

## Registration form

Name of the Institute / University: \_\_\_\_\_

Address: \_\_\_\_\_

Name of the Student: \_\_\_\_\_

Course of study: \_\_\_\_\_

Contact details: \_\_\_\_\_

*Sir/madam*

The undersigned is pleased to nominate the above mentioned student to participate in the workshop “Crystal Engineering – where Industry and Academia Meet” organized by Department of Chemistry, SRMIST.

Signature of the HoD or research supervisor with seal

Date: \_\_\_\_\_

**Online**

**registration:**

[https://docs.google.com/forms/d/e/1FAIpQLSeZpLFZNH0gmjQgSAI\\_sNKEtxEMKSmbAuBH6iEY4hVfG9TV8A/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSeZpLFZNH0gmjQgSAI_sNKEtxEMKSmbAuBH6iEY4hVfG9TV8A/viewform?usp=sf_link)



## CHIEF PATRONS

Dr. T. R. Paarivendhar, Founder Chancellor, SRMIST

Dr. Ravi Pachamuthu, Pro Chancellor (Admin), SRMIST

Dr. P. Sathyanarayanan, Pro Chancellor (Academics), SRMIST

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, Dean (Sciences), SRMIST

Dr. B. Neppolian, Dean (Research), SRMIST

## CONVENOR

Dr. M. Arthanareeswari, Professor and Head, Department of Chemistry, SRMIST

## CO-CONVENOR

Dr. Goutam Kumar Kole, Res. Asst. Prof., SRMIST

Email: [goutamks@srmist.edu.in](mailto:goutamks@srmist.edu.in)

## COORDINATOR

Dr. Rabindra Nath Das, Asst. Prof., SRMIST

## RESOURCE PERSONS

Dr. Goutam Kumar Kole, Res. Asst. Prof., SRMIST

Dr. Palash Sanphui, Res. Asst. Prof., SRMIST

Dr. Tanay Kundu, Asst. Prof., SRMIST

Dr. Soumyajit Ghosh, Res. Assoc. Prof., SRMIST



**SRM**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
Deemed to be University u/s 3 of UGC Act, 1956

# Crystal Engineering – where Industry and Academia Meet

28<sup>th</sup> October 2022



**Organized by**

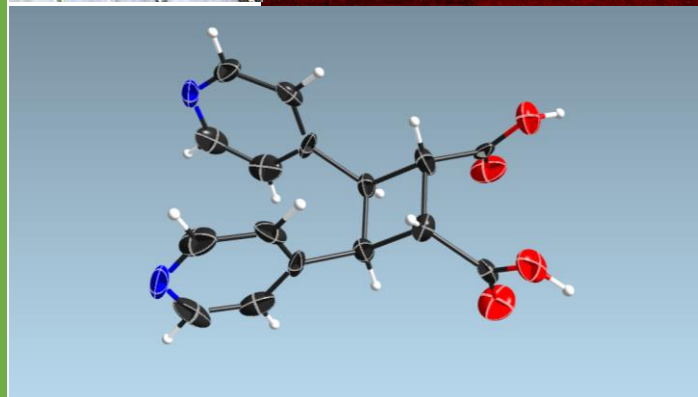
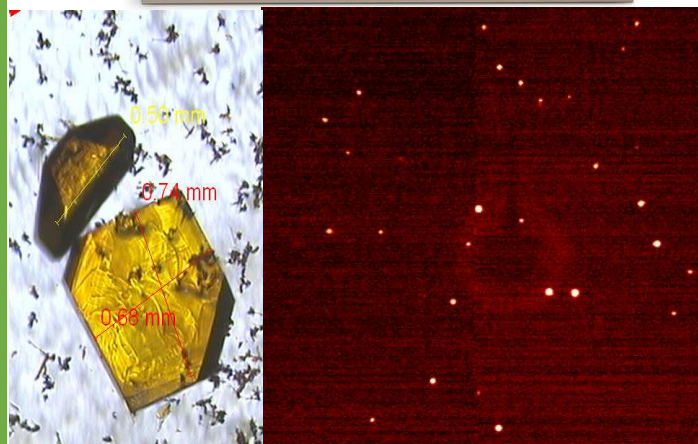
DEPARTMENT OF CHEMISTRY  
**SRM** Institute of Science and Technology  
Kattankulathur – 603203, Tamil Nadu.

## ABOUT THE INSTITUTION

SRM Institute of Science and Technology is one of the top ranking universities in India with over 50,000 students and 3,200 faculty members, offering a wide range of undergraduate, postgraduate and doctoral programs in Science, Engineering, Management, Medicine, Health sciences, Agricultural 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 A'. SRMIST is accredited by NAAC with A++ grade in 2018.

## ABOUT THE DEPARTMENT

Department of Chemistry, SRMIST, 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 4 year B.S. (Chemistry), B.Sc. (Chemistry), M.Sc. (Chemistry), M.Sc. (Organic Chemistry) and Ph.D. (Chemistry) programs. It has 56 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 WORKSHOP

In this workshop expert persons will demonstrate the importance of single crystal X-ray crystallography (SCXRD) in materials characterization, and will explain how to solve, refine, and finalize a crystal structure. In addition, current thrust areas of research in the field of Crystal Engineering with industrial importance will be discussed by the experts. Post graduate students, and PhD scholars utilizing SCXRD in their research, will highly be benefitted by participating in this one-day workshop, which is free of any charge.

## DATE AND TIME

- 28 October 2022
- 10 am to 4 pm.
- **Last Date of Registration**
- 22 October 2022
- **There is no registration fees.**
- The workshop is open to the registered participants only.
- The cost for travel, accommodation (if needed), and food should be borne by the participants.

## ADDRESS FOR COMMUNICATION

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

## PARTICIPATION CERTIFICATES

- Certificates would be issued to the registered participants only.



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

## Report

# A One-day Workshop on Crystal Engineering – Where Industry and Academia Meet (28 October, 2022)

Venue: Chola Lecture Hall, Architecture Building (ground floor), SRMIST Annexe Campus



Figure 1: The banner of the program.

### Registration form

Name of the Institute / University: \_\_\_\_\_

Address: \_\_\_\_\_

Name of the Student: \_\_\_\_\_

Course of study: \_\_\_\_\_

Contact details: \_\_\_\_\_

Sir/madam

The undersigned is pleased to nominate the above mentioned student to participate in the workshop "Crystal Engineering – where Industry and Academia Meet" organized by Department of Chemistry, SRMIST.

Signature of the HoD or research supervisor with seal

Date: \_\_\_\_\_

### Online

#### registration:

[https://docs.google.com/forms/d/e/1FAIpQLSeZpLFZNH0gmjQgSAI\\_sNKEtxEMKSmbAuBH6iEY4hVfG9TV8A/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSeZpLFZNH0gmjQgSAI_sNKEtxEMKSmbAuBH6iEY4hVfG9TV8A/viewform?usp=sf_link)



### CHIEF PATRONS

Dr. T. R. Paarivendhar, Founder Chancellor, SRMIST  
Dr. Ravi Pachamuthu, Pro Chancellor (Admin), SRMIST  
Dr. P. Sathyanarayanan, Pro Chancellor (Academics), SRMIST  
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, Dean (Sciences), SRMIST  
Dr. B. Neppolian, Dean (Research), SRMIST

### CONVENOR

Dr. M. Arthanareeswari, Professor and Head, Department of Chemistry, SRMIST

### CO-CONVENOR

Dr. Goutam Kumar Kole, Res. Asst. Prof., SRMIST  
Email: [goutamks@srmist.edu.in](mailto:goutamks@srmist.edu.in)

### COORDINATOR

Dr. Rabindra Nath Das, Asst. Prof., SRMIST

### RESOURCE PERSONS

Dr. Goutam Kumar Kole, Res. Asst. Prof., SRMIST  
Dr. Palash Sanphui, Res. Asst. Prof., SRMIST  
Dr. Tanay Kundu, Asst. Prof., SRMIST  
Dr. Soumyajit Ghosh, Res. Assoc. Prof., SRMIST



## Crystal Engineering – where Industry and Academia Meet

28<sup>th</sup> October 2022



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

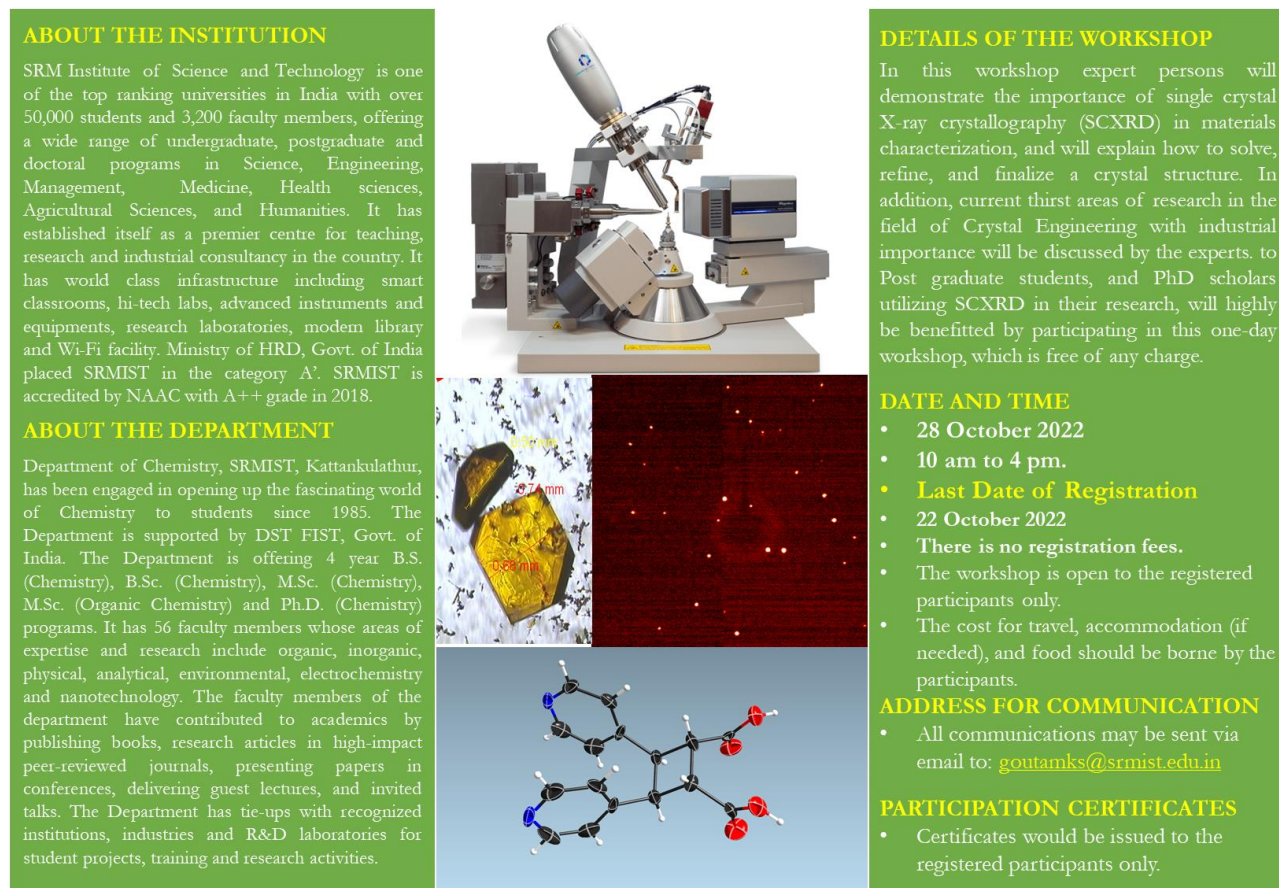


Figure 2: The brochure of the programme, which was circulated for inviting various institutions.

## Programme Schedule

09:00 – 09:30 am	Registration
09:30 – 09:35 am	Inaugural address by HoD, Chemistry, SRMIST
09:35 – 10:00 am	<b>"Crystallography and Crystal Engineering"</b> Dr. Goutam Kumar Kole, Res. Asst. Prof., Chemistry, SRMIST
10:00 – 11:00 am	<b>"Demonstration on Structure Solving and Refinement – Organic Compound"</b> Dr. Goutam Kumar Kole, Res. Asst. Prof., Chemistry, SRMIST
11:00 – 11:15 am	Tea Break
11:15 – 12:00 noon	<b>"Demonstration on Structure Solving and Refinement – Metal-Organic Framework Compound"</b> Dr. Tanay Kundu, Asst. Prof., Chemistry, SRMIST
12:00 – 12:45 pm	<b>"Metal-Organic Frameworks; from Storage to Mobility Solutions"</b> Dr. Tanay Kundu, Asst. Prof., Chemistry, SRMIST
12:45 – 13:45 pm	Lunch Break
13:45 – 14:30 pm	<b>"Finalising Crystallographic Data, Parameters, and Databases"</b> Dr. Palash Sanphui, Res. Asst. Prof., Chemistry, SRMIST

14:30 – 15:00 pm	<b>"Relevance of Pharmaceutical Solids: From Crystal Structure to Properties"</b> Dr. Palash Sanphui, Res. Asst. Prof., Chemistry, SRMIST
15:00 -15:15 pm	Tea Break
15:15 – 16:00 pm	<b>“Recent Trends in Dynamic Molecular Crystals: A Crystal Engineering Approach”</b> Dr. Soumyajit Ghosh, Res. Assoc. Prof., Chemistry, SRMIST
16:00 – 16:30 pm	Valedictory Notes and distribution of Certificates
16.30 pm	End of the programme

---

The first version of one-day workshop ‘Crystal Engineering – Where Industry and Academia Meet’ was organized by Department of Chemistry, SRMIST, Kattankulathur on 28<sup>th</sup> October, Friday, 2022. The programme was open for PG students, and PhD scholars on National level. About 120 participants registered from 18 different institutes. 54 participants are from Department of Chemistry, and Physics and Nano-Tehcnology, SRMIST participated in the programme. The programme was conducted at the Chola Lecture Hall, Architechture building, SRMIST. The pupose of the workshop was to educate the young researchers about the importnace of Crystallography in materials characterizations, which is one of the key techniques both in the academia and industry. Live demonstrations on solving crystal structures or organic compounds, and metal organic compounds were presented with ‘tits and bits’ of technical information involved. There was no regstration fees and all the resource persons were from the Department of Chemistry, SRMIST.

In the morning, registration started at 9:00 am. The programme was opened by the Head, Chemistry with a brief address to the participants. The first session was taken by Dr. Goutam Kumar Kole, Res. Asst. Prof. covering two topics. In the theoretical lecture **Crystallography and Crystal Engineering**, the basics were covered, followed by a live demonstration on **Structure Solving and Refinement – Organic Compound** was presented by him. In the second session, live demonstration on **Structure Solving and Refinement – Metal-Organic Framework Compound** was presented by Dr. Tanay Kundu, Assist. Prof., followed by a seminar presentation was delivered on **Metal-Organic Frameworks; from Storage to Mobility Solutions**. The third session was taken over by Dr. Palash Sanphui, Res. Asst. Prof., after lunch break. He demonstrated on **Finalising Crystallographic Data, Parameters, and Databases**, followed by a seminar presentation on **Relevance of Pharmaceutical Solids: From Crystal Structure to Properties**. In the last session

Dr. Soumyajit Ghosh, Res. Assoc. Prof., presented on **Recent Trends in Dynamic Molecular Crystals: A Crystal Engineering Approach**.

At the end of the technical sessions., **Prof. B. Neppolian**, Dean (Research), graced the occasion of valedictory and prize distribution function at 4 pm. He also addressed the audience and enlightened them about the importance of crystals in scientific research. All the participants were given a '*participation certificate*'. The programme ended at 4:30 pm. Some glimpses of various events of the programme and representative copies of the certificates are provided herewith for reference.

The programme was well-received by the participants, and faculty members. We feel that the programme was a great success! We also plan such programme in the future.

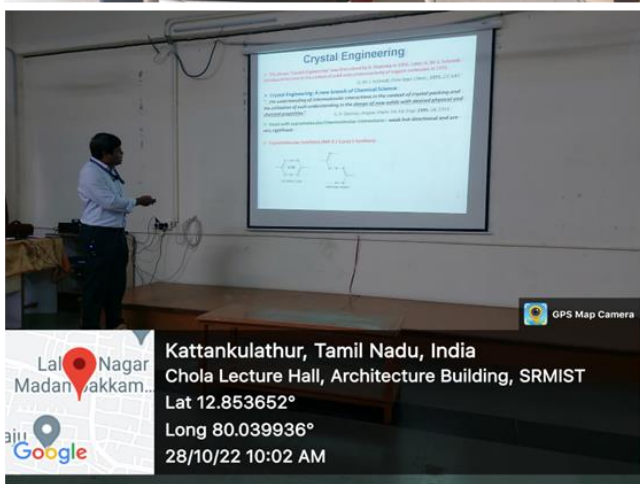
Prof. M. Arthanareeswari,

**Head and Convener**

**Co-convener**

Dr. Goutam Kumar Kole, Res. Asst. Prof.







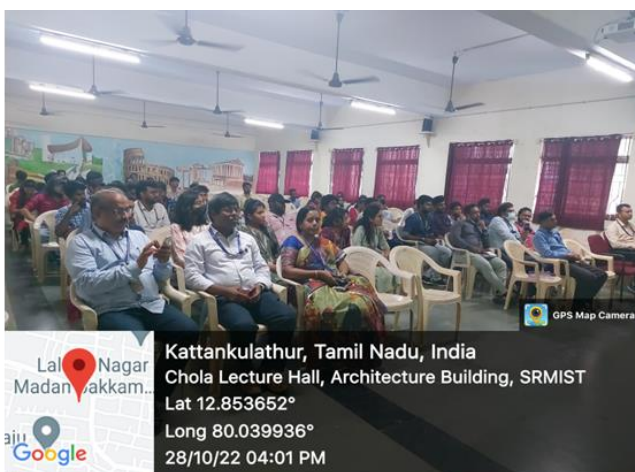


Figure: Some glimpses of various events the whole programme.





DEPARTMENT OF CHEMISTRY  
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY  
Kattankulathur - 603203, Tamil Nadu.

One-day Workshop on  
**Crystal Engineering – where Industry and Academia Meet**

*Certificate of Participation*

This is to certify that Mr. / Ms. / Dr. **Shyamvarnan B** of SRM Institute of Science and Technology has participated in one-day workshop on Crystal Engineering - Where Industry and Academia Meet” organized by Department of Chemistry, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India, on 28th October 2022.

**Dr. M. Arthanareeswari**  
(Convener & Head)  
Department of Chemistry, SRMIST

**Dr. D. John Thiruvadigal**  
(Dean Sciences)  
SRMIST



DEPARTMENT OF CHEMISTRY  
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY  
Kattankulathur - 603203, Tamil Nadu.

One-day Workshop on  
**Crystal Engineering – where Industry and Academia Meet**

*Certificate of Participation*

This is to certify that Mr. / Ms. / Dr. **Balamurali R** of Jiangsu University has participated in one-day workshop on Crystal Engineering - Where Industry and Academia Meet” organized by Department of Chemistry, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India, on 28th October 2022.

**Dr. M. Arthanareeswari**  
(Convener & Head)  
Department of Chemistry, SRMIST

**Dr. D. John Thiruvadigal**  
(Dean Sciences)  
SRMIST

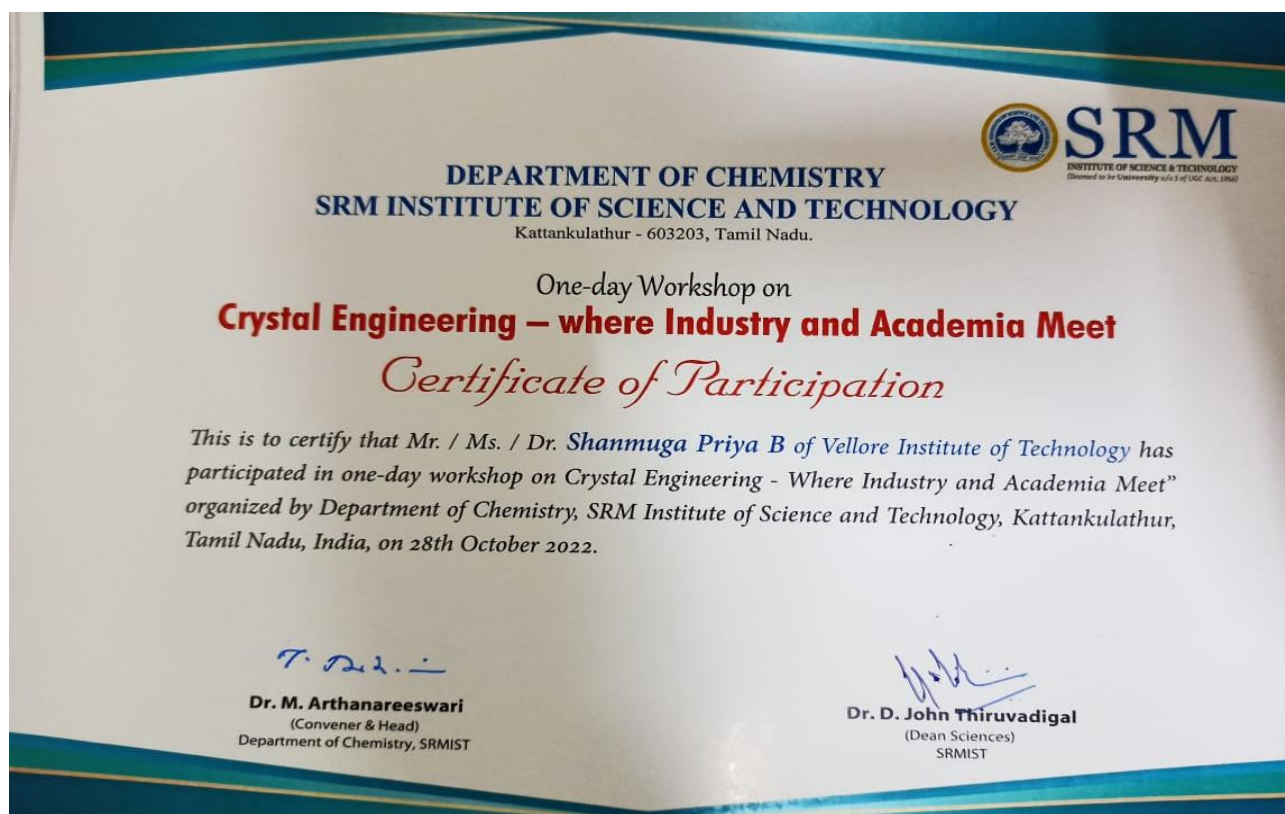


Figure: Some representative copies of the ‘participation certificate’.