

## REFERENCES:

1. A.I. Vogel : A Text book of Quantitative Inorganic Analysis, (ELBS), 1978.
2. APHA, AWWA and WPCF: Standard Method for the Examination of water and Waste Water (Washington DC),1989,
3. I. M. Kolthof and E.P. Sandell: Quantitative Chemical Analysis.McMillan,1980
4. I.Williams, Environmental Chemistry, Wiley, 2001
5. Lobinski and Marzenko, Comprehensive Analytical Chemistry, Vol.30, Elsevier,1996.

## CH P 508: ORGANIC CHEMISTRY PRACTICALS – III

### COURSE OUTCOME:

- Enable the students to understand and learn the principle of quantitative estimation of different types of organic molecules,
- Methods of organic preparations using multistep synthetic protocol,
- Isolation and purification of intermediate and final products,
- Use of computers in the study of conformation and geometry of some simple organic molecules.

**Quantitative Determination:** of sugars, amino acids, phenols, amines by various methods. Determinations of acid & ester and acid & amide in the given mixtures.

**Multi Step Organic Synthesis:** Synthesis of Ethyl resorcinol from Resorcinol,  $\epsilon$ -Caprolactam from cyclohexanone, p-Aminobenzoic acid from p-Nitrotoluidine, s-Tribromobenzene from aniline, Benzanilide from Benzophenone, Benzylic acid from Benzoin, 2,5-Dihydroxy acetophenone from Hydroquinone, 2,4-Dinitrophenylhydrazine from Chlorobenzene, m-Nitrobenzoic acid from Benzoic acid, 2,4-Dinitrophenol from Chlorobenzene, o-Aminobenzoic acid from Phthalic anhydride.

**Separation Techniques:** Separation of components from mixture of organic compounds by fractional crystallization, fractional distillation, adsorption, Paper and TLC. Their purification and characterization.

**Applications of computers** in the study of conformation and geometry of some simple organic molecules.

## REFERENCES:

1. Elementary Practical Organic Chemistry-Vol. III quantitative Organic Analysis- A.I. Vogel
2. Experimental Organic Chemistry- Vol. I &II- P.R.Singh, Tata McGraw-Hill, 1981.
3. Practical Organic Chemistry- IV Ed- Dey &.Sitaraman (Allied)
4. Laboratory Experiments in Organic Chemistry-Adam, Johnson &Wicon(McMillan, London), 1979.
5. Experimental Organic Chemistry- H.D.Durst & G.E.Goke (McGraw-Hill)1980.
6. Computers and their applications to Chemistry, Ramesh Kumari (Narosa).
7. Short Manual to the Chemical Drawing Program-ChemDraw®- Stefan Bienz (CambridgeSoft).



Mangalore University  
Mangalagangothri - 574 199



Department of Studies in Chemistry  
Organises  
International Webinar



on  
Recent Advances in Organic Synthetic Methods (RAOSM 2021)  
August 27 & 28, 2021

Chief Guests

Resource Persons



Chief Guest-Inauguration  
Dr. B. Ravichandran  
ROHC, ICMR, Bengaluru



Chief Guest-Valedictory  
Dr. Shridhara K.  
ArkGen Pharma Pvt. Ltd., Bengaluru



Prof. I. N. N. Namboothiri  
IIT Bombay, India



Prof. S. K. Awasthi  
University of Delhi, India



Prof. Bhisma K. Patel  
IIT Guwahati, India



Prof. A. S. Achal Kumar  
IIT Guwahati, India



Prof. Nonappa  
Temper University, Finland



Prof. Akshai Kumar  
IIT Guwahati, India

Patron

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

Prof. Boja Poojary  
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Prof. Jagadeesh Prasad D.  
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Prof. Kishore Kumar C. K.  
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**Mangalore University**  
**Department of Studies in Chemistry**  
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*International Webinar*  
on  
**Recent Advances in Organic Synthetic Methods (RAOSM 2021)**  
August 27 & 28, 2021

**Program Schedule**

**Friday, 27-08-2021**

- 10.00am-11.00am Inauguration
- 11.15am-12.15pm **Lecture 1: Prof. Irishi N. N. Namboothiri, IIT Bombay, India**  
*Role of Bestmann-Ohira Reagent and its Sulfone and Ester Analogues as Michael Donors and 1,3-Dipolar Precursors*
- 02.00pm-03.00pm **Lecture 2: Prof. Bhisma K. Patel, IIT Guwahati, India**  
*Intermolecular Amination of Remote and Proximal Unactivated C<sub>sp<sup>3</sup></sub>-H Bonds Through Intrinsic Substrate Reactivity – Expanding towards a Traceless Directing Group Approach*
- 03.15pm-04.15pm **Lecture 3: Prof. Nonappa, Tempere University, Finland**  
*Plant Triterpenoid-Based Building Blocks for Functional Organic Nanomaterials*

**Saturday, 28-08-2021**

- 10.00am-11.00am **Lecture 4: Prof. S. K. Awasthi, University of Delhi, India**  
*Design, Synthesis and Antimalarial Activity of Tetraoxane Analogs*
- 11.15am-12.15pm **Lecture 5: Prof. A. S. Achal Kumar, IIT Guwahati, India**  
*Self-assembled Nanostructured Organic Semiconductors*
- 02.00pm-03.00pm **Lecture 6: Prof. Akshai Kumar A. S., IIT Guwahati, India**  
*Poly-Fluorinated Poly-Aromatic Hydrocarbons and Their Versatile Applications*
- 03.15pm-04.15pm Valedictory





**Department of Studies in Chemistry**

**International Webinar on  
Recent Advances in Organic Synthetic Methods (RAOSM 2021)**



The image displays two promotional posters for the RAOSM 2021 webinar. The left poster lists the event details, including the dates (August 27 & 28, 2021), and features a grid of 12 resource persons with their names and affiliations. The right poster provides a detailed program schedule for both days, listing the time slots and topics for each lecture, along with the names of the lecturers and their institutions.

Department of Studies in Chemistry, Mangalore University organised an international webinar on Recent Advances in Organic Synthetic Methods (RAOSM 2021) during August 27<sup>th</sup> - 28<sup>th</sup> 2021.

Eminent Professors from various institutions across India and abroad were invited as resource speakers to deliver the lectures. Dr. B. Ravichandran, ROHC, ICMR Bengaluru was our guest of honor for the inauguration function. Prof. P. S. Yadapadithaya presided over the Inauguration function on 27<sup>th</sup> August 2021. After the Inauguration, Prof. Irishi N. N. Namboothiri, IIT Bombay delivered the first lecture on 'Role of Bestmann-Ohira Reagent and its Sulfone and Ester Analogues as Michael Donors and 1,3-Dipolar Precursors'. The 2<sup>nd</sup> lecture of the Day 1 was delivered by Prof. Bhisma K. Patel, IIT Guwahati on 'Intermolecular Amination of Remote and Proximal Unactivated Csp<sup>3</sup>-H Bonds Through Intrinsic Substrate Reactivity – Expanding towards a Traceless Directing Group Approach'. Prof. Nonappa, Tempere University, Finland gave last lecture of Day 1 on Plant Triterpenoid-Based Building Blocks for Functional Organic Nanomaterials.

On Day 2, Prof. S. K. Awasthi, University of Delhi, presented the 1<sup>st</sup> lecture on 'Design, Synthesis and Antimalarial Activity of Tetraoxane Analogs'. Similarly, Prof. A. S. Achal Kumar, IIT Guwahati, delivered the 2<sup>nd</sup> lecture on Self-assembled Nanostructured Organic Semiconductors. The last lecture of the webinar was presented by Prof. Akshai Kumar A. S., IIT Guwahati, on Poly-Fluorinated Poly-Aromatic Hydrocarbons and Their Versatile Applications'.

Faculties of various institutions, MSc students, Guest faculties and other invitees participated in the webinar. Overall around 250 participants benefited from this webinar

on various organic synthetic methods. Resource persons spoke on their recent research works related to advanced organic synthetic methods for the synthesis of biologically and medicinally important molecules. Many of the participants interacted with resource persons after their presentations. After all the lectures, valedictory function was conducted. Prof. Kishore Kumar C. K. Registrar, Mangalore University presided over this valedictory function. Dr. Sridhara K., ArkGen Pharma Pvt. Ltd., Bengaluru was our guest of honor.

