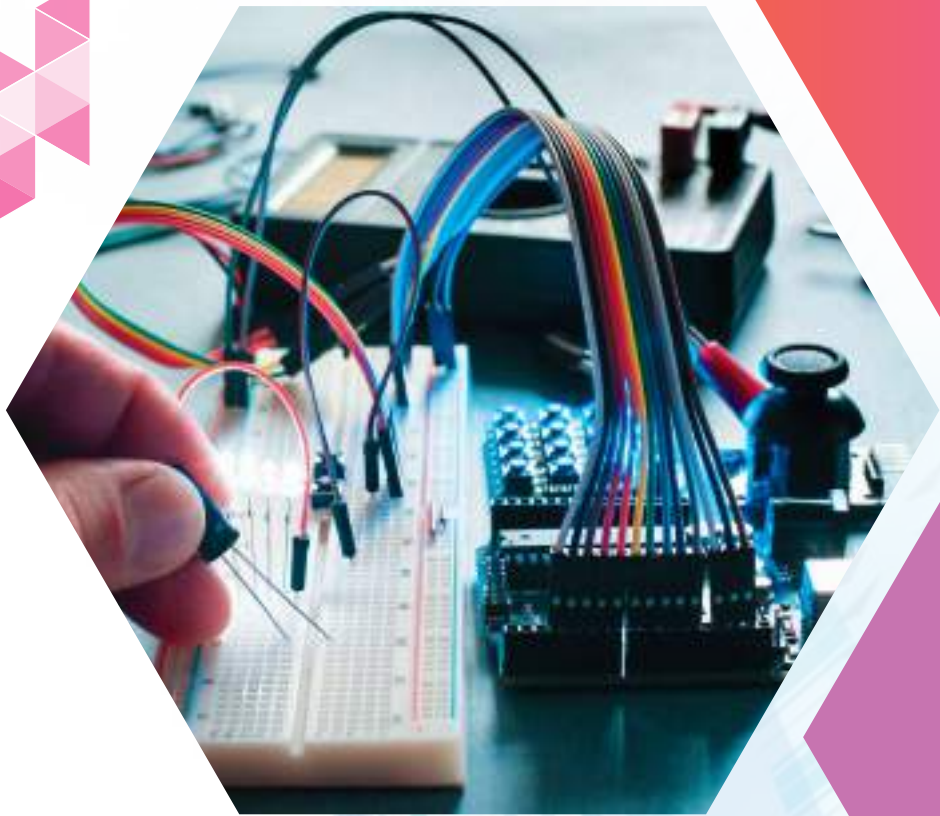
# ANNUAL REPORT

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2022

**Prepared By**  
**EEE GREEN**





## EXECUTIVE SUMMARY

*The year 2022 saw sustainable growth in the EEE department of Green University of Bangladesh in terms of departmental activities, such as the arrangement of EEE Day, creativity in all dimensions, research, and academic quality enhancements. EEE club has arranged numerous events in 2022, such as Iftar Mahfil, Summer Fest, EEE Day, etc. Research outcome has also been significant, where researchers such as Dr. Molla Shahadat Hossain Lipu has been enlisted in the world's top 2% researchers list. Also, the research exposure of other faculty members in National, International Journals and Conferences has improved significantly. The activities under IEEE PES have also been noteworthy. EEE Department now has established 17 distinguished laboratories well equipped with the latest amenities and updated experiments. The year also saw the departure of Dr. ASM Shihavuddin in February, which left everyone in tears. However, he joined in August as Professor, EEE, which filled up everyone with joy. EEE Department now has a strong team of faculty members and enthusiastic students who are working in tandem to become a better version of ourselves. Moving towards the bi-semester system and permanent campus will definitely boost departmental excellence in the years to come.*



## MESSAGE FROM THE CHAIRPERSON

*The year 2022 saw sustainable growth in the EEE department of Green University of Bangladesh in terms of departmental activities, such as the arrangement of EEE Day, creativity in all dimensions, research, and academic quality enhancements. EEE club has arranged numerous events in 2022, such as Iftar Mahfil, Summer Fest, EEE Day, etc. Research outcome has also been significant, where researchers such as Dr. Molla Shahadat Hossain Lipu has been enlisted in the world's top 2% researchers list. Also, the research exposure of other faculty members in National, International Journals and Conferences has improved significantly. The activities under IEEE PES have also been noteworthy. EEE Department now has established 17 distinguished laboratories well equipped with the latest amenities and updated experiments. The year also saw the departure of Dr. ASM Shihavuddin in February, which left everyone in tears. However, he joined in August as Professor, EEE, which filled up everyone with joy. EEE Department now has a strong team of faculty members and enthusiastic students who are working in tandem to become a better version of ourselves. Moving towards the bi-semester system and permanent campus will definitely boost departmental excellence in the years to come.*



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01

## Departmental **Activities**

2022



# FRESHER'S ORIENTATION PROGRAM

SPRING 2022  
(FEBRUARY 02, 2022)

Dr. ASM Shihavuddin, Associate Professor and Chairperson, Dept. of EEE, Prof. Dr. Fayzur Rahman, Treasurer, Prof. Dr. Md. Quamrul Ahsan, Distinguished Professor, Dept. of EEE, faculty members, departmental coordination officers, newly admitted students, and students from different batches were present at the virtual Fresher's Orientation Program for Spring 2022. More than 230 participants participated in the event.

# EEE GREEN GET- TOGETHER

(MAY 22, 2022)

The EEE department of the Green University of Bangladesh has successfully organized the EEE Green get-together at Buffet Lounge, Dhanmondi on 22 May 2022. Around 60 faculty members, technical and administrative staff attended this event to make it cheerful.



# FRESHER'S ORIENTATION PROGRAM – SUMMER 2022

(JUNE 03, 2022)

Dr. Molla Shahadat Hossain Lipu, Associate Professor and Chairperson, Department of EEE, Prof. Dr. Fayzur Rahman, Treasurer; Prof. Dr. Md. Quamrul Ahsan, Distinguished Professor; Department of EEE, faculty members, departmental coordination officers, newly admitted students, and students from different batches were present the "Fresher's Orientation Program for Summer 2022.

# INVITATION TO SUBMIT ARTICLES IN EEE TIMES

(FEBRUARY 25, 2022)

Department of EEE, GUB has successfully launched an online magazine “EEE Times”.

- <https://www.eeetimes.org/>
- Submit your article [.doc format] in the google form link below:

[https://docs.google.com/forms/d/e/1FAIpQLSe7IIM2mETMOVYeMQ\\_S8LmRVe5qluHWcWJw05KILiyJfvlx4Q/viewform](https://docs.google.com/forms/d/e/1FAIpQLSe7IIM2mETMOVYeMQ_S8LmRVe5qluHWcWJw05KILiyJfvlx4Q/viewform)

## FRESHER'S ASSEMBLY – SPRING 22

SPRING 22  
(APRIL 9, 2022)

- The Strategy for securing a good result from the beginning of the semester.
- How to improve marks and grades both in midterms and final examinations and how to return to the track after getting poor grades in the Midterm Exam.
- Career opportunity after Graduation.
- Advise what one should do in their student life.



## BRING SOMETHING TO SHARE – ONE DISH PARTY

(SEPTEMBER 14, 2022)

Prof. Dr. Md. Golam Samdani Fakir, Vice-Chancellor, GUB; Prof. Dr. ASM Shihavuddin, Chairperson, Dept. of EEE, Prof. Dr. Fayzur Rahman, Treasurer; Dr. Molla Shahadat Hossain Lipu, faculty members, departmental coordination officers, newly admitted students, and students from different batches were present at “Fresher’s Orientation Program, Fall 2022”. Prof. Dr. ASM Shihavuddin, ensured to aid the students with the best quality of education.



# THE SUPERIORITY OF MENTORSHIP PROGRAM

FALL 2022 (OCTOBER 3, 2022)

Md. Reazur Rahman, a mentor, described the program's objectives and gave examples of what the program will do. Then, Md. Nayem Sharker, a mentor, demonstrated the previous semester's program activities to help beginners understand. Prof. Dr. ASM Shihavuddin encouraged all the freshers to be with this program and mentioned the last successful activities of the program.

# YEAR IN REVIEW 2022 - LOOKING BACK FOR MOVING FORWARD

(JANUARY 05, 2023)

The event was designed to update the students on the different development activities of the departments, future plans, and significant achievements to make them better aware of the departmental agenda. Faculties and students both benefitted from the information provided in the session which ended with a fruitful discussion among the stakeholders. This is an innovative idea to create credibility among the stakeholders.

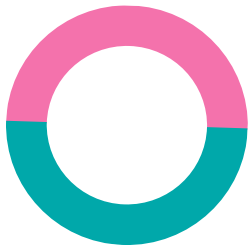


# PITHA UTSHOB

(DECEMBER 22, 2022)

Pitha occupies an important place in our culinary culture. For Bengalis, it has been a long tradition to make varieties of pitha, particularly in the winter. In this regard, this festival has been arranged to give some nostalgic moments to faculties. There are different varieties of pitha such as Chittoi, Vapa, puli, etc. It was a very fun event with participations from other departments as well. The event ended with an after party having a juice at the roof top restaurants with laughter and joy. EEE Dept plans to hold such events every year.





02

EEE CLUB

## Activities

## SEMINAR ON "HOW TO CONVERT A THESIS BOOK INTO A RESEARCH PAPER"

SPRING 2022 (APRIL 6, 2022)

The chief guest, Prof. Dr. Md. Quamrul Ahsan, Distinguished Professor, Dept. of EEE, and the session chair, Dr. Ratil H. Ashique, Associate Professor, Dept. of EEE were present at this valuable session. They encouraged everyone to be more involved in research activities through their speech. Prof. Ahmed Al Mansur, Associate Professor, Dept. of EEE was the keynote speaker of this session who explained the pros & cons of the importance of writing a standard thesis book .

## IFTAR MAHFEEL AND ISLAMIC FEST AT PERMANENT CAMPUS

(APRIL 18, 2022)

The iftar Mahfeel program was organized to promote harmony and spread love during this ramadan. This program was presided over by Dr. Delwar Hossain, Assistant Professor, GBS. Assistant proctor. Dr. Mohammad Aminur Rahman, Associate Professor, CSE, Dr. Muhammad Najmus Sakib also joined the program with the students.



## IFTAR MAHFIL AND ISLAMIC QURAN RECITATION COMPETITION AT CITY CAMPUS

(APRIL 21, 2022)

Prof. Dr. Md. Abdur Razzaque, Advisor of GUB, Prof. Dr. Md. Fayzur Rahman, Treasurer of GUB, Prof. Dr. Md. Saiful Azad, Dean of FSE, Dr. Molla Shahadat Hossain Lipu, Chairperson of EEE, Dr. Md. Nazmus Shakib, Associate Head (Permanent Campus) and other faculty members joined this program. They all praised the students for arranging this event.



# EEE GREEN SUMMER FEST

SUMMER 2022 (JULY 4, 2022)

This program has become colorful and vibrant with the presence of the chief guest Prof. Dr. Md. Golam Samdani Fakir, Vice Cancellor, GUB, Prof. Dr. Abdur Razzaque, Advisor, Prof. Dr. Md. Fayzur Rahman, Treasurer, Dr. Molla Shahadat Hossain Lipu, Chairperson, Dept. of EEE, Dr. ASM Shihavuddin, other faculty members and the students. The event was divided into three parts: Fruits Festival, Leadership Awards and Cultural Segment. Distinct summer fruits of Bangladesh, such as mangoes, jackfruit, guava, dragon fruit, grapes, lotkon, apple, pineapple, orange, etc. were offered to the guests.

## EEE ADDA (চা গরম, আড্ডা হবে চরম)

(AUGUST 29, 2022)

A refreshment event was organized with the presence of all faculty members and students of distinct department. This event was more enjoyable by categorized the event as three segments: opening speech, tea and, jhalmuri distribution, and games & cultural program.



## EEE ADDA (চা গরম, আড্ডা হবে চরম) - MUSIC NIGHT

(AUGUST 29, 2022)

During the EEE ADDA, milk tea, raw tea and, jhal-muri were offered to the guests. The games and cultural segment kicked off with performances of some songs and a funny dance. The audience loved the performances and other departmental students also joined the session. A positive vibe created through this programs helps student to overcome the monotony and pressure of the academic curriculums. Some of the faculties also joined in.



03

Rise From

# The Ashes



# OPENING CEREMONY

(NOVEMBER 2, 2022)

The program started with a Grand Opening Ceremony. Many senior and junior faculty members, and students from different batches were present at this event. Everyone praised the event and also highlighted it as a big platform for all the students. Prof. Dr. Fayzur Rahman, highlighted the usefulness of robotics and encouraged the students.

# ROBOCON V1.0

(NOVEMBER 2, 2022)

It was the first-ever line follower robot competition, RoboCon v1.0; Unleash your Potential, Energize the Wheels on EEE Day 2022! Total nine teams from colleges and universities demonstrated their robots. Through intense excitement, team Dynamic Spark became the champion beating team Robot 2.0.

# PROJECT AND POSTER PRESENTATION

(NOVEMBER 2, 2022)

The contest successfully completed with an aim of extracting the innovative and creative ideas of our young engineering students for future technological development.



# IEEE SEMINAR

(NOVEMBER 2, 2022)

Prof. Dr. Satyen Biswas (Professor, AUST) was present as the keynote speaker. The title of the seminar was "Design and testing of a VLSI circuit". Our keynote speaker delivered a splendid speech describing the basics of VLSI. He mainly focused on learning VLSI layout design and gave a clear idea of the job market in Bangladesh on VLSI design. He also mentioned the future opportunity of the VLSI sector in Bangladesh. The session helped students to get more acquainted with the VLSI technologies..

# PHOTOGRAPHY EXHIBITION

(NOVEMBER 2, 2022)

Participants were allowed to send any type of photographs related to student life or campus life or anything else. From all the submitted photos only 15 photographs were selected for the final round. An exhibition of these 15 photos was held on 2nd November, 2022 at the permanent campus of GUB. From those photos, only 3 photos were selected by the judging panel

## CULTURAL SEGMENT

(NOVEMBER 2, 2022)

Few senior faculty members, and students from different batches were present in the cultural segment. Prof. Dr. ASM Shihavuddin and Rukhshana Parvin, lecturer of EEE Dept. performed in this event. On behalf of students Sajib Biswas, Rudra Saha, Faysal Shahid Noor, Nusrat Binte Youme, Samia Nowshin Oishi performed at the event.



## BATTLE OF BRAINS

(NOVEMBER 3, 2022)

Initially, 26 teams consisting 80 students participated in the pre-battle where the top 15 teams fought in the final battlefield. The battles were hosted by Lusain Nima (Lecturer). Md. Shamsuddoha Russell, Managing Director, Kernel International Ltd. along with Prof. Dr ASM Shihavuddin announced the top 3 winners of Battle of Brains.



# CAREER TALK

(NOVEMBER 2, 2022)

It was a motivational seminar on the career prospects of EEE graduates titled "Career Talk: The Next Future". Mr. Shamsuddoha Russell, Managing Director, Kernel International Ltd. was present as the keynote speaker. He was introduced by the program host Najmul Huda Bijoy, Lecturer, Dept. of EEE. The audience was mesmerized by his one hour long career leading, future-shaping, direction- finding speech.

# ARTICLE FOR THE EEE TIMES

(NOVEMBER 2, 2022)

The aim of arranging this contest was to extract the innovative and creative ideas of our young students for the future. Among the total articles submitted 13% are of technology, 20% of project ideas, 33% of research works, 26% of literature and 7% of academic tips. 5 were selected to provide certificates and the best one was provided a prize. A short question-answer session was conducted between the speaker & the audience. Lastly, Our Honorable Chairperson, Dr. ASM Shihavuddin thanked our speaker & presented a crest to him & finally concluded the program.



# TALENT HUNT

(NOVEMBER 3, 2022)

It was a very interesting event to make the sky-high dreams of art and talent to develop the dormant talent of the young generation and bring it to everyone. 26 performances from total submissions published on Green University's YouTube channel. First three performances were awarded. Senior teachers talked about the importance of this kind of program and also expressed happiness to hear about the events.





04

IEEE  
**PES**

2022



# MAPPING OF PRESENTATION

(MARCH 13, 2022)

This session was conducted by Mr. Md. Hafiz Sikder, Graduate student. Notably, more than 80+ mentees (221 Batch) of the EEE department from the city and permanent campuses were present through the zoom platform. After the main session, there was an open Q&A segment in which students asked different questions regarding their issues.

# MATLAB FOR EEE

(MARCH 13, 2022)

The aim of the workshop was to improve the skill of the students in MATLAB and simulink which will assist them to accomplish their final year project/thesis and to solve complex engineering problems. Throughout the session, participants were introduced to MATLAB and some of its basic concepts. Later on, some of the use cases of MATLAB were discussed. Students were given some visual examples of using MATLAB. At the end of the session, participants were asked to join a question-answer session.



# ENERGY SECTOR

(MARCH 13, 2022)

It was a very interesting event to make the sky-high dreams of art and talent to develop the dormant talent of the young generation and bring it to everyone. 26 performances from total submissions published on Green University's YouTube channel. First three performances were awarded. Senior teachers talked about the importance of this kind of program and also expressed happiness to hear about the events.



05

Research

## Awards 2022

2022



# TOP 2% OF SCIENTISTS IN THE WORLD

(APRIL 1, 2022)

- Fields of Specialization: Renewable Energy, Battery Energy Storage, Power Electronics, Electric Vehicles
- Citations:
  - Google Scholar: 5000+
  - Scopus: 3000+
- h - index:
  - Google Scholar: 28
  - Scopus: 25

Dr. Molla Shahadat Hossain Lipu, Assistant Professor, Dept of EEE deserves this immense standing ovation for the rare achievement.

## EDITOR'S PICK

(APRIL 1, 2022)

- "Molecular Dynamics, Transport Properties & Surface Stoichiometry of Plasma Polymerized Cyclohexane thin films" (Research Article)
- Accepted in: AIP Advances
- Impact Factor: 1.697 (JCR @ Clarivate Analytics 2022)

Meherun Nesa, Lecturer, Dept of EEE brought us this pride we can cheer out loud.



## CRIT AWARDEES

(APRIL 1, 2022)

IEEE department of GUB is full of research enthusiasts. The Centre of Research Innovation and Transformation (CRIT) arranged an award giving ceremony as a token of gratitude for their contribution in the research section of GUB. In this ceremony, most of the awards were held by our honorable faculty members. GUB EEE family is proud of them and pray for their shining days to come.



06

Students'

# Achievement

2022



# HULTBATTLE 02 CHAMP

(APRIL 1, 2022)

- Organizer: HULT Prize GUB
- Idea: IoT Based Smart Air Pollution Detection & Monitoring System

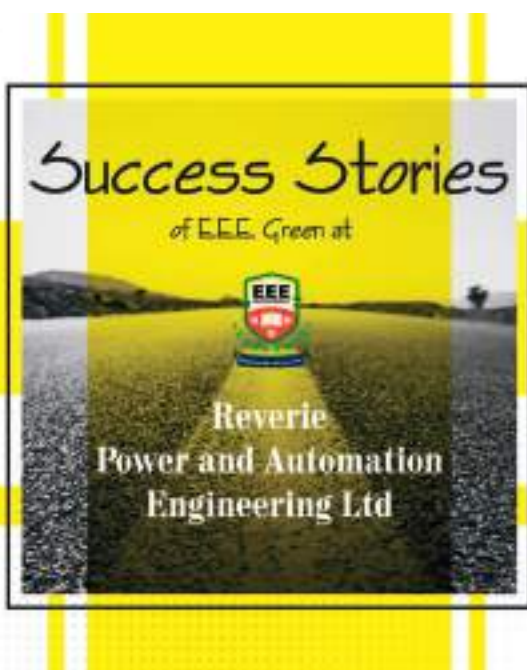
So far the most entertaining and smart event organized by GUB. As usual the crown of championship held its place. This time, Amirul Islam, student of GUB EEE, got the champion trophy.

# EXCELLENCE ABROAD

(APRIL 1, 2022)

There are many bright faces contributing their knowledge among the leading positions in the world. Some of them are mentioned

- Shad Hossain, EEE Green Alumni, University of Rome, Italy
- Jakaria Islam, Electrical Engineer, Career Electromechanical Cont. L.L.C, Dubai, UAE
- Shafiqul Alam Khan, GRE 309, IELTS 7
- Md. Sabbir Rohman, Service Engineer, Chemtech Scientific LTD
- Jahidul Islam, Earth Station Engineer, Channel 24



**Md. Mufid Aram Litu**  
B.Sc. in Engineering (EEE) GUB  
Assistant Engineer  
Research & Development



**Md. Mikul Islam**  
B.Sc. in Engineering (EEE) GUB  
Assistant Engineer  
Production (Transformer)



**Md. Rahman Hossain**  
B.Sc. in Engineering (EEE) GUB  
Assistant Engineer  
Production (Transformer)



**Al. Mahmud Sharif**  
B.Sc. in Engineering (EEE) GUB  
Assistant Engineer  
Production (Transformer)



**Rashidul Islam Rahad**  
B.Sc. in Engineering (EEE) GUB  
Assistant Engineer  
Production (Transformer)

# SCHOLARSHIP

(JULY 2, 2022)

Md. Imamul Islam, Student of GUB EEE, received the most prestigious scholarship "Malaysian Technical Cooperation Programme (MTCP) - 2022" sponsored by the ministry of Foreign Affairs, Malaysia. GUB family is proud of him. Currently he is pursuing his master degree in "Sustainable Energy & Power Electronics" from University of Malaysia Pahang (UMP).



07

## Arrivals, Departures & **Promotions**

2022



# ARRIVALS

(JULY 1, 2022)

We, the department of Electrical and Electronic Engineering cordially welcome the teachers on behalf of our institution. Teachers are the mentors of society; teachers are the ideal personality for the students. They follow teachers, their rules, their lifestyle, and their habits. Our faculty members are highly energetic and dedicated to their responsibilities that makes a healthy and friendly working environment. We cordially welcomed our newly joined faculty members with a get together program.

# DEPARTURES

(JULY 1, 2022)

Leaving the working place is an emotional moment regardless of separation conditions. Even when people go to a better workplace, they still are nostalgic. On behalf of the Social Get Together and Event Management Committee, the committee members organized farewell program for appreciating their success and recalling their continuous support on different departmental activities. The chairperson and other faculty members thank them for their valuable contribution to our organization and wish them all the best in the next chapter of their careers.



# PROMOTIONS

(JULY 2, 2022)

The hard work of any person always pays off. GUB EEE family is proud to announce that the respective faculty members are selected to be promoted as the mentioned responsible posts as a payoff to their hard work and dedication to the university. The respected faculty members are  
*Dr. Mohammed Nazmus Shakib*  
Associate Professor (Fall 2022)  
*M M Naushad Ali*  
Assistant Professor (Fall 2022)  
*D. M. Saaduzzaman*  
Assistant Professor (Summer 2022)



08

# Research

2022



# RESEARCH GRANT

(JULY 1, 2022)

This is a great news to be announced that, the dedication of our faculty members towards the research field in our GUB is tremendously appreciable. Our honorable faculty members are always working hard to upgrade the research cell and improve its quality.

In this regard, we'd like to share that, Dr. Ratil H Ashique, Associate Professor, won a research grant of 4.8 lac BDT under the project titled "*A Competitive Performance Analysis of Zero Voltage Switching Class and Selected Enhanced E Class Inverters*"

# EXCELLENCE

(JULY 1, 2022)

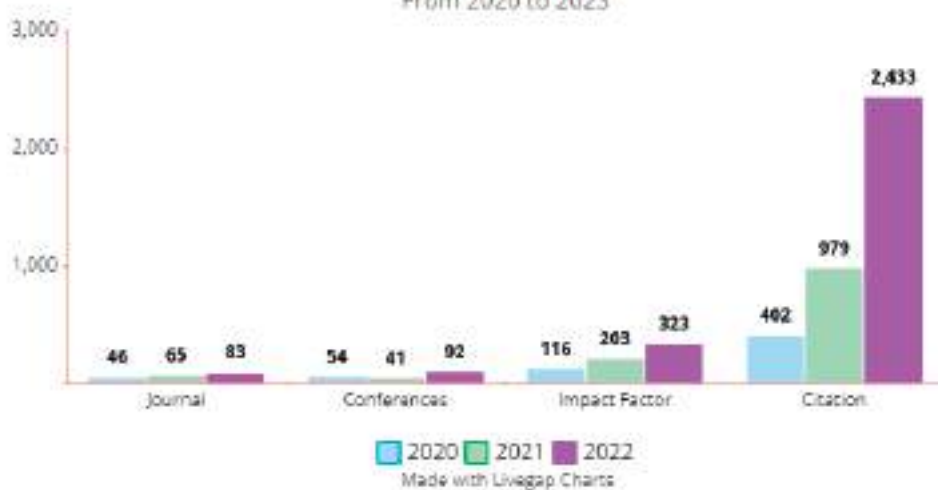
We are in the place where we can proudly show off our annual progress regarding the contribution in innovation and research.

The chart both expresses our struggles as well as our achievements that has been made by EEE Green family. This task has been possible only for our cooperation towards each other and passion towards our work.



## Dashboard

From 2020 to 2023



# SUMMARY

(JULY 2, 2022)

The Department of EEE is happy to share the cumulative success stories towards the path of where we stand today.

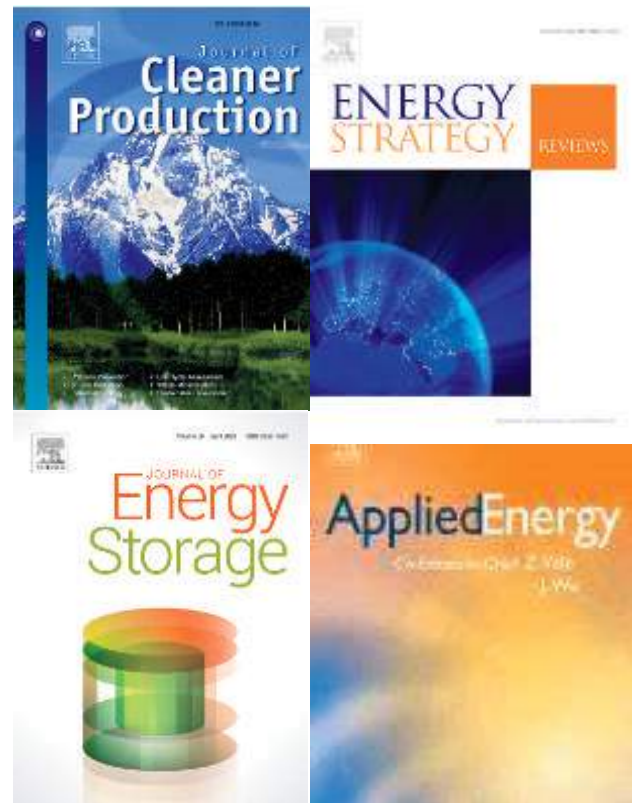
From the very beginning of this institution, it has claimed a total of 7 research grants and awards, a total of 9.2 lacs BDT as research grant and 2.6 lacs BDT as total award money for various innovative tasks by its family members.

# HIGH IMPACT FACTOR JOURNALS

(JULY 1, 2022)

At Green University of Bangladesh, we are proud to acknowledge the remarkable accomplishments of our research enthusiasts. Their dedication and passion have led to numerous impactful publications in renowned journals. Their tireless efforts in advancing knowledge and pushing the boundaries of innovation deserve admiration. Through their research, they have not only expanded the frontiers of academic excellence but also contributed to the betterment of society. Their work encompasses a diverse range of fields, from science and technology to social sciences and humanities. Their insightful studies have shed light on pressing global issues and provided valuable solutions.

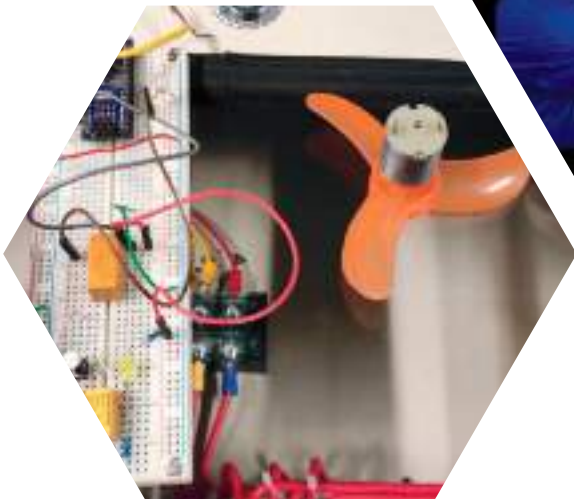
We applaud the resilience, intellectual rigor, and unwavering commitment of these researchers. Their contributions have elevated the reputation of our institution and inspired future generations. We extend our heartfelt appreciation to the research enthusiasts of the Green University of Bangladesh, whose relentless pursuit of knowledge continues to make a profound impact.







Collection of  
moments from 2022  
that we will  
cherish forever  
**Part I**







Collection of  
moments from 2022  
that we will  
cherish forever  
**Part II**





