

School of Applied Sciences - Department of Chemistry

CIRCULAR

20-05-2020

Department of Chemistry, School of Applied Sciences, REVA University, Bangalore will be organizing webinar on Basics to advanced topics in one dimensional NMR Spectroscopy for IV Semester M.Sc. students on 23<sup>rd</sup> May 2020 in the classroom, Science block.



**REVA UNIVERSITY**  
Bengaluru, India  
Established as per the section 201 of the UGC Act, 1956  
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School of Applied Sciences, Department of Chemistry  
Organises  
Webinar on  
**"Basics to Advanced Topics in One Dimensional NMR Spectroscopy"**

**Organizer:**  
Dr. Madhusudana Reddy M B, Professor,  
(madhusudana@reva.edu.in; 94802 24757)

**Expert Speaker:**  
Dr. Rajesh Sonti, Assistant Professor, NIPER, Hyderabad  
9177273849 / +91-040-23074750 (Ext. No: 2013)  
Link: <http://www.niperhyd.ac.in/ProfileRajeshSonti.html>

Eligible attendees: M. Sc Chemistry, Biochemistry, Physics, Biotechnology and B. Sc (PCM) final year students, Chemistry faculty members and researchers.

Date : 23<sup>rd</sup> May, 2020  
Time : 10:30 A. M. to 12.00 P. M.      Registration: Free      [www.reva.edu.in](http://www.reva.edu.in)

**Report:**

Department of Chemistry, School of Applied Sciences, REVA University, Bangalore, organized Lecture on **Report of Webinar on "Basics to advanced topics in one dimensional NMR spectroscopy"** on 23<sup>rd</sup> MAY 2020 at 10.30 AM to 12 PM through Webinar video Meetings.

**Resource Person:**

Dr. Rajesh Sonti  
Assistant Professor  
Department of pharmaceutical analysis  
NIPER, Hyderabad

Dr. Rajesh Sonti is a notorious scientist and Assistant Professor, Department of pharmaceutical analysis and he is supporting Dept. of Chemistry, REVA University, Bangalore. This lecture is useful for MSc students especially MSc 4<sup>th</sup> Semester students. Dr. Rajesh Sonti delivered a scientific Lecture on Basics to advanced topics in one dimensional NMR spectroscopy through Webinar meetings. The talk includes.

- Basics and terms used in NMR spectroscopy.
- Explained Nuclear spins in magnetic field.
- Properties of NMR active nuclei
- Briefed on Boltzmann distribution, CW NMR, pulsed FT NMR and FID NMR
- Illustrated about signal or noise for different scans.
- Meaning of Chemical shift and solving the problems on proton shift. Spectra from different machines won't change the chemical shift and coupling constant.
- Coupling and coupling constant with different examples
- Discussed n+1 rule, Pascal's triangle for 2,3 and 4 bond coupling, multiplicity of signal and Karplus curve for dihedral angle.
- Regions of H1 and C13 NMR spectroscopy by taking example like Caffeine
- Introduction, definition Solvent effect and impact of solvents on various compounds in NMR spectroscopy
- Examples to solve structure of organic compounds.
- NOE, Perturbation is by saturation or inverting spins.
- 1-D sel-NOE through space transfer and H1 sel-Tocsy

Finally, Reciter simplified all the questions raised by students and faculties.

The lecture was attended by all our MSc chemistry 2<sup>nd</sup> and 4<sup>th</sup> semester students, research scholars and faculties of Chemistry through Webinar meeting REVA University.

We would like to thank the guest speaker, **Dr. Rajesh Sonti** Department of pharmaceutical analysis NIPER, Hyderabad.

We would like to thank our Honorable Chancellor **Dr. P. Shyama Raju Sir** for providing all facility, support and encouragement to organize such events. We also thank our beloved Director, School of Applied Sciences **Dr. Beena G.** for encouragement towards academic activities of the school.

Thank you.

I thank Dr. M. S. Reddy Co-coordinator, School of Chemical Science for organizing the expert talk.

**List of students participated\_2020-21.**



SL. NO	SRN	NAME OF THE STUDENT
1	R19MCH01	ABITHA KUJALAMBAL V
2	R19MCH02	AMBIKA
3	R19MCH03	ARPITHA N N
4	R19MCH04	BINDUSHREE P
5	R19MCH05	C M NEDHA FARHATH
6	R19MCH06	EMILDA MANI
7	R19MCH07	GIRIJA H J
8	R19MCH08	HARSHITHA H D
9	R19MCH09	KANALA SRILEKHA
10	R19MCH10	MADHUKAR C V
11	R19MCH11	MALA SHIVAKUMAR
12	R19MCH12	MANASA N
13	R19MCH13	MANIRATNA SANJEEVKUMAR KULKARNI
14	R19MCH14	MEDOSALIE KEHIE
15	R19MCH15	MOASOSANG AIER
16	R19MCH16	MULLA SAMEER HUSSAIN
17	R19MCH17	NARLA RAMA MANOHAR REDDY
18	R19MCH18	PAGADALA HYNDAVI
19	R19MCH19	PEETLA ANJALI
20	R19MCH20	PITTU PRATHYUSHYA
21	R19MCH21	PREMSAGAR C S
22	R19MCH22	RAMYA YADAV N
23	R19MCH23	RAVIKUMAR BIRADAR

24	R19MCH24	RENAATI VISWANATHA REDDY
25	R19MCH25	RISHANI DEBBARMA
26	R19MCH26	SAHANA S
27	R19MCH27	SHAIK NAYAB RASOOL
28	R19MCH28	SHAWN SUNNY P THOMAS
29	R19MCH29	SHETH SHRENIK BHARATBHAI
30	R19MCH30	SHRISHAIL
31	R19MCH31	SINGH AISHWARYA
32	R19MCH32	SWARNA R
33	R19MCH33	V TEJASWANI
34	R19MCH34	VINOTHINI T
35	R19MCH35	YANUMALA MADHUMITHA
36	R19MCH36	ANJALI RATHI
37	R19MCH37	SACHIN M S
38	R19MCH38	SELAM HARIKRISHNA
39	R19MCH39	SURESH
40	R19MCH40	THEERTHAN KUMAR N
41	R19MCH41	VARSHA G
42	R19MCH42	RAGHAVENDRA R B
43	R19MCH43	RAGHU D E

Director/HOD Signature  
Director  
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