

## REFERENCES:

1. A.K. De : Environmental Chemistry, (Wiley Eastern).
2. S.K. Banerji : Environmental Chemistry, ( Prentice Hall India), 1993.
3. Sawyer and McCarty, Chemistry for Environmental Engineering (McGraw Hill) 1978.
4. An Introduction to metallic corrosion and its prevention-Raj Narayan (Oxford-IBH, New Delhi), 1983.
5. Chemical & Electrochemical Energy Systems, R. Narayan & B. Viswanathan (University Press), 1998.
6. Industrial Electrochemistry, D. Peltcher & F. C. Walsh (Chapman & Hall) 1990.
7. F.W. Billmeyer, Text book of Polymer science, 3rd Edn, A Wiley- Interscience Publication, New York, 2005
8. V.R. Gowariker, Polymer Science, New Age International (P) Ltd., New Delhi, 2012
9. R.W. Dyson, Specialty Polymers, Chapman and Hall, New York, 1987
10. J.R. Fried, Polymer Science and Technology, Prentice Hall of India Pvt. Ltd., New Delhi, 1999
11. P. Ghosh, Polymer Science and Technology, Tata - McGraw Hill, New Delhi, 1995

## CH P 457: INORGANIC CHEMISTRY PRACTICALS-II

### COURSE OUTCOME:

- The students will have hands on experience in the qualitative analysis of mixtures of Inorganic Salts containing 3 cations in which 1 less common metal ion and 2 anions.
- Students will learn the systematic methods of separation techniques.
- Apart from inorganic radicals they also learn the separation organic radicals.

Qualitative Analysis of mixtures of Inorganic Salts containing 3 cations and 2 anions (1 less common metal ions like Tl, W, Mo, V, Zr, Th, U, Ce, Ti and Li to be included among anions organic acid radicals, phosphate, borate and fluoride separation included).

### REFERENCES:

1. Vogel's Text Book of Quantitative Chemical Analysis (5<sup>th</sup> Ed), G. H. Jeffrey, J. Bassette, J. Mendham and R. C. Denny, Longman, 1999
2. Vogel's Qualitative Inorganic Analysis (7<sup>th</sup> Ed), G. Svehla, Longman (2001).

## CH P 458 : ORGANIC CHEMISTRY PRACTICALS-II

### COURSE OUTCOME:

- Student will gain the in-depth knowledge and skill in organic separations,
- purifications, qualitative analyses.
- Separation of binary mixtures of organic compounds containing both mono and bifunctional groups
- Students will learn preparation of suitable derivatives.

Separation and systematic qualitative analysis of binary mixtures of organic compounds containing both mono and bifunctional groups and preparation of suitable derivatives.

# Mangalore University

Mangalagangothri - 574 199



Department of Studies in Chemistry

Organises

International Webinar

on

Frontier Research in Chemical Sciences 2020

September 10 – 12, 2020



• Free Registration. • e – certificates to participants

Online

Click to Register

Scan

Platform

<https://forms.gle/3QaVQ4JeFbAmHfJx9>

QR code



## Resource Persons

Alumnae of the Department



Dr. Sahana Mallya  
SRI International, USA



Dr. Rashmi Nayak  
NCL Pune, India



Dr. Shridevi S. Bhat  
New York, USA



Dr. Anitha Alanthadka  
IIT Roorkey, India



Dr. A. S. Amrutha  
RIES, Hokkaido University, Japan



Dr. Sahana Roessler  
Max-Planck Institute, Germany

## Patron

Prof. P. S. Yadapadithaya, Hon'ble Vice Chancellor

Prof. B. Vishalakshi  
*Coordinator*

Prof. G. K. Nagaraja  
*Chairman*

Sri K. Raju Mogaveera (KAS)  
*Registrar*

## Organizing Committee

Prof. Balakrishna Kalluraya

Prof. B. Narayana

Prof. Boja Poojary

Prof. Jagadeesh Prasad D.

Dr. M. R. Maddani



**Mangalore University**  
**Department of Studies in Chemistry**  
**Mangalagangothri - 574 199**



*International Webinar*  
on

**Frontier Research in Chemical Sciences 2020**

September 10 – 12, 2020

**Program Schedule**

**Thursday, 10-09-2020**

- 10.00am-10.30am Inauguration
- 10.30am-11.30am **Lecture 1: Dr. Sahana Mallya, SRI International, USA**  
Title SynJet™ – An automated chemistry platform for high throughput reaction screening and optimization
- 11.45am-12.45pm **Lecture 2: Dr. Rashmi Nayak, NCL Pune, India**  
Title Luminescent molecular liquids for large area lighting applications

**Friday, 11-09-2020**

- 10.30am-11.30am **Lecture 3: Dr. Shridevi S. Bhat, New York, USA**  
Title How nanotechnology can change the world?
- 11.45am-12.45pm **Lecture 4: Dr. Anitha Alanthadka, IIT Roorkee, India**  
Title Sustainable catalytic methodologies towards the synthesis of N-heterocyclic compounds

**Saturday, 12-09-2020**

- 10.00am-11.00am **Lecture 5: Dr. A. S. Amrutha, RIES, Hokkaido University, Japan**  
Title Targeted activation of motor protein – driven molecular transportation by visible light
- 11.15am-12.15pm **Lecture 6: Dr. Sahana Roessler, Max-Planck Institute, Germany**  
Title Spin-orbit entangled states in 4d and 5d transition element compounds
- 12.30pm-01.00pm Valedictory





Mangalore University

Department of Studies in Chemistry

International Webinar on  
Frontier Research in Chemical Sciences (FRCS 2020)



Mangalore University  
Mangalagangothri - 574 199

Department of Studies in Chemistry  
Organises  
International Webinar  
on  
Frontier Research in Chemical Sciences 2020  
September 10 - 12, 2020

Free Registration. \* e - certificates to participants  
Online Click to Register  
Platform <https://forms.gle/3QaVQ4JeFbAmHfx9> Scan QR code


Resource Persons  
Alumnae of the Department

 Dr. Sahana Mallya SRI International, USA	 Dr. Rashmi Nayak NCL Pune, India	 Dr. Shridevi S. Bhat New York, USA
 Dr. Anitha Alanthadka IIT Roorkee, India	 Dr. A. S. Amrutha RIES, Hokkaido University, Japan	 Dr. Sahana Roessler Max-Planck Institute, Germany


Patron  
Prof. P. S. Yadapadithaya, Hon'ble Vice Chancellor

Prof. B. Vishalakshi Coordinator	Prof. G. K. Nagaraja Chairman	Sri K. Raju Mogaveera (KAS) Registrar
-------------------------------------	----------------------------------	--

Organizing Committee  
Prof. Balakrishna Kalluraya Prof. B. Narayana Prof. Boja Poojary  
Prof. Jagadeesh Prasad D. Dr. M. R. Maddani



Mangalore University  
Department of Studies in Chemistry  
Mangalagangothri - 574 199



International Webinar  
on  
Frontier Research in Chemical Sciences 2020  
September 10 - 12, 2020

Program Schedule  
Thursday, 10-09-2020


10.00am-10.30am	Inauguration
10.30am-11.30am	Lecture 1: Dr. Sahana Mallya, SRI International, USA Title: SynJet™ - An automated chemistry platform for high throughput reaction screening and optimization
11.45am-12.45pm	Lecture 2: Dr. Rashmi Nayak, NCL Pune, India Title: Luminescent molecular liquids for large area lighting applications

Friday, 11-09-2020

10.30am-11.30am	Lecture 3: Dr. Shridevi S. Bhat, New York, USA Title: How nanotechnology can change the world?
11.45am-12.45pm	Lecture 4: Dr. Anitha Alanthadka, IIT Roorkee, India Title: Sustainable catalytic methodologies towards the synthesis of N-heterocyclic compounds

Saturday, 12-09-2020

10.00am-11.00am	Lecture 5: Dr. A. S. Amrutha, RIES, Hokkaido University, Japan Title: Targeted activation of motor protein - driven molecular transportation by visible light
11.15am-12.15pm	Lecture 6: Dr. Sahana Roessler, Max-Planck Institute, Germany Title: Spin-orbit entangled states in 4d and 5d transition element compounds
12.30pm-01.00pm	Valedictory



Department of Studies in Chemistry, Mangalore University organised an international webinar on Frontier Research in Chemical Sciences (FRCS 2020) during September 10 - 12 2020.

This webinar was very special as all the invited resource persons are Alumnae of the Department of Chemistry, Mangalore University who are actively involved in research in India and abroad. Inauguration of the webinar was done on September 10 2020. Prof. P. S. Yadapadithaya presided over the Inauguration function. After the Inauguration, Dr. Sahana Mallya, SRI International, USA delivered the first lecture on 'SynJet™ - An automated chemistry platform for high throughput reaction screening and optimization. The 2<sup>nd</sup> lecture of the Day 1 was delivered by Dr. Rashmi Nayak, NCL Pune, India on 'Luminescent molecular liquids for large area lighting applications.

On the Day 2, Dr. Shridevi S. Bhat, New York, USA delivered the first lecture on 'How nanotechnology can change the world?' Subsequently, Dr. Anitha Alanthadka, IIT Roorkee, India presented the 2<sup>nd</sup> lecture on the topic 'Sustainable catalytic methodologies towards the synthesis of N-heterocyclic compounds' On the Day 3, Dr. A. S. Amrutha, RIES, Hokkaido University, Japan delivered the lecture on 'Targeted activation of motor protein - driven molecular transportation by visible light'. The last lecture of the webinar was presented by Dr.

Sahana Roessler, Max-Planck Institute, Germany on the topic ‘Spin-orbit entangled states in 4d and 5d transition element compounds’.

Faculties of various institutions, MSc students, Guest faculties and other invitees participated in the webinar. Overall around 250 participants benefited from this webinar. Almost all the participants appreciated the organising team for arranging such a wonderful webinar. Many of the participants actively interacted with all the resource persons. After all the lectures, valedictory function was conducted. Sri K. Raju Mogaveera, Registrar, Mangalore University presided over the valedictory function.

