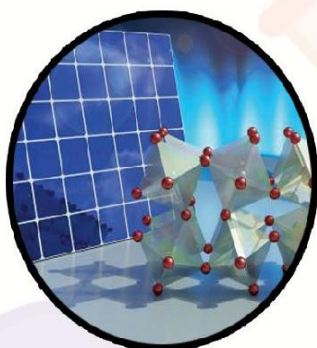


*We cordially invite you all for the*

## Two Days National Virtual Seminar on

# “Innovations in Chemical Science - Energy, Environment and Health” (ICS-E<sup>2</sup>H 2022)

under DBT Star College Scheme  
on 22<sup>nd</sup> and 23<sup>rd</sup> February 2022



Organized by  
Department of Chemistry  
Sri G.V.G Visalakshi College for Women  
Autonomous & Affiliated to Bharathiar University  
Accredited at ‘A<sup>+</sup>’ Grade by NAAC  
An ISO 9001:2015 Certified Institution  
Udumalpet- 642 128.

Click Here for Registration : <https://forms.gle/11Wsl1me91bMDaEP9>

## The Host Institution

Sri GVG Visalakshi College for Women, appeared in the academic map of Tamilnadu in 1952 as the first women's college in the then composite Coimbatore district comprising Erode, Coimbatore and Nilgiris. The college works on the vision of the founder, renowned Philanthropist and Industrialist, Sri G.V.Govindasamy Naidu, "To Educate and Empower rural Women". The college obtained Autonomy in 1995, ISO 9001:2008 certification in 2011, and Reaccreditation with 'A+' grade by NAAC (Fourth cycle with CGPA 3.27) in 2019. The college continuously aims to enlarge the scope and variety of higher education by offering innovative, traditional and contemporary courses. The college is implementing the concept of Outcome Based Education from the academic year 2017-18 onwards. The college strives to empower students through women making education for life and living to the ideal set by the motto of the college "Not for Self, But for All". The Steps the Institution crossed are mind-boggling with phenomenal accolades such as UGC-Paramarsh Mentor Institution, DST FIST funded and DBT Star College. Community and Extension activities in villages are a regular feature of our college. Our college has been developing rapidly as one of the best and leading higher learning institutions in Tiruppur district and has made a mark in the arena of higher education.

## About the Department

The Department of Chemistry was established in 1962. The department has an excellent academic record and has bagged several ranks of Bharathiar University, Coimbatore, for several consecutive years. The Chemistry laboratories are well furnished and equipped with instruments like Electrochemical workstation, UV-Photoreactor, UV-Visible spectrophotometer, Flame photometer, Polarogram, Muffle furnace etc. The Department has received funds from UGC to carry out minor research projects. The Department is financially supported by the Department of Science and Technology under the DST-FIST scheme and has also been identified to participate in DBT-Star College scheme for enhancing the activities of the Science Departments. Many National Seminars/Workshops/Hands-on training under various fields of chemistry have been organized every year with funds received from various funding agencies. The department has well qualified and experienced faculties with good number of publications in reputed National and International journals. A reasonable institute-industry interaction with a good placement record exists in the department. The Department of Chemistry has a well – established academic track record of having produced more than 2150 chemistry graduates. It has an excellent academic record in preparing students for career and higher studies

## Objective of the Seminar

This seminar aims at disseminating knowledge of Innovations in chemical science through invited lectures by eminent scientists in the domain of Energy, Environment and Health. The research areas in chemistry are growing at a phenomenal pace. It is necessary to have regular seminars and conferences on various aspects of it. Hence the Department of Chemistry is organizing the virtual national seminar on "Innovations in Chemical Science - Energy, Environment and Health (ICS-E<sup>2</sup>H 2022)" with the aim of gathering together scientists, researchers, academicians and students to have valuable discussions and exchange scientific information. It would also endeavor to provide a broad background and observe different dimensions of various scientific applications. We anticipate that interaction on such key areas would generate sustainable solutions to global changes and also influence the inquisitive minds to appreciate their future course in Chemistry.

**Programme Schedule**  
**Day 1 (22.02.2022)**

**Inaugural Session : 10.00 am – 11.00 am**

Welcome Address

**Dr. M. Malarvizhi**

Assistant Professor and Head, Department of Chemistry

Presidential Address

**Dr. N.Rajeswari**

Principal

**Inaugural Address**

**Dr. S.Kutti Rani**

Professor & Dean, SP & CS

B.S. Abdur Rahman Institute of Science & Technology

Vandalur, Chennai 600 048.

Vote of Thanks

**Mrs. R.Chitradevi**

Assistant Professor in Chemistry

**Technical Session I : 11.00 am – 12.30 pm**

**Dr. Jamespandi Annaraj**

Assistant Professor and Head(i/c)

Department of Materials Science School of Chemistry,

Madurai Kamaraj University, Madurai - 625 021.

**Topic : DNA Targeted Metallo drugs and  
Nanoscale Level Biomaterials.**

**Technical Session II : 1.30 pm – 2.30 pm**

**Dr. K. Swarnalatha**

Associate Professor,

Department of Chemistry,

Manonmaniam Sundaranar University,

Tirunelveli - 627 012.

**Topic: Light-harvesting Materials and  
Devices - Challenges and Directions  
in Emerging Technologies**

**Technical Session III : 2.30 pm – 3.30 pm**

**Dr. R. Arun Prasath**

Professor,

Department of Green Energy Technology,

Pondicherry University, Puducherry - 605 014.

**Topic: Waste to Energy Conversion  
Technologies for Sustainable Development**

**Programme Schedule**  
**Day 2 (23.02.2022)**

**Technical Session IV : 9.30 am – 10:30 am**

**Dr. Prasanta Kumar Rout**

Assistant Professor,

Department of Material Science and Engineering,

Tripura University, (Central University),

Tripura - 799 022.

**Topic : Development of geopolymeric  
construction materials from industrial  
waste**

**Technical Session V : 10.30 am – 11:30 am**

**Dr. P. Kannan**

Associate Professor, College of Biological

Chemical Sciences and Engineering

Jiaying University, Zhejiang, 314 001. PR China.

**Topic: Transition metal nanoparticles  
integrated nanostructured platforms for  
fuel cell catalysis applications.**

**Technical Session VI : 11.30 am – 1.00 pm**

**Dr.Sudha Seshayyan M.S.,**

Vice-Chancellor,

The Tamilnadu Dr.M.G.R. Medical University,

Chennai - 600 036.

**Topic: Chemical Science in Health  
and it's Promotion**

**Technical Session VII**

**&**

**Valedictory Session : 2.00 pm – 3:30 pm**

Welcome Address

**Dr. M. Indrani**

Assistant Professor in Chemistry

**Valedictory Address**

**Dr. B. Viswanathan**

Formerly Professor and Head,

National Centre for Catalysis Research,

Indian Institute of Technology Madras, Chennai - 600 036.

**Topic:Energy and Environment  
in recent times**

Vote of Thanks

**Dr. S. Umadevi**

Assistant Professor in Chemistry



**Patron**

Smt. Sumathi Krishna Prasad  
Secretary

**Chairman**

Dr. N.Rajeswari  
Principal



**Conveners**

Dr. S. Umadevi,  
DBT Co-ordinator,  
Assistant Professor in Chemistry

Dr. J. Bhuvaneswari,  
Assistant Professor in Chemistry

Dr. E. Vaishnavi,  
Assistant Professor in Chemistry



**Organizing Committee**

Dr. M. Malarvizhi,  
Head & Assistant Professor in Chemistry

Mrs. R. Chitradevi,  
Assistant Professor in Chemistry

Mrs. V. Anitha,  
Assistant Professor in Chemistry

Dr. M. Indrani,  
Assistant Professor in Chemistry

**Address for Communication**

Department of Chemistry,  
Sri G.V.G. Visalakshi College for Women, (Autonomous)  
S.V.Mills (Post), Udumalpet – 642 128. Tirupur District.  
E-mail : chemgvg2011@gmail.com

E certificate will be provided





**Sri G.V.G. Visalakshi College For Women**, Udumalpet- 642128  
Autonomous and Affiliated to Bharathiar University, Coimbatore  
Accredited at A<sup>+</sup> Grade by NAAC (Fourth cycle)  
An ISO 9001:2015 Certified Institution  
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## DEPARTMENT OF CHEMISTRY

### Two Days National Virtual Seminar on

### “Innovations in Chemical Science - Energy, Environment and Health” (ICS-E<sup>2</sup>H 2022)

Under DBT Star College Scheme

Date : 22<sup>nd</sup> and 23<sup>rd</sup> February 2022

Registration Link : <https://forms.gle/11WsL1me91bMDaEP9>

Technical Session Links :

22.02.2022 FN - [meet.google.com/its-aaog-cvb](https://meet.google.com/its-aaog-cvb)

22.02.2022 AN - [meet.google.com/pai-oqui-zhb](https://meet.google.com/pai-oqui-zhb)

23.02.2022 FN - [meet.google.com/dzy-rvxy-gca](https://meet.google.com/dzy-rvxy-gca)

23.02.2022 AN - [meet.google.com/dma-pvie-rqc](https://meet.google.com/dma-pvie-rqc)

Feedback Link : <https://docs.google.com/forms/d/1yZJude-yRsSXSAjQEARQEyBQGSVWrpe7WJ9qZmhXvjk/edit>

The Department of Chemistry, Sri GVG Visalakshi College organised a **Two Days National Virtual Seminar** titled “**Innovations in Chemical Science - Energy, Environment and Health**” (ICS-E<sup>2</sup>H 2022)” under DBT Star College Scheme on 22<sup>nd</sup> and 23<sup>rd</sup> February 2022. Google form was designed and circulated to the various colleges to start the registration of the seminar a week ago. On the first day of the seminar, 22.02.2022, the programme started with the note of a prayer song, followed by the Welcome Address by Dr. M. Malarvizhi, Assistant Professor and Head, Department of Chemistry. The Presidential Address was delivered by Dr. N.Rajeswari, Principal, after that, Dr. M. Malarvizhi, Assistant Professor and Head introduced the chief guest of the Inaugural Session, Dr. S.Kutti Rani, Professor & Dean, SP & CS, B.S. Abdur Rahman Institute of Science & Technology, Vandalur, Chennai. She addressed the participants regarding the role of chemistry in energy, environment and health and She also discussed "Nanotechnology for Environmental

Remediation". During her inaugural speech she appreciated the title of this two days national virtual seminar and mentioned the importance of innovations in science for a future sustainable development. After that the vote of thanks was delivered by Mrs. R. Chitradevi, Assistant Professor in Chemistry. There were a total of around 200 participants for the inaugural session which included faculty members and interested students from various departments, as well as the registered delegates.

The inaugural session was completed by 11:30 and after a short discussion the technical sessions started. Technical session 1 started at 11:35, the first lecture of the day I was delivered by Dr. Jamespandi Annaraj, Assistant Professor and Head(i/c), Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Madurai on the topic "DNA Targeted Metallodrugs and Nanoscale Level Biomaterials" which was very impressive and a motivational one (11:35 am -12:40 noon). After the lunch break (12.40 pm – 01.30 pm), the second lecture was delivered by Dr. K. Swarnalatha, Associate Professor, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli on "Light-harvesting Materials and Devices - Challenges and Directions in Emerging Technologies" which showed the various energy storing materials (1:30 p.m. – 2.45 pm). This inspiring lecture could invite wide attention among the audience. The next session started at 02:50 pm and the lecture was delivered by Dr. R. Arun Prasath, Professor, Department of Green Energy Technology, Pondicherry University, Puducherry on the topic "Waste to Energy Conversion Technologies for Sustainable Development" which inspired the audience through the diverse strategies for the energy conversion (02:50 pm - 04.20 pm). After the talk, his interactions with the audience was excellent and he shared a lot of experiences with the students which would benefit them for present academics and their future career. The day I of this seminar was concluded with the vote of thanks by Dr. J. Bhuvanewari, Assistant Professor in Chemistry.

The second day of the seminar started at 09:30 am and the guest speaker was introduced by Dr. E. Vaishnavi, Assistant Professor in Chemistry. The first plenary lecture of the day 2 was delivered by Dr. Prasanta Kumar Rout, Assistant Professor, Department of Material Science and Engineering, Tripura University (Central University), Tripura. On the topic "Development of geopolymeric construction materials from industrial waste" which could show how geopolymers could be synthesised and their importance in future concrete construction (09:30 am – 10:30 am). The talk was an inspiration for all the participants. The next lecture was delivered by Dr. P. Kannan, Associate Professor, College of Biological,

Chemical Sciences and Engineering, Jiaying University, Zhejiang, PR China on “Transition metal nanoparticles integrated nanostructured platforms for fuel cell catalysis applications” which showed different fuel cells and their applications (10:30 am-11:30 am). The talk was very motivational and the entire audience enjoyed the session by interaction. Following this the next session speaker Dr.Sudha Seshayyan M.S., Vice-Chancellor The Tamilnadu Dr.M.G.R. Medical University, Chennai was introduced by Dr. S. Umadevi, Assistant Professor in chemistry. The lecture delivered on the topic “ Chemical Science in Health and it's Promotion” was an inspirational talk which showed the use of innovations of science in health (11:35 am - 12:45 pm). She also interacted with the students between her speech and shared her deep knowledge on the said topic as well. After the lunch break (12:45 pm – 02:00 pm), the last session of the whole seminar was a valedictory function that started at 02:00 pm after the welcome address by Dr. M. Indrani, Assistant Professor in Chemistry. The Valedictory Address was delivered by Dr. B. Viswanathan, Formerly Professor and Head, National Centre for Catalysis Research, Indian Institute of Technology Madras, Chennai on the topic "Energy and environment in recent times" which could transfer the idea of energy and environment in day today life (02:00 - 03:15 p.m.). Participants could realise greener strategies for energy applications and it inspired them. The vote of thanks was delivered by Dr. S. Umadevi, Assistant Professor in Chemistry. Based on the feedback received, 119 E-certificates were issued to the participants.

We take this opportunity to wholeheartedly thank the resource persons who came from many parts of the country, the Principal, she was with us throughout the whole seminar, Head of the Department, Participants and other supported people. It is our pleasure to thank the Department of Biotechnology (DBT), Govt. of India, for financial support for conducting this national virtual seminar. We believe that this seminar could be of interest and motivation to many students, research scholars and teachers of the region in the lines of bringing true research to solve some of the fundamental problems faced by our society in an innovative way.

#### **Registration Details:**

Guest Speakers	: 8
Professor and Senior Scientist	: 1
Students	: 173
Research scholars	: 15
Faculties for nearby colleges	: 42

## **Resource Persons Details:**

### **Day 1 (22.02.2020)**

1. **Dr. S. Kutti Rani**, Professor & Dean, SP & CS, B.S. Abdur Rahman Institute of Science & Technology Vandalur, Chennai.  
Topic: Inaugural Address on "Nanotechnology for Environmental Remediation"
2. **Dr. Jamespandi Annaraj**, Assistant Professor and Head(i/c), Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Madurai.  
Topic :DNA Targeted Metallo drugs and Nanoscale Level Biomaterials.
3. **Dr. K. Swarnalatha**, Associate Professor, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli.  
Topic: Light-harvesting Materials and Devices - Challenges and Directions in Emerging Technologies.
4. **Dr. R. Arun Prasath**, Professor, Department of Green Energy Technology, Pondicherry University, Puducherry.  
Topic: Waste to Energy Conversion Technologies for Sustainable Development

### **Day 2 (23.02.2020)**

5. **Dr. Prasanta Kumar Rout**, Assistant Professor, Department of Material Science and Engineering, Tripura University (Central University), Tripura.  
Topic:Development of geopolymeric construction materials from industrial waste"
6. **Dr. P. Kannan**, Associate Professor, College of Biological, Chemical Sciences and Engineering, Jiaying University, Zhejiang, PR China  
Topic: Transition metal nanoparticles integrated nanostructured platforms for fuel cell catalysis applications.
7. **Dr.Sudha Seshayyan M.S.**, Vice-Chancellor, The Tamilnadu Dr.M.G.R. Medical University, Chennai 600 032.  
Topic: Chemical Science in Health and it's Promotion
8. **Dr. B. Viswanathan**, Formerly Professor and Head, National Centre for Catalysis Research, Indian Institute of Technology Madras, Chennai.  
Topic: Valedictory Address on "Energy and environment in recent times"



# Day 1(22.02.2022) FN

The image shows two screenshots of a Google Meet session. The top screenshot shows a presentation by Dean (School of Physical and Chemical Sciences) with the following content:

**Nanotechnology for Environmental Remediation**

**Dr. S. KUTTI RANI**  
PROFESSOR AND DEAN (SPCS)

Department of Chemistry  
B S ABDUR RAHMAN CRESCENT INSTITUTE OF SCIENCE AND TECHNOLOGY, CHENNAI-48.

The bottom screenshot shows a presentation by Jamespandi Annaraj with the following content:

**Benign**

- Slow growing,
- capsulated,
- Non-invasive do not metastasize,
- well differentiated,
- suffix "oma" eg. Fibroma.

**Malignant:**

- Fast growing,
- non capsulated,
- Invasive & infiltrate
- Metastasize
- poorly differentiated,
- Suffix "Carcinoma" or "Sarcoma"

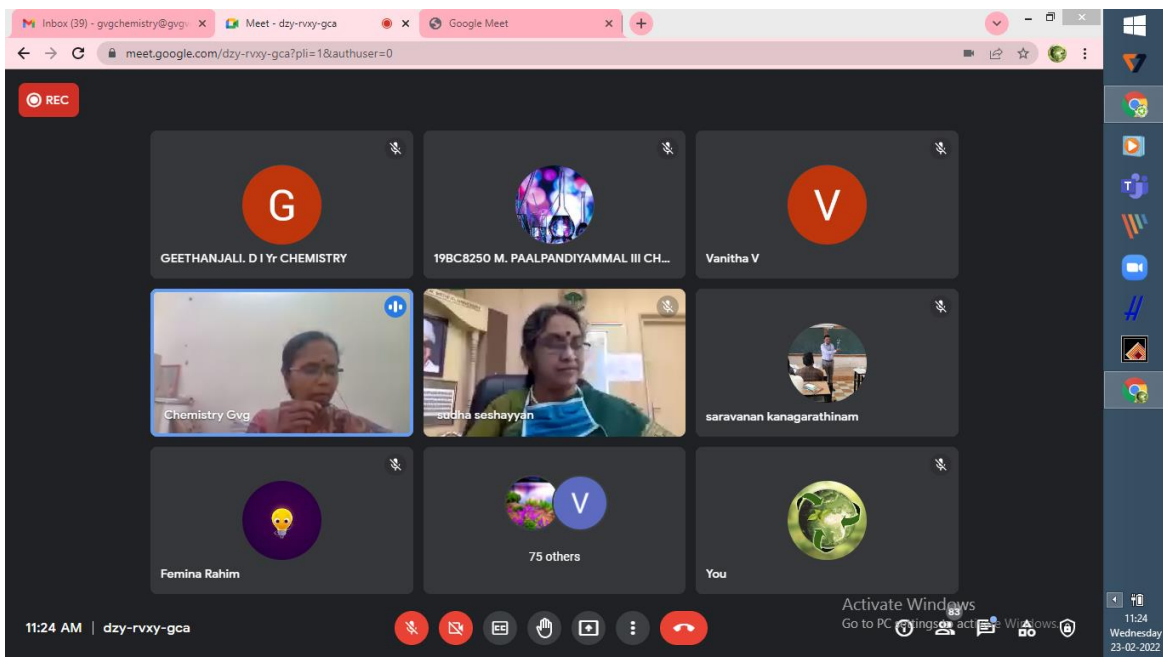
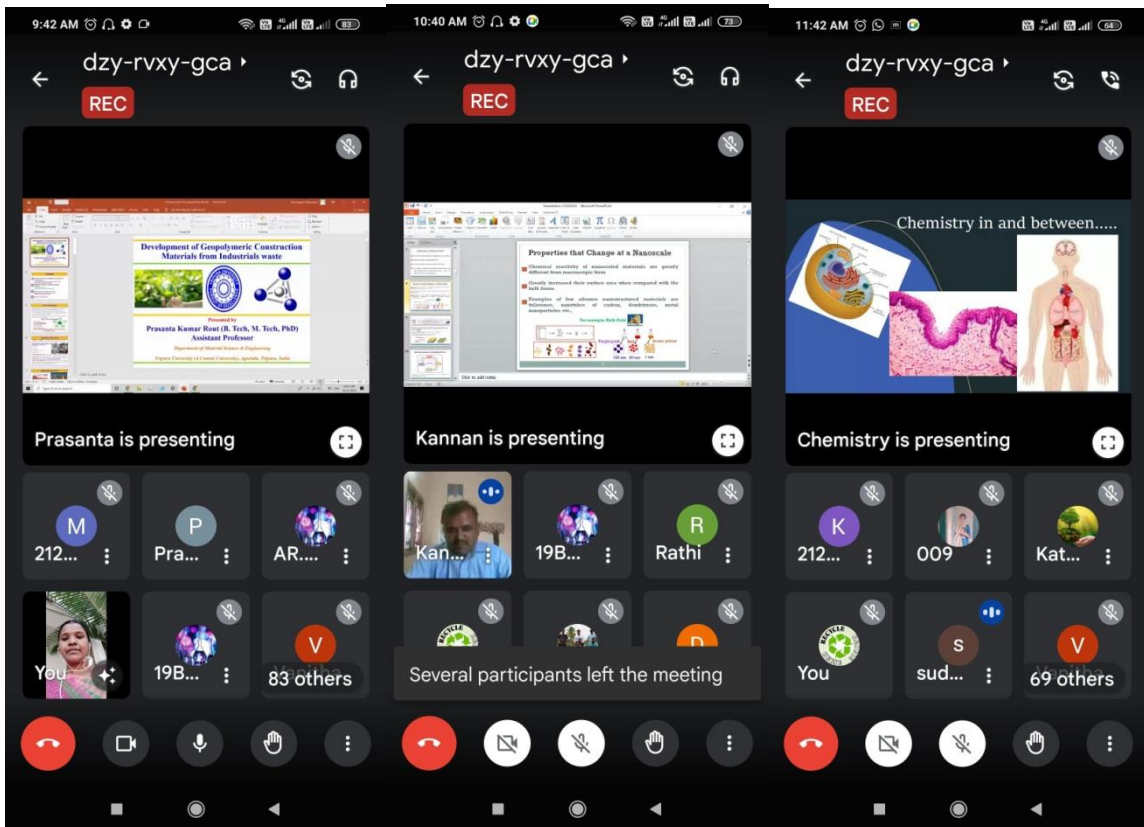
Both screenshots show a grid of participants and a Windows taskbar on the right side.

# Day 1(22.02.2022) AN

The screenshot shows a Google Meet window with a presentation slide. The slide title is "Light-harvesting Materials and Devices – Challenges and Directions in emerging technologies". The presenter is K. Swarnalatha, Associate Professor at the Photochemistry Research Laboratory, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India. The slide features a cartoon sun with a face and a lightning bolt pointing to a box labeled "Light Harvesting Units". The meeting interface shows the presenter's name "swarna latha" and a grid of other participants including "CHEMISTRY Depart...", "Chemistry Gvg", "SSHOBIKA III CHE...", "S.snehaIII Chemistry", and "Anitha V". The time is 1:43 PM on Tuesday, 22-02-2022.

The screenshot shows a Google Meet window with an in-call message. The message text reads: "Nowadays we are facing new pollution known as micro-pollution, as a chemical how can we reduce and reuse this kind of pollution sir?". The message is from "19BC8250 M. PAAL...". The meeting interface shows the presenter's name "Dr.ARUN PRASATH" and a grid of other participants including "Akshaya Babu", "19BC8250 M. PAAL...", "SANJITH . K", "2020PGCH09 K Ar ...", and "pushpanayaki A III ...". The time is 4:22 PM on Tuesday, 22-02-2022.

## Day 2 (23.02.2022) FN



## Day 2 (23.02.2022) AN

The screenshot shows a Google Meet interface with a grid of participants and an in-call messages panel. The participants are:

- KEERTHANA P V 212CE014
- Hari Varsha
- Viswanathan B
- INDRANI MURUGAN
- 19BC8250 M. PAALPANDIYAMMAL III ...
- Vanitha V
- MUNEERA PARVEEN.S 1st yr Chemistry
- 44 others
- You

The in-call messages panel shows:

- Let everyone send messages (checked)
- Messages can only be seen by people in the call and are deleted when the call ends.
- Parameshwari Ramalingam 2:05 PM: Good afternoon...
- SARAVANABAVA J 2:28 PM: good afternoon to all
- 19BC8250 M. PAALPANDIYAMMAL III CHEMISTRY 2:56 PM: Sir what are the disadvantages of bioplastic ?
- Miruthula Palanisamy 2:56 PM: Does the energy waste affect the environment sir?

The bottom of the screen shows the time 2:57 PM, the meeting ID dma-pvie-rqc, and the Windows taskbar with the date Wednesday, 23-02-2022, and time 14:57.