

Department of Chemistry  
SRM Institute of Science and Technology  
Kattankulathur – 603203, Tamil Nadu.

### Report

## 2<sup>nd</sup> SRM Crystal Growing Challenge and Quiz Contest 2023

(07 October, 2023)



Figure: The banner of the program.

#### Registration form

Name of the School / College: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name of the Student: \_\_\_\_\_  
Class: \_\_\_\_\_  
Section: \_\_\_\_\_  
Name of the Teacher In-charge: \_\_\_\_\_  
Contact details: \_\_\_\_\_

#### Sir/madam

The undersigned is pleased to nominate the above mentioned students to participate in the Science competition for School students organized by Department of Chemistry, SRMIST.

Signature of the principal with seal  
Date: \_\_\_\_\_

#### Online registration:

<https://docs.google.com/forms/d/e/1FAIpQLScsMARjV2PamSZiAOyawd5tTDRJkN6V8WaF4gL1aKcJU2T1Hg/viewform?usp=sharing>



#### CHIEF PATRONS

Dr. T. R. Paarivendhar, Founder Chancellor  
Dr. Ravi Pachamuthu, Pro Chancellor (Admin)  
Dr. P. Sathyanarayanan, Pro Chancellor (Academics)  
Dr. R. Shivakumar, Chairman, SRMIST (Ramapuram and Trichy Campuses)

#### ADVISORY COMMITTEE

Dr. C. Muthamizhchelvan, Vice Chancellor, SRMIST  
Dr. S. Ponnusamy, Registrar, SRMIST  
Dr. T. V. Gopal, Dean, CET, SRMIST  
Dr. A. Duraisamy, Dean, CSH, SRMIST  
Dr. D. John Thiruvadigal, Chairperson, SAS, SRMIST  
Dr. B. Neppolian, Dean, Research, SRMIST

#### CONVENOR

Dr. M. Arthanareeswari, Professor and Head

#### CO-CONVENORS

Dr. Goutam Kumar Kole, Asst. Prof.  
Dr. T. Pushpa Malini, Asst. Prof.  
Dr. R. Kalaivizhi, Assoc. Prof.  
Dr. Venkatamaiah Nutalapati, Res. Assoc. Prof.  
Dr. Samarendra Maji, Res. Assoc. Prof.  
Dr. A. John Bosco, Asst. Prof.  
Dr. Ganesh Pandian, Assoc. Prof.  
Dr. Gopal Chandru Senadi, Res. Asst. Prof.

#### COORDINATORS

Dr. Abhijit Saha, Asst. Prof.  
Dr. Dipankar Das, Asst. Prof.  
Dr. Rahul Narayanan, Res. Asst. Prof.  
Dr. Tumpa Sadhukhan, Res. Asst. Prof.  
Dr. S. Vadivel, Res. Asst. Prof.  
Dr. Avijit Baidya, Res. Asst. Prof.  
Dr. Jayanta Samanta, Res. Asst. Prof.  
Dr. Rajendra Kumar Konidena, Res. Asst. Prof.



## 2<sup>nd</sup> SRM Crystal Growing Challenge

07 October 2023



*Organized by*

DEPARTMENT OF CHEMISTRY  
SRM Institute of Science and Technology  
Kattankulathur, 603203, Tamil Nadu.

**ABOUT THE INSTITUTION**

SRM Institute of Science and Technology is one of the top ranking universities in India with over approx. 60,000 students and 3000 faculty members, offering a wide range of undergraduate, postgraduate and doctoral programs in Science, Engineering, Management, Medicine, Health Sciences, and Humanities. It has established itself as a premier centre for teaching, research and industrial consultancy in the country. It has world class infrastructure including smart classrooms, hi-tech labs, advanced instruments and equipments, research laboratories, modern library and Wi-Fi facility. Ministry of HRD, Govt. of India placed SRMIST in the category I.

**ABOUT THE DEPARTMENT**

Department of Chemistry, SRM Institute of Science and Technology, Kattankulathur, has been engaged in opening up the fascinating world of Chemistry to students since 1985. The Department is supported by DST FIST, Govt. of India. The Department is offering B.Sc. (Chemistry, 3 years), B.S. (Chemistry, 4 years) M.Sc. (Chemistry), M.Sc. (Organic Chemistry) and Ph.D. (Chemistry) programs. It has 59 faculty members whose areas of expertise and research include organic, inorganic, physical, analytical, environmental, electrochemistry and nanotechnology. The faculty members of the department have contributed to academics by publishing books, research articles in high-impact peer-reviewed journals, presenting papers in conferences, delivering guest lectures, and invited talks. The Department has tie-ups with recognized institutions, industries and R&D laboratories for student projects, training and research activities.



**DETAILS OF THE COMPETITIONS**

**1. Crystal Growing Challenge**

- A group of 4 students can grow single crystals at their home institute, and show-case on the day of competition at SRMIST.
- Multiple groups from one institute can participate in the competition.
- Participants should arrange chemical(s) for crystal growth.
- Each student should register separately.
- Participation in the competition is free of any charge.

**2. Quiz Competition**

- On general Chemistry
- Only for HS students, a team of 4 students.

**DATE AND TIME**

- 07 October 2023
- 10 am to 3 pm.
- Last Date of Registration**
- 25 September 2023

**ADDRESS FOR COMMUNICATION**

- All communications may be sent via email to: [goutamks@srmist.edu.in](mailto:goutamks@srmist.edu.in)

**PRIZE DISTRIBUTION**

- Three prizes will be given to the first, second and third winners for each competition.

**PARTICIPATION CERTIFICATES**

- Certificates would be issued to the registered participants only.
- ☐ Lunch and local transport will be provided.

**WHO CAN ATTEND?**

- Students studying at 11<sup>th</sup> & 12<sup>th</sup> standard, and Undergraduate levels can participate

**BENEFITS OF THIS COMPETITION**

- By participating in the 'crystal growing challenge', students will learn how to grow single crystals. This will grow curiosity among the students to know how crystals of the minerals grow naturally on the earth crust; and the importance of single crystal in Chemistry research.
- Participation in the quiz contest will help them to explore beyond the textbooks, and think outside the box. This will also help them to perform well in other competitive exams and in higher education.

**Our Rankings :-**

 A++	 Category I with 129 Status	 (2022) Ranked 19 <sup>th</sup> University	 (2023) World Ranking one among 41 Indian Universities	 (2023) World Ranking one among 75 Indian Universities	 (2021) Ranked 4 <sup>th</sup>	 (2023) World Ranking one among 14 Indian Universities
--	--	---	---	--	---	---

Figure: The brochure of the programme, which was circulated for inviting various institutions.

The 2<sup>nd</sup> edition of SRM Crystal Growing Challenge was conducted by the Department of Chemistry, SRMIST, Kattankulathur, to out-reach the high school (11<sup>th</sup> and 12<sup>th</sup>) students from the neighbourhood. The programme was also combined with a quiz contest to make it more attractive. The programme was intended to attract potential students' community, and get to know and explore more about the campus and opportunities offered by SRMIST. There was no registration fee to participate in this programme. Transport facilities, refreshment and lunch were provided to all the participants and accompanying teachers.

Faculty members from the Department of Chemistry, SRMIST, who acted as the organising committee members for the programme, personally visited many schools to invite them. Also, they have taken initiative to explain the science and arts of crystal growth, and answered the queries raised by the teachers and students during their venture of crystal growths. 292 students from 26 different schools registered online via google link provided to them. 252 students appeared and participated from 25 different high schools on the day. The name list of participating schools and their students are appended below. This year, we received overwhelming responses from students – compared to about 100 participants from 9 schools, we have hosted 252 students from 25 different schools and accompanying teachers.

In the morning, registration started at 8:30 am. Students in a team of four members, displayed beautiful crystals of various commonly available chemicals (thorough guidelines were shared with the participants well in advance), grown by themselves at their home institutions, at the ground floor lobby at the University building. Innovative ideas of showcasing their crystals by the participants was

commendable. The exhibition remained open for all to explore until 12:45 pm. Respected **Prof. A. Duraisamy**, Dean FS&H, **Dr. S. Albert Anthony Raj**, Deputy Dean FS&H and **Dr. V. Thirumurugan**, Associate director, campus-life, SRMIST were the dignitaries who graced the occasion of exhibition. All of them interacted with the young participants actively. We hope that the young students have been motivated and inspired by the valuable interaction with the dignitaries. A group of five-member judges – **Dr. Samarendra Maji**, Res. Assoc. Prof., **Dr. Palash Sanphui**, Asst. Prof., **Dr. Susnata Pramanik**, Asst. Prof., **Dr. Tanay Kundu**, Asst. Prof. and **Dr. Goutam Kumar Kole**, Asst. Prof., inspected the quality of the crystals, and interacted with the participants. Based on their evaluation, **five teams** (5 x 4 = 20 students) were selected for prizes.

Award for Crystal Growth	Name of the School	Name of the students
1 <sup>st</sup>	Sitadevi Garodia Hindu Vidyalaya Matriculation Higher Secondary School	Rudra Devi, Shreesha S., Shakti Sudarshan S., S. Santosh
2 <sup>nd</sup> (joint)	Kendriya Vidyalaya No. 1, AFS, Tambaram	Niranjana, Rishith, Basundhara Jena, Janani.
2 <sup>nd</sup> (joint)	Sree Gokulam Public School	S. Vanathi, Hrithika S., Elsa Justin, G. Subhashini
3 <sup>rd</sup> (joint)	Annai Violet Matriculation Higher Secondary School	S. Yalini, S. Prathyush Haran, Pooja S., S. Anusha Veeramani
3 <sup>rd</sup> (joint)	St. John's Matriculation Higher Secondary School	Janani S., Afsa Fathima, Vishal N., S. S. Hemanth Kumar

For quiz contest, a written test was conducted to reach a final list of following 10 schools.

1. Velammal Vidyalaya, Ayanambakkam. 2. Zion International Public School. 3. Light Workers Academy. 4. JRK Global School. 5. Annai Violet Mat. Hr. Sec. School. 6. Loyola Academy CBSE School. 7. Sree Gokulam Public School. 8. Alwin International Public School. 9. Kendriya Vidyalaya (Team 1) AFS. 10. Alwin Memorial Public School.

After the lunch break, the quiz contest started at Room no. UB 1114. A team of four students from each represented their schools. Other participants remained as the audience. **Dr. T. Pushpa Malini**, Asst. Prof., acted as the quiz-master, and **Dr. Gopal Chandru Senadi**, Res. Asst. Prof., **Dr. Tumpa Sadhukhan**, Res. Asst. Prof., **Dr. Abhijit Saha**, Asst. Prof., and **Dr. Rajendra Kumar Konidena** Res. Asst. Prof. helped her in the process. Some questions were reserved only for the audience to keep up them active. Chocolates were given as a token of appreciation to the students from the audience for giving correct answers. Based on the scores in the question-answer session, **five teams** were selected for award.

Award for Quiz	Name of the School
1 <sup>st</sup>	Light Workers Academy
2 <sup>nd</sup>	Zion International Public School
3 <sup>rd</sup>	Alwin International Public School
4 <sup>th</sup>	Sree Gokulam Public School
5 <sup>th</sup>	Loyola Academy CBSE School

**Prof. T. V. Gopal, Dean, CET**, and **Prof. M. Vairamani**, Dean, School of Bioengineering, graced the occasion of valedictory and prize distribution function at 3 pm. Both the Deans addressed the audience and enlightened them about the importance of crystals in scientific research. Dean, CET interacted with the students with zeal to motivate them. A few representative students and fellow teachers were called upon stage to share their experience. All the winners in both events were awarded with a memento and a '*certificate of recognition*'. All other participants were given a '*participation certificate*'. The programme ended at 4 pm. Faculty members took responsibility of sending off the participants and accompanying teachers by SRM buses. Some glimpses of various events of the programme and representative copies of the certificates are provided herewith for reference.

Under the leadership of HoD, Chemistry (also Convener), **Dr. Goutam Kumar Kole**, Asst. Prof. lead the arrangement of the events, prepared the certificates and banners for the programme. **Dr. Jayanta Samanta**, Res. Asst. Prof. and **Dr. S. Vadivel**, Res. Asst. Prof. helped in the registration and certificates writing processes. **Dr. J. Arockia Selvi**, Assoc. Prof., **Dr. B. Natarajan**, Asst. Prof., and **Dr. D. Paradesi**, Asst. Prof. helped the organising team in various ways. Several **Research Scholars** voluntarily worked hard and helped the organising committee members in various ways. The programme was well-received by the participants and accompanying teachers of various schools. We feel that the programme was a great success!

**Prof. M. Arthanareeswari**,  
Head and Convener

#### **Co-conveners**

Dr. Goutam Kumar Kole, Asst. Prof.  
Dr. T. Pushpa Malini, Asst. Prof.  
Dr. R. Kalaivizhi, Assoc. Prof.  
Dr. Venkatramaiah Nutalapati, Res. Assoc. Prof.  
Dr. Samarendra Maji, Res. Assoc. Prof.  
Dr. M. Ganesh Pandian, Assoc. Prof.  
Dr. A. John Bosco, Asst. Prof.  
Dr. Gopal Chandru Senadi, Res. Asst, Prof.

#### **Coordinators**

Dr. Abhijit Saha, Asst, Prof.  
Dr. Dipankar Das, Asst, Prof.  
Dr. Rahul Narayanan, Res. Asst. Prof.  
Dr. Tumpa Sadhukhan, Res. Asst. Prof.  
Dr. S. Vadivel, Res. Asst. Prof.  
Dr. Avijit Baidya, Res. Asst. Prof.  
Dr. Jayanta Samanta, Res. Asst. Prof.  
Dr. Rajendra K. Konidena, Res. Asst. Prof

Table: List of participating Schools and names of the students.

S. No	School Names	Student Names
1	<b>Alpha Matric Higher Secondary School, Sembakkam</b>	Saranraj. S, J. Sophia Sharon, Melwin Raj, Monisha, R. Pavaneethan, M. Sanchida, Lega. S, Maria Jemimah. N, R. MITHILESH, Atchaya C, Samihah. S, Varsha Rajapandian, Nithika Ramasamy, Smrithi. M, Mohammed Suhail, Charumithra, R. Parameshwar, S. Gracia Sharon, NEIL DANIEL. A, P. Michelle Sephora, Freddy Matthew, M. Oviya, P. Shobhana
2	<b>Alwin International Public School, Padappai</b>	Kamalesh Paramadayalan, Jashwanth Suresh, Fritwin Reo, Guru Shankar Karikalan, A.R Akilan, Arjun Thakku Kumarakannan, Anto Allwan Savio, Punit Muthu Ravikumar, Richard Allen Doss, Kailash Krishnamoorthy, Keswan Kedrick Martin Selvaraj, Eben Victor Dani, Vitor Kalyana Sundaram, Navin Kumar PG, Vijay B, Abilash, Deivasigamani, Mohith Kumar Janakiraman, Vignesh Tawker, Kripashnkar, Saatvik Joshua, Amirdeswaran Thirukonda Karthick, Thileepan
3	<b>Alwin Memorial Public School, Selaiyur</b>	Sai Sowmya V, Amrita Rani V, Mahalakshmi M, Samuel John Dhinakaran
4	<b>Annai Violet Matriculation and High School, Chitlapakkam</b>	Joy Elizabeth, YALINI S, Sanjana. S, Anusha Veeramani, Pooja. S, P. Sanjay, Dhirthika. S, YALINI S, S. Prathyush Haran
5	<b>Arignar Anna Govt. Hr Sec School, Poonamallee</b>	Shaik Hazeem A, Manikandan, Riches A, Karthikeyan M, Dushyanth B
6	<b>Bharathiyar Matric Higher Secondary School, Guduvanchery</b>	Azim Fathima, Uthra, Jeevithan xII A, Jagannath K, Rithika, Kalaivani K, Sathish, Sai Sanjay B, Supraja, Krithika, Nandhitha, Vaishnavi S, Priyanka M, Sakthivel C, Vel Arjun T S, Deeveka G, Nameera Parveen A, Durgai Lakshmi P, Harini G, V Kavitha
7	<b>Gurukulam Matric Higher Secondary School, West Tambaram</b>	Atchaya P, Neelu Farnaz A, Pranavi S, Safana Yasmin S, Harish Ragavendra S, Priyan M, Ranjith M, Surendhar K. H.

8	<b>Holy Angels Matric Higher Secondary School, Korattur</b>	Shyam Samuel A, Ayisha Siddiqua A, Nivedha S, Mohammed Yazzar K, Gowtham K, Gowtham K, Mohammed Faizil S, Caroline Jenifer L, Deerthika J, Oviya M E
9	<b>JRK Global Senior Secondary School, Kattankulathur</b>	Monica A, Pavithra C, Abinaya J, Monisha S, Deepika V, Rethanya S, S Monisha, Monika Varshini B, Anamika P P, Yuvasri R, M.S.Kaviya, Meghana Yadav N, S Dakshitha, Deva Dharshini, Arunika. T. J, Sushmitha. S, Jai sakthi Shri. K, Shuvetha Jovi. A, Aadhira. A
10	<b>Kendriya Vidyalaya No-1, AFS. Tambaram</b>	Manjari, Niranjana, Rishith, Sudharshan, Pragyashri, Pavna Kabira, Priya Varshini, Advait.S, Nirangan, Srinikethan, Shashank, S. Vishwa, Basundhara Jena, Janani. R. A, L. Sree Sanmati, Radhika
11	<b>Loyola Academy CBSE School, Vadamelakkam</b>	Kishore Kumar, Samundeeswari. S, INFANT, Naresh. G, Mathiyazhagan. M, Yogeshwar. T.D, BALAJI.K, Adithiya. K, M. Nivas, Subashree. U, Subashree. U, G. Monika, Aron Daniel M, Aron Daniel M, Buvaresh. M, Mummaneni Chethana, Jebarish Kumar, Eu. Divyesh, T. Jeeva
12	<b>Ramakrishna Mission Vidyalaya Matric Higher Secondary School, Chengalpattu</b>	Manju dharshini S, Abimanonmani. PL, Dhivya Dharshini. P, Mahwish wafa, Srivedha K, Sathiyapriya V, Pooja. M. D.
13	<b>St. Johns Matric Higher Secondary School</b>	S. Shanmuga Priyan, Kriya S, Jonika Shanu, Rakshaya V, Loshini.B, Janani S, Asfa Fathima. N, S K Tanish, Vishaal. Tn, Madhumitha.S
14	<b>Shi Natesan Vidyasala Matric Higher Secondary School, Mannivakkam</b>	Logeshwaran K, Praviksha K, Varshini S, Vijayan V, Santhosh M, Saikrishna S, Sanjay B, Harismen S, Amudhan S.
15	<b>Sitadevi Garodia Hindu Vidyalaya Matriculation Higher Secondary School, East Tambaram</b>	Rudra Devi. D, Shreesha S, Hemapriya. R, S. Santhosh, S H Pragadeeshwaran, Ramanan. A, Harshini. N, M. Sarvan Ram, Ranjani S, S Sakthi Sudharshan, S. Jaiakash, Gayathri Mutharasi. V



16	<b>Sree Gokulam Public School, Chengalpattu</b>	S. Vanathi, Hrithika S, K.B. Mirudulaa, H. Prajeeth, T.N. Ganesh Kumar, M. Rishima, ELSA JUSTIN, G. Subhashini
17	<b>St. Antony Matric Higher Secondary School, Pallikaranai</b>	Ahmed Ansari Iththisham L, Aishwarya M, Aman Gour B, Anbazhagan T, Haarish A, John Milton S, Karthiga Sekar, Palani P, Pranatheesh S, Rokith Kumar S, Thangarasu S, Haritha K, Kanishka M, Kaviya S, Sanjai R, Sarukesh S, Shanmuga Priya E, Sivaranjini Nair S, Thananjayan S.
18	<b>St. Joseph's Matric Higher Secondary School, Marai Malai Nagar</b>	Hemachanthiran P, Ranjith P, Manigandan S, Dharshini P, Harshavardhan S, Arokia Shathana M, Samyuktha V, Belcy Frutlin T, Yuvasri S, Ruvanthika P, Ramya Priya S.
19	<b>Valluvar Gurukulam Higher Secondary School, Tambaram</b>	Tharunkumar B, Kamesh Kanna G., Dilip Kumar M, Kishore G, Prithika Priya R S, Udhaya K, Bharath M, Meenalochani B.
20	<b>Ramakrishna Mission Boys Hr. Sec School, Chengalpattu</b>	E. Manoj, Dhanush. R, Gnanaprabhanjan G, Sachin. S
21	<b>Sri Ramakrishna Mission Vidyalaya Girls Hr. Sec School, Chengalpattu</b>	S Monika, S. Shastika, I. Hasini, K. Shabishna, D. Monika, S. Sri Priya, K. Jashvini, P. Dharshini, S. Supriya, Varalakshmi. M, S. Dhivya Dharshini, U. Kalairubini, R. Ragavi, I. Shobhana Shree, K. Mahalakshmi, V. Divya, R. Maha, S. Jeevana Priya, P. Yuva Shree, K.S. Shahana Keerthi, A. Sai Priya, D. Ezhilarasi, S. Kaviya
22	<b>St. Paul's Academy (Cbse), Chengalpattu</b>	Jonika Shanu, Sam E., Sibi, Sanjeevi Kumar E.
23	<b>Velammal Vidhayala (Main) Mel Ayanambakkam</b>	Bhavadharani D. K, Priyadharshini, Dhanraj, Pulkit Jain, Jayanti Nishaanthan. M, Sanjay, Abilash. S.M, S. Shreya, Naveen. U, Keshav Pandey, Sahana Chandini
24	<b>St. Paul's Matriculation Higher Secondary School, Chengalpattu</b>	Mohana Sundaram S., Hema Chandhiran M., Harish P., Divakar M., Sandhana K., Salath Ferdina A, Roshini P., Dharshini S.
25.	<b>Light Workers Academy, Nallambakkam</b>	Sivani, Joshua Danni, Harjeeth, Pranav Karthik



Figure: Some glimpses of various events the whole programme.





Figure: Some glimpses of the event of the exhibition of crystals.





Figure: Some glimpses of various events – interactions between school students and professors of SRMIST.



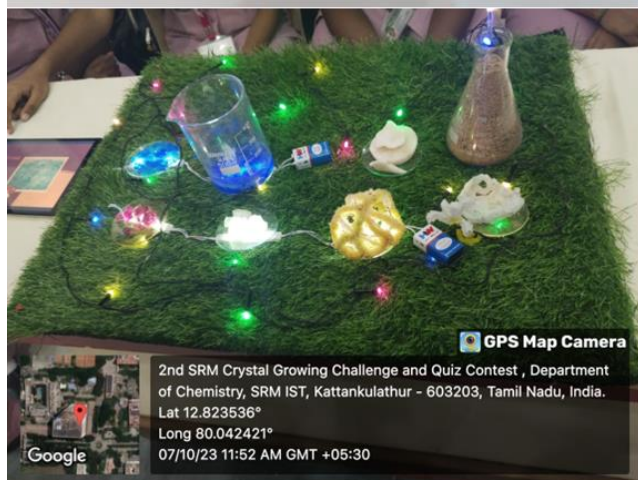
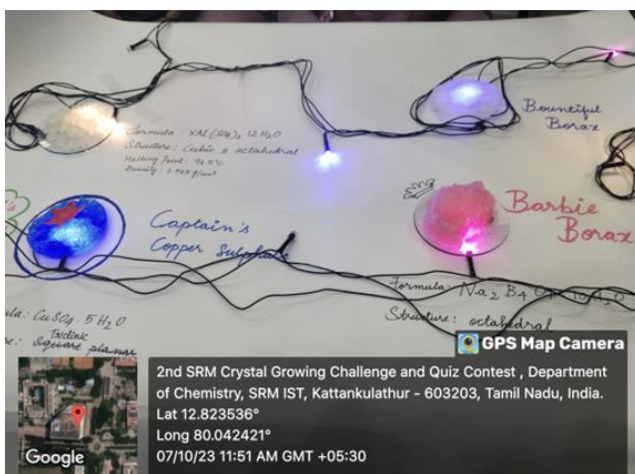
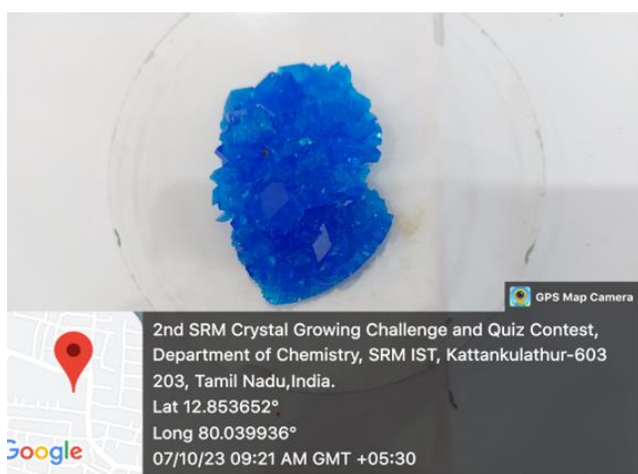
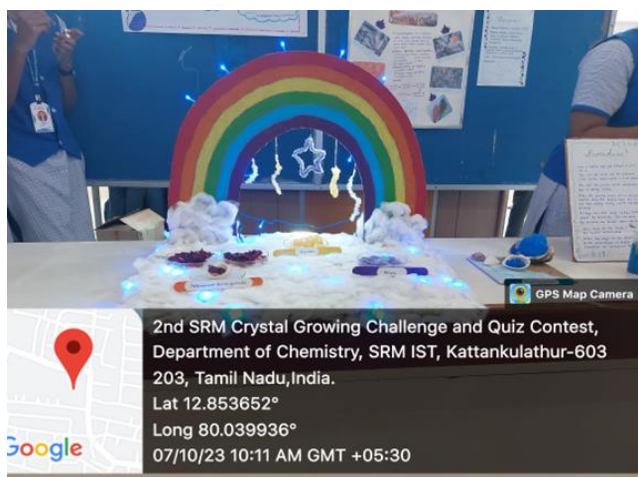


Figure: Some glimpses of innovative ideas by the school students for displaying their crystals.





Figure: Some glimpses of event of organising the quiz contest.





Figure: Some glimpses of the valedictory function and distribution of certificates and mementos.





Figure: A representative copy of the participation certificate given to the students.



Figure: A representative copy of the winner's certificate given to the students.