### CH P 408: ORGANIC CHEMISTRY PRACTICALS – I

### **COURSE OUTCOME:**

- Enlighten the students to understand the method of organic preparation by utilizing various kinds of organic reactions,
- To understand isolation and purification of products.
- To understand oxidation reactions
- To learn substitution reaction.

### Single and two stage organic preparations

1. Electrophilic substitution reactions–Preparations of p-bromoaniline, p-nitroaniline, 2,4,6-tribromophenol and picric acid.

2. Alkylations–Preparation of nerolin and N-methyl anthranilic acid.

3. Acetylations–Preparations of I-D-glucose penta-acetate and 2-naphthyl acetate.

4. Reactions with ring formation–Preparations of 1,2,3,4–tetrahydrocarbazole, 1-

phenyl-3-methyl-5-pyrazolone and 7– hydroxy-4-methyl-coumarin.

- 5. Diazotisation reactions–Preparations of iodo, chloro and azo compounds.
- 6. Dehydration reactions–Preparations of cyclohexene and succinic anhydride

7. Condensation reactions–Condensations involving diethylmalonate and ethyl

aetoacetate. Claisen-Schmidt, Aldol and Perkin condensation reactions.

8. Halogenation reactions-Preparation of n-butylbromide &□, □-dibromocinnamic acid.

9. Reduction reactions–Reductions of nitro compounds and carbonyl compounds.

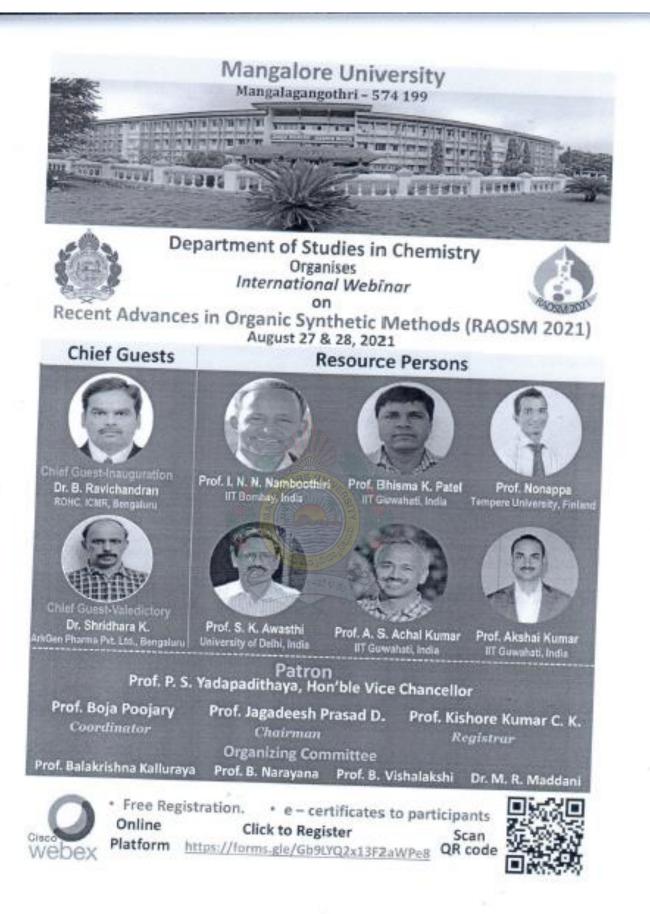
10. Oxidation reactions-Preparation of p-nitrobenzoic acid, p-benzoquinone and adipic acid.

### **REFERENCES:**

- 1. Laboratory Manual in Organic Chemistry-R. K. Bansal (New Age, New Delhi)1990.
- 2. Experimental Organic Chemistry-Vol. I & II-P. R. Singh et al (TMH New Delhi)1981
- 3. Laboratory Manual in Organic Chemistry–Dey & Sitaraman(Allied, New Delhi)1992.
- 4. Vogel's Text Book of Practical Organic Chemistry including Qualitative

Organic Analysis - B. S. Furniss et al., (Longman - ELBS, London), 1989.

- 5. Manual of Organic Chemistry Dey and Seetharaman.
- 6. A Text Book of Practical Organic Chemistry A.I. Vogel, Vol.III.
- 8. Practical Organic Chemistry Mann & Saunders.



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



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</sub> <sup>1</sup> –H Bands 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)



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.

