



Department of Chemistry
jointly with Department of Physics and IQAC
organizes
National level webinar
on
TIPS & TRICKS for CSIR-NET
CHEMICAL SCIENCE EXAMINATIONS

Date	Time	Platform
19.2.2021	10.00 am - 5.00 pm	through zoom

Inauguration

Welcome Address

MS. S.KIRUTHIGA

Student - III - B.Sc Chemistry

Introduction about speakers

MR. S. MAHESHWARAN

Student - II B.Sc Chemistry

Valediction

Vote of Thanks

MS. S.SNEHA

Student - II B.Sc Chemistry

All are cordially invited



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Dept. of **CHEMISTRY**
organizes National level webinar on
TIPS & TRICKS for CSIR-NET
CHEMICAL SCIENCE EXAMINATION

Date | **Time**
19.02.2021 | 10.00AM - 5.00PM through
ZOOM

**SPECTROSCOPY AND THEIR
APPLICATIONS**



Dr. A. MURUGADOSS
Head of the Department,
Department of Inorganic Chemistry,
University of Madras, Chennai

**ORGANIC CHEMISTRY: NAMING
REACTIONS
AND REARRANGEMENTS**



Dr. S. CHANDRASEKAR
Research Investigator
Syngene International Limited,
Bengaluru

**INORGANIC CHEMISTRY
CO-ORDINATION CHEMISTRY**



Dr. A.S. GANESHRAJA
Assistant Professor
Department of Chemistry,
National College - Tiruchirappalli

**INTERDISCIPLINARY
AREA: NUCLEAR CHEMISTRY /
POLYMER CHEMISTRY**



Dr. K. RAJKUMAR
Guest Faculty
Department of Chemistry
School of Applied Science
Central University of Tamil Nadu

Registration link :
<https://forms.gle/Wogc3jP5NHT2ooNN6>



Meeting ID: 750 325 4844

Passcode: periyar

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Programme Schedule

Date : 19-02-2021

Time: 10.00 AM- 5.00 PM

Platform : ZOOM

INAUGURATION : 10.00 AM - 10.30 AM

SESSION 1 : ORGANIC CHEMISTRY: NAMING REACTIONS AND REARRANGEMENTS

TIME : 10.30 AM - 11.45 PM

SPEAKER : DR. S. CHANDRASEKAR,

Research Investigator
Syngene International Limited,
Bangaluru

SESSION 2 : INORGANIC CHEMISTRY: CO-ORDINATION CHEMISTRY

TIME : 11.45 AM - 1.00 PM

SPEAKER : DR. A.S. GANESHRAJA

Assistant Professor
Department of Chemistry,
National College, Tiruchirappalli

LUNCH : 1.00 PM - 1.45 PM

SESSION 3 : INTERDISCIPLINARY AREA: NUCLEAR CHEMISTRY / POLYMER CHEMISTRY

TIME : 1.45 PM - 3.00 PM

SPEAKER : DR. K. RAJKUMAR

Guest Faculty
Department of Chemistry
School of Applied Science
Central University of Tamil Nadu,
Thiruvarur.

SESSION 4 : SPECTROSCOPY AND THEIR APPLICATIONS"

TIME : 3.00 PM - 4.30 PM

SPEAKER : DR. A.MURUGADOSS

The Head
Department of Inorganic chemistry,
University of Madras, Chennai.

VALEDICTORY : 4.30 PM - 5.00 PM

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National Level webinar on tips and tricks for CSIR-NET Chemical science Examination - Report

The Department of Chemistry, Physics and IQAC jointly organized a “**National Level Webinar on tips and tricks for CSIR-NET Chemical Science Examination**” on 19.02.2021.

Ms. S. Kiruthiga from III B.Sc. Chemistry welcomed the participants. Mr. S. Maheshwaran, II B.Sc. Chemistry introduced the speakers academic & research achievements. Four resource people from various fields of Chemical Science have explored their subject knowledge in the four different sessions of the webinar series.

Dr. S. Chandrasekar, Research Investigator, Syngene International Limited, Bengaluru served as the resource person for the first session. He highlighted the important key ideas about the naming reactions and the reagents. Also, he explained the mechanism of the reactions.

The second session was handled by **Dr. A. S. Ganeshraja**, Assistant Professor, Department of Chemistry, National College, Tiruchirappalli. He explained various shortcuts to solve analytical types of problems in coordination chemistry and also gave a glimpse of important topics of coordination chemistry.

The third session was handled by **Dr. K. Rajkumar**, Guest faculty, Department of Chemistry, School of Applied Science, Central University of Tamil Nadu, Thiruvavur. He elaborated on the important concepts of nuclear chemistry and polymer chemistry and also solved various analytical types of problems in the interdisciplinary field.

The fourth session was engaged by **Dr. A. Murugadoss**, Head, Department of Inorganic Chemistry, University of Madras, Chennai. He discussed the various Spectroscopic techniques and its application. Also he solved some spectroscopic problems of previous CSIR question papers.

About 118 participants including Undergraduate, Postgraduate, Research scholars and faculty members of Chemistry & Physics of PMIST, also participants from various academic and research institutions have attended and benefited from the webinar. The participants have actively interacted with respective resource persons and rectified their doubts. Ms. S. Sneha, II B.Sc. Chemistry proposed vote of thanks at the end of the session.

The webinar was organized by **Dr. S. Gomathi**, Head, Department of Chemistry and **Dr. K. Kesavan**, Head, Department of Physics.

**Title of the Seminar Talk: “National Level
webinar on tips and tricks for CSIR-NET
Chemical science Examination”**

Photos of the Seminar Talk





Recording

In protic solvents:

- ❖ In protic solvents, the diazo compound abstracts a proton from the solvent and thus by forming a diazonium ion, which subsequently loses dinitrogen to give a carbenium ion. Finally, a mixture of E & Z alkenes is formed from the carbenium ion through loss of a proton.
- ❖ H_2O , CH_3OH , $\text{CH}_3\text{CH}_2\text{OH}$, CH_3COOH

S-H = solvent Diazonium ion Carbenium ion Mixture of E & Z alkenes

In aprotic solvents:

- ❖ In aprotic solvents, the diazo compound loses dinitrogen and gives a carbene, which undergoes a faster 1,2-hydrogen shift to furnish a Z-alkene predominantly.
- ❖ CH_2Cl_2 , THF

Carbene Z alkene

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Dr. Karthikeyan M

Sanjay