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# EXECUTIVE SUMMARY

<b>Name of the Course</b>	Refresher Course in Chemistry
<b>Venue</b>	The Hermitage, UGC-Human Resource Development Centre Kumaun University, Nainital.
<b>Date</b>	16 July to 04 August 2018
<b>Organizing Agency</b>	UGC-Human Resource Development Centre, Kumaun University, Nainital.
<b>Patron</b>	Hon'ble Vice-Chancellor, Prof. D.K. Nauriyal, Kumaun University, Nainital.
<b>Course Team</b>	
<b>Director</b>	Prof. B.L. Sah, Director, UGC-Human Resource Development Centre, Kumaun University, Nainital
<b>Deputy Director</b>	Dr. Divya Upadhayay Joshi, Deputy Director, UGC-Human Resource Development Centre, Kumaun University, Nainital
<b>Assistant Director</b>	Dr. Reetesh Sah, Assistant Director, UGC-Human Resource Development Centre, Kumaun University, Nainital
<b>Officials</b>	Mr. I.S. Negi, Dr. Rajendra Singh Bora, Mr. Jasod Singh Bisht, Mr. Arvind Singh, Mr. Kailash, Mr. Rajendra
<b>No. of Participants attended</b>	<b>40</b>
<b>No. of Participants applied</b>	<b>51</b>
<p>Interactive Session, Breaking the Ice Science and Society, Fundamentals of Polymer Chemistry, Polymer Degradation and Polymer Characterization Techniques, Stereochemistry I.R. Spectroscopy, Challenges and opportunities in Nano-science and Technology, Nanotechnology and Introduction to Stereochemistry, Introduction to Stereochemistry, Design Principles used in Chemical Biology some Noteworthy examples (II) EPR, Metalloporphyrins in Biology: The Colors of Life EPR Spectroscopy Group Discussion, Facets of Life, Creativity &amp; Innovation, Palynology, Free Energy Relationships, Signal to Noise Ratio, Sensitivity, Detection Limits, Noises, FT Electronic Spectra Coordination Complexes, Microteaching, Magnetochemistry of Transition Metal Complexes, Time to Reimagine Indian Education System, Fifty Six Laws of Good Teaching, Role of Metals in Medicine and Cosmetics, Role of Metals in Medicine and Cosmetics, Metals in Cosmetics, Organic Spectroscopy: Structure Determination of Organic Compounds, C-SP2 and (C-SP3)n Functionalization by Photoredox Catalysis, Complex Natural Product Structure, Research Based Pedagogical Tools, Chemistry of Living System/ Chemical and Biological Aspect of Enzyme, Power Point Presentation, Organic Synthesis, Assignments</p>	

# Invitation Letter for Participants

Ref. No: UGC –HRDC/KU/PRO/RC-/18-19

Date: 11/07/2018

Dear Participant,

Your application for participation in **Refresher Course in Chemistry (SRC)** has been accepted. The course is scheduled from **16-07-2018** to **04-08-2018** at the UGC-Human Resource Development Centre, Kumaun University, Nainital.

Attendance in the inaugural session is compulsory so ensure that you report with your **relieving certificate** and copy of **12(b) or 2(f) certificate** at the UGC-Human Resource Development Centre, The Hermitage, Kumaun University, Mallital, Nainital at 10:00 am sharp on 16/07/2018 (Monday).

You will be informed of all details regarding the course on your arrival at Nainital. The weather of Nainital in July is pleasant and light woollens may be required sometimes. Brace yourself with an umbrella or raincoat compulsorily. (Other information overleaf)  
TA will be paid for travel by AC-III/ Deluxe Bus via shortest route between your place of work and Nainital. Please preserve copies/original of your travel tickets/receipts. Local conveyance charge will be paid as per University rules. D.A. not provided by the UGC.

Kindly note that UGC-HRDC, Kumaun University, Nainital will provide free accommodation to the participants. However catering is available at ` 230/- per day as per University rates. Participants need to deposit the advance amount on the 1<sup>st</sup> day.

You are required to confirm your participation and arrival date by telephone or e-mail at the earliest. **We have dormitory/room sharing type hostel facility and we provide it on a first confirmation first serve basis.** So please ensure your timely confirmation to avoid any inconvenience.

*No accommodation will be given to family members/companions of participants.*

We look forward to seeing you at the UGC-Human Resource Development Centre, Kumaun University, Nainital.

Sincerely,

*Bl Sah*

(Prof. B. L. Sah)

Director

To,

Dr. Shasti Ballabh Mishra

Assistant Professor

Department of Chemistry

M.B. Govt. P.G. College, Haldwani-263139 (Uttarakhand)

## General Information for Participants

The colonial town of Nainital situated in the Indian state of Uttarakhand is the headquarters of Nainital District in the outer Himalayas. Situated at an altitude of 1,938 meters (6,358 feet) above sea level, this town with its beautiful splendour is one of the most popular famous tourist places of the country. Nainital has moderate summers, maximum temperature 29 °C; minimum temperature 10 °C and extreme winters with minimum sub-zero temperatures. You should bring adequate clothing suitable for Nainital, a sweaters and a jacket are required to brave the cold in the morning or evening hours.

**MODES OF TRANSPORT** - Nainital is well connected with the rest of the country through different modes of transport.

**RAILWAYS** – Kathgodam, 35 Kms. away, is the nearest railway terminus of the broad gauge line of North East Railways connecting Nainital with Delhi, Dehradun & Howrah. Lalkuan, 60 Kms from Nainital, is connected to Bareilly, Mathura & Lucknow. Nainital is 35 Km. far from Kathgodam, the nearest railway station and 285 Km from New Delhi and 310 Km. from the state capital Dehradun.

You can take a Taxi or Buses from Kathgodam or Haldwani. Taxis are available on shared seat basis at Haldwani Taxi Stand & as well as at Kathgodam, Haldwani & Lalkuan railway stations.

A computerized Railway Reservation counter is situated near Bus Stand at Nainital. This facility is also available at Kathgodam, Haldwani & Lalkuan railway stations.

### **RAILWAY TIME TABLE**

*(Kindly confirm with current schedule of Indian Railways)*

Train Name	Train No.	From/Departure time	To /Arrival time	Train No	From/Departure time	To /Arrival time
Ranikhet Express	15014	Kathgodam/ 20:40	Delhi/ 04:00	15013	Delhi/ 22:40	Kathgodam/ 05:20
UTR Samprk K Ex.	15036	Kathgodam/ 08:50	Delhi/ 15:20	15035	Delhi/ 16:00	Kathgodam / 22:40
Bagh Express	13020	Kathgodam/ 21:55	Howarah/ 12:40	13019	Howarah/ 21:45	Kathgodam / 09:30
Nainital Express	15307	Lalkuan / 20:45	Lucknow/ 06:25	15308	Lucknow/ 20:45	Lalkuan / 06:10
KGMDN express	14119	Kathgodam/19:45	Dehradun/04:20	14120	Dehradun/ 22:50	Kathgodam/07:10

**BY BUS** - The U.K.S.R.T. Corporation (Uttarakhand Govt. Roadways) provides direct buses to Nainital from Delhi, Lucknow and major cities of the state. There are many private tour operators who provide good and luxurious coach buses to Nainital from New Delhi. Besides these, Harayana Roadways, Rajasthan Roadways & the DTC (Delhi Transport Corp.) also operate direct buses to Nainital. It takes around 8 hrs to reach Nainital from New Delhi. Nainital is connected to National Highway No. 87.

*There are branches and ATM's of almost all major banks in Nainital.*

***The use of plastic bags is banned in Nainital.***

# Schedule

UGC -Human Resource Development Centre, Kumaun, University Nainital  
 R C Chemistry (16July to 04August, 2018)  
 Theme: Chemistry with Industrial and Pharma link

DATE/DAY	SESSION	TOPIC	RESOURCE PERSON
16July 2018 Monday	09.45-11.15 am.	Registration /Introduction	
	11.30 -01.00 pm.	Inaugural Function	
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	Interactive Session with Participants/Fears & Expectations	HRDC Team
	03.00 -04.30 pm.	Breaking the Ice	
17 July 2018 Tuesday	09.45-11.15 am.	Science and Society	Prof. B.L. Sah
	11.30 -01.00 pm.	Science and Society	Prof. B.L. Sah
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	Fundamentals of Polymer Chemistry	Prof. Chapal Kr. Das, Professor Emeritus, Chemistry Department, IIT Kharagpur, Email:chapal12@yahoo.co.in Mob: +91-9434016996
	03.00 -04.30 pm.	Fundamentals of Polymer Chemistry	Prof. Chapal Kr. Das, Professor Emeritus, Chemistry Department, IIT Kharagpur Email:chapal12@yahoo.co.in Mob: +91-9434016996
18 July 2018 Wednesday	09.45-11.15 am.	Polymer Degradation and Polymer Characterization Techniques	Prof. Chapal Kr. Das, Professor Emeritus, Chemistry Department, IIT Kharagpur, Email:chapal12@yahoo.co.in Mob: +91-9434016996
	11.30 -01.00 pm.	Polymer Degradation and Polymer Characterization Techniques	Prof. Chapal Kr. Das, Professor Emeritus, Chemistry Department, IIT Kharagpur, Email:chapal12@yahoo.co.in Mob: +91-9434016996
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	Assignments	HRDC team
	03.00 -04.30 pm.	Assignments	HRDC team

19 July 2018 Thursday	09.45-11.15 am.	Stereochemistry	Prof. P.S. Kalsi 13-D Sarabha Nagar, Ludhiana Email: profkalsi@gmail.com Mob: +919815187190
	11.30 -01.00 pm.	Stereochemistry	Prof. P.S. Kalsi 13-D Sarabha Nagar, Ludhiana Email: profkalsi@gmail.com Mob: +919815187190
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	Assignments	HRDC Team
	03.00 -04.30 pm.	Assignments	HRDC Team
20 July 2018 Friday	09.45-11.15 am.	I.R. Spectroscopy	Prof. P. S. Kalsi 13-D Sarabha Nagar, Ludhiana Email: profkalsi@gmail.com Mob: +919815187190
	11.30 -01.00 pm.	I.R. Spectroscopy	Prof. P. S. Kalsi 13-D Sarabha Nagar, Ludhiana Email: profkalsi@gmail.com Mob: +919815187190
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	Challenges and opportunities in Nano-science and Technology	Prof. Anurag Srivastava Indian Institute of Information Technology & Management Gwalior Email: profanurag@gmail. com Mob. 07987708813
	03.00 -04.30 pm.	Microteaching	HRDC team
21 July 2018 Saturday	09.45-11.15 am.	Nanotechnology and Introduction to Stereochemistry	Prof. Anurag Srivastava Indian Institute of Information Technology & Management Gwalior Email: profanurag@gmail. com Mob. 079877088
	11.30 -01.00 pm.	Nanotechnology and Introduction to Stereochemistry	Prof. Anurag Srivastava Indian Institute of Information Technology & Management Gwalior Email: profanurag@gmail. com Mob. 079877088

	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Introduction to Stereochemistry	Prof. P. S. Kalsi 13-D Sarabha Nagar, Ludhiana Email: profkalsi@gmail.com Mob: +919815187190
	03.00 -04.30 pm.	Microteaching	HRDC team
22 July 2018 Sunday	09.45-11.15 am.	<b>SUNDAY</b>	
	11.30 -01.00 pm.		
	01.00-01.30 pm.		
	01.30 -03.00 pm		
	03.00 -04.30 pm.		
23 July 2018 Monday	09.45-11.15 am.	Design Principles used in Chemical Biology some Noteworthy examples (II) EPR	Prof. S. P. Rath Chemistry Department, IIT Kanpur Email; sprath@iitk.ac.in Mob. 009450346453
	11.30 -01.00 pm.	Design Principles used in Chemical Biology some Noteworthy examples (II) EPR	Prof. S. P. Rath Chemistry Department, IIT Kanpur Email; sprath@iitk.ac.in Mob. 0 09450346453
	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Microteaching	HRDC team
	03.00 -04.30 pm.	Assignments	HRDC team
	24 July 2018 Tuesday	09.45-11.15 am.	Metalloporphyrins in Biology : The Colors of Life EPR Spectroscopy
11.30 -01.00 pm.		Metalloporphyrins in Biology : The Colors of life EPR Spectroscopy	Prof. S. P. Rath Chemistry Department, IIT Kanpur Email; sprath@iitk.ac.in Mob. 0 09450346453
01.00-01.30 pm.		LUNCH	
01.30 -03.00 pm		Group Discussion	Prof. B.L. Sah
03.00 -04.30 pm.		Group Discussion	Prof. B.L. Sah
25 July 2018 Wednesday		09.45-11.15 am.	General Discussion
	11.30 -01.00 pm.	Facets of Life, Creativity & Innovation	Prof. B.L. Sah
	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Microteaching	Chemistry Department, DSB Campus, Nainital
	03.00 -04.30 pm.	Assignments	Chemistry Department, DSB Campus, Nainital

26 July 2018 Thursday	09.45-11.15 am.	Linear Free Energy Relationships	Prof. R. D. Kaushik Chemistry Department, GKU, Haridwar Email:rduttkaushik@yahoo. co.in,Mob. 07351739000
	11.30 -01.00 pm.	Signal to Noise Ratio, Sensitivity, Detection Limits, Noises, FT	Prof. R. D. Kaushik Chemistry Department, GKU, Haridwar Email:rduttkaushik@yahoo. co.in Mob.07351739000
	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Electronic Spectra Coordination Complexes	Prof. V. K. Sharma Chemistry Department, Lucknow University, Lucknow Email;vksharma21@hotmail. com Mob.09415423122
	03.00 -04.30 pm.	Microteaching	HRDC Team
27 July 2018 Friday	09.45-11.15 am.	Magnetochemistry of Transition Metal Complexes	Prof. V. K. Sharma Chemistry Department, Lucknow University, Lucknow Email:vksharma21@hotmail. com Mob.09415423122
	11.30 -01.00 pm.	Time to Reimagine Indian Education System	Prof. B.L. Sah
	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Fifty Six Laws of Good Teaching	Prof. Premraj Chemistry Department, Lucknow University, Lucknow Email;premrj123@ gmail.com Mob 09415159894
	03.00 -04.30 pm.	Microteaching	HRDC team
28 July 2018 Saturday	09.45-11.15 am.	Role of Metals in Medicine and Cosmetics	Prof. Premraj Chemistry Department, Lucknow University, Lucknow Email:premrj123@gmail.co mMob.09415159894
	11.30 -01.00 pm.	Role of Metals in Medicine and Cosmetics	Prof. Premraj Chemistry Department, Lucknow University, Lucknow Email:premrj123@gmail.co mMob.09415159894



	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Microteaching	HRDC team
	03.00 -04.30 pm.	Metals in Cosmetics	HRDC team
29 July 2018 Sunday	09.45-11.15 am.		
	11.30 -01.00 pm.	SUNDAY	
	01.00-01.30 pm.		
	01.30 -03.00 pm		
	03.00 -04.30 pm.		
30 July 2018 Monday	09.45-11.15 am.	Organic Spectroscopy : Structure Determination of Organic Compounds	Prof. D. S. Rawat Chemistry Department, Delhi University, Delhi Email:diwansrawat@ gmail.com Mob.09810232301
	11.30 -01.00 pm.	Organic Spectroscopy : Structure Determination of Organic Compounds	Prof. D. S. Rawat Chemistry Department, Delhi University, Delhi Email:diwansrawat@ gmail.com Mob.09810232301
	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Microteaching	HRDC team
	03.00 -04.30 pm.	Assignments	HRDC team
31 July 2018 Tuesday	09.45-11.15 am.	C-SP <sup>2</sup> and (C-SP <sup>3</sup> ) <sub>n</sub> Functionalization by Photoredox Catalysis	Prof. Ganesh Pandey Director Center of Biomedical Research SGPG Institute of Medical Sciences Lucknow Email:gp.pandey@cbmr.res.in Mob. 9970171802
	11.30 -01.00 pm.	Complex Natural Product Structure A driving force innovation in organisms Chemistry	Prof. Ganesh Pandey Director Center of Biomedical Research SGPG Institute of Medical Sciences Lucknow Email:gp.pandey@cbmr.res.in Mob. 9970171802
	01.00-01.30 pm.	LUNCH	
	01.30 -03.00 pm	Research Based Pedagogical Tools	Dr. Apurva Barve
	03.00 -04.30 pm.	Research Based Pedagogical Tools	Dr. Apurva Barve
	01 August 2018 Wednesday	09.45-11.15 am.	Chemistry of Living System/ Chemical and Biological Aspect of Enzyme

	11.30 -01.00 pm.	Chemistry of Living System/ Chemical and Biological Aspect of Enzyme	Prof. Chandrakala Pant
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	Power Point Presentation	Dr. Nand Gopal Sahu
	03.00 -04.30 pm.	Power Point Presentation	Dr. Nand Gopal Sahu
02 August 2018 Thursday	09.45-11.15 am.		Prof. Swapandeeep Chimni Chemistry Department, GNDU, Amritsar Email: sschimni@yahoo.com Mob.09417438845
	11.30 -01.00 pm.	Organic Synthesis	Prof. Swapandeeep Chimni Chemistry Department, GNDU, Amritsar Email:sschimni@yahoo.com Mob.09417438845
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	-----	HRDC team
	03.00 -04.30 pm.	-----	HRDC team
03 August 2018 Friday	09.45-11.15 am.	Organic Synthesis	Prof. Department, GNDU, Amritsar Email: sschimni@yahoo.com Mob.09417438845
	11.30 -01.00 pm.	-----	HRDC team
	01.00-01. 30 pm.	LUNCH	
	01.30 -03.00 pm	-----	HRDC team
	03.00 -04.30 pm.	-----	HRDC team
04 August 2018 Saturday	09.45-11.15 am.	VALEDICTORY	
	11.30 -01.00 pm.		
	01.00-01. 30 pm.		
	01.30 -03.00 pm		
	03.00 -04.30 pm.		

## List of Participants

### UGC Human Resource Development Centre Kumaun, University Nainital R C in Chemistry (16 July to 4 August, 2018)

S. No.	Name & Address of Participants	Address of Residence	M/ F	Cat	Subject	University	Phone No./ E-mail
1.	Amar Jensi Solanki Assistant Professor Department of Chemistry Govt. Girls College, Khargone-450110 (M.P.)	New GDC, Campus Khargone (M.P.)	M	ST	Chemistry	D A V V Indore	Tel (O): Tel (R): Mobile:0942400 0107 Email:amarjensi solanki@gmail. com
2.	Anita Bisht Assistant Professor Department of Chemistry Govt. P.G. College, Kotdwar-246149 (Uttarakhand)	Manohar Bhawan, Near Balaji Mandir Lower, Kalabrah, Kotdwar (Uttarakhand)	F	Gen	Chemistry	H N B Garhwal University	Tel (O): Tel (R): 01382- 223072 Mobile:0941072 2979 Email:anitabisht 1503@gmail. com
3.	Anoop Kumar Assistant Professor Department of S.V.R. N S S College, Vazhoor, Kottayam-686505 (Kerala)	Thottupwadhucw rilKuKumaramaka ry Veliyanadu (Kerala)	M	Gen	Chemistry	M K Gandhi University	Tel (O): 0481- 2456227 Tel (R): Mobile:0949757 9858 Email:akstks@ gmail. com
4.	Antara Sharma Assistant Professor Department of Chemistry St. Joseph's College, Darjeeling, Singamari, P.O. North Point-734104 (West Bengal)	Kolabari Near Doon Heritage School Chanpasari P.O. Chanpasari, Siliguri (West Bengal)	F	Gen	Chemistry	North Bengal	Tel (O): 0354- 2252550 Tel (R): Mobile:0900261 7487 Email:antara.sha rma7@gmail. com
5.	Asha Gurjar Assistant Professor Department of Chemistry University Maharaja College, Jaipur Bhawani singh Road, Rajsthan (Raj)	163-A Vidyut Nagar Gandhipath jaipur (Rajsthan)	F	OBC	Chemistry	University of Rajsthan	Tel(O): Tel(R): Mobile:0946139 4088 Email:ashagurja r85@ gmail.com
6.	Ashwani Kumar Assistant Professor Department of Chemistry Kurukshetra University, Kurukshetra-136119 (Haryana)	M Th-11 University Campus Kurukshetra University, Kurukshetra- 136119 (Haryana)	M	SC	Chemistry	Kurukshetra University	Tel (O): Tel (R): Mobile:0972990 9572 Email:vihanaash wani@gmail. com
7.	Beena Assistant Professor	848-C Nyay Khand-2	F	Gen	Chemistry	Delhi University	Tel (O): 011- 26494544

	Department of Chemistry Gargi College Siripost Road Delhi University, Delhi-110049 (Delhi)	Indirapuram Ghaziabad (U.P.)					Tel (R): Mobile:0954014 1309 Email:beenanegi @gargi.du.ac.in
8.	Bharti Bahuguna Assistant Professor Department of Chemistry Govt. P.G. College, Ranikhet, Almora- 263645 (Uttarakhand)	Padalini Niwas Tallital, Nainital (Uttarakhand)	F	Gen	Chemistry	Kumaun University	Tel (O): 05966- 220372 Tel (R): Mobile:0941116 4291 Email:bahuguna bharti@yahoo.in
9.	Biswajit Nath Assistant Professor Department of Chemistry Science College, Kokrajhar Kokrajhar B.T.A. D.-783370 (Assam)	Vill. Charaikhala P.O. Charaikhala Dist. Kokrajhar.- 783370 (Assam)	M	OBC	Chemistry	Gauhati University	Tel (O): 03661- 275204 Tel (R): Mobile:0943572 0208 Email:nathbis wajit81@gmail .com
10.	Devendra Kumar Mahawar Assistant Professor Department of Chemistry University Maharaja College, Jaipur (Rajasthan)	68, Roop Nagar – II Near Mahesh Nagar Jaipur (Rajasthan)	M	SC	Chemistry	University of Rajasthan	Tel (O): Tel (R): Mobile:0941434 8027 Email:devendra mahawar@gmai l.com
11.	Gopal Prasad Sahu Assistant Professor Department of Chemistry J.H. Govt. P.G. College, Betul- 460001 (M.P.)	Vinoba Nagar Bhagu Dhana Betul ganj Betul (M.P.)	M	OBC	Chemistry	Barkatullah Univ. Bhopal	Tel(O): Tel(R): Mobile:0942440 5544 Email:drgps01 @gmail.com
12.	Hinna Hamid Assistant Professor Department of Chemistry School of Chemical & Life Sciences, Jamia Hamdard, Hamdard Nagar , New Delhi-110062 (Delhi)	D-302, Jamia Hamdard, Hamdard Nagar , New Delhi- 110062 (Delhi)	F	Gen	Chemistry	Jamia Milia University	Tel (O): 011- 26059688 Tel (R): Mobile:0999990 8696 Email:hhamid@ jamiahamdard. ac.in
13.	Jaspal Singh Assistant Professor Department of Chemistry Gurukul Kangri University Haridwar-249404 (U.K.)	C-92, Subham Vihar Near GKV Sitapur Jwalapur, Haridwar (Uttarakhand)	M	SC	Chemistry	Gurukul Kangri University	Tel(O):01334- 249129 Mobile:0975869 1745 Email:sis2874@ yahoomail.com
14.	Jotiram Krishna Chavan Assistant Professor	At. Post :- Hamidwada Tal kagal Dist.	M	Gen	Chemistry	Shivaji University	Tel(O): Tel(R): Mobile:0968943

	Department of Chemistry Shri Yashwantrao Patil Science College, Solapur Tal Radhanagar Dist. Kolhapur-416212 (Maharashtra)	Kolhapur-416212 (Maharashtra)					8780 Email:jkchavagy psc@gmail.com
15.	Lakshmy M Assistant Professor Department of Chemistry M S M College, Kayankulam Alappuzga-690502 (Kerala)	Alhani Puthan Veedu Athani lane ARA-97, Vanchiyoor P.O. Trivendrum (Kerala)	F	Gen	Chemistry	Kerala University	Tel(O): Tel(R): Mobile:0944740 1509 Email:lakshmy msradha@gmail .com
16.	Lalit Mohan Assistant Professor Department of Chemistry D S B Campus Kumaun University,Nainital-263002 (Uttarakhand)	Vill.lahariya Malla near Sarswati Academy P.O. Kathaghariya haldwani (Uttarakhand)	M	SC	Chemistry	Kumaun University	Tel(O): Tel(R): Mobile:0854832 4338 Email:lalit_moh an99@rediffmai l.com
17.	Mahender Sambharia Assistant Professor Department of Chemistry K,L.P. College Delhi Road Rewari-123401 (Haryana)	Gali No. 6, Sub-Gali -4 (West) Vikas nagar Kankaewali Rewari (Haryana)	M	SC	Chemistry	IGU & MDU	Tel(O): Tel(R): Mobile:0981266 8500 Email:msambha ria78@gmail. com
18.	Manju Kumari Saroj Assistant Professor Department of Chemistry Gargi College Siripost Road Delhi University, Delhi-110049 (Delhi)	A-146,Gali No.-16, Harsh Vihar Colony Hari nagar Ext. part- 3, Badarpur New Delhi	F	SC	Chemistry	Delhi University	Tel (O): 011-26494544 Tel (R): Mobile:0954020 2887 Email:manjuksa roj@gmsil.com
19.	Manoj Dhuni Assistant Professor Department of Chemistry D S B Campus Kumaun University,Nainital-263002 (Uttarakhand)	Om Shiv Hari Bhawan Near Ayurvedic Hospital Kumaun Colony Damuvadhunga haldwani (Uttarakhand)	M	SC	Chemistry	Kumaun University	Tel(O): Tel(R): Mobile:9837559 2820 Email:manojdhu ni@gmail.com
20.	Manoj Dohare Assistant Professor Department of Chemistry Govt. P.G. arts & Science College,Rutlam (M.D.), Near Nagar Nigam-457001	C-10, Suncity, Sailana Road Rutlam (M.D.), Near Nagar Nigam-457001 (M.P.)	M	SC	Chemistry	Vikram University	Tel (O): Tel (R): Mobile:0999398 4605 Email:manojjrf @gmail.com

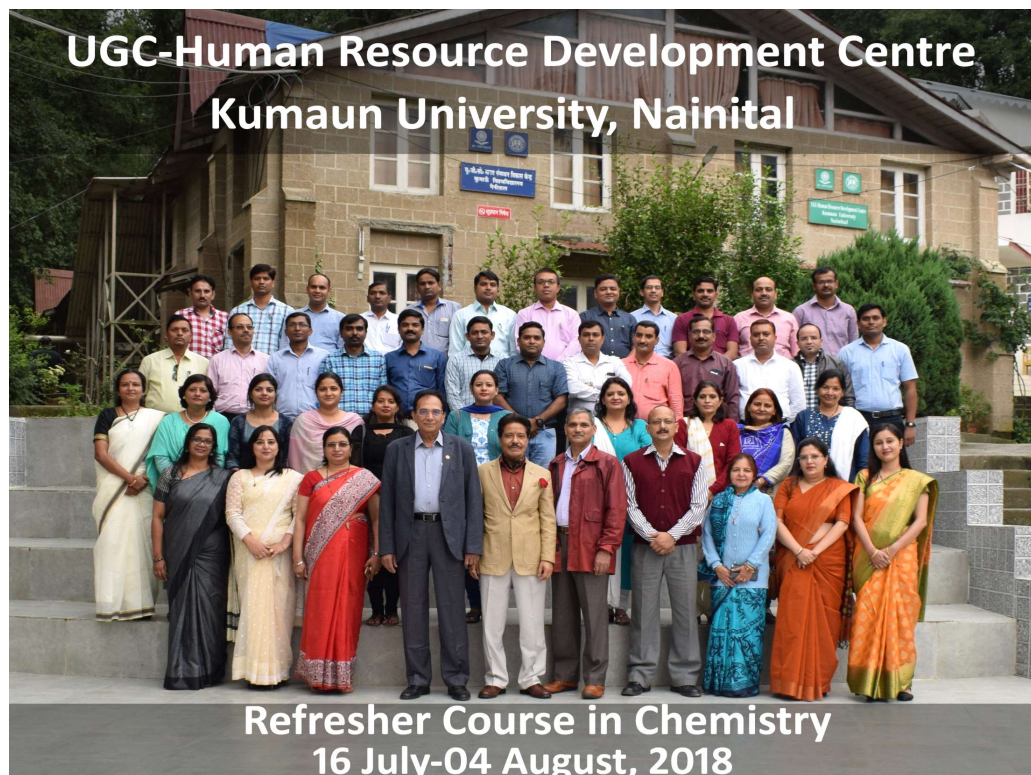
	(M.P.)						
21.	Neha Kapoor Assistant Professor Department of Chemistry Hindu College, University Enclave, Delhi-110007 (Delhi)	507, 2nd Floor West Parmanand Colony Delhi-09 (Delhi)	F	Gen	Chemistry	Delhi University	Tel (O): 011- 27662055 Tel (R): Mobile:9313006 612 Email:nehakapo or221278@ gmail.com
22.	Pankaj Sarkar Assistant Professor Department of Chemistry Nabadwip Dist. Nadia-741302(West Bengal)	Vill+Post: Maywhat PS: Hanskhali Dist. Nadia - 741302(West Bengal)	M	SC	Chemistry	Kaliyani University	Tel (O): 03472- 240014 Tel (R): Mobile:0700188 3776 Email:psnvc1@ gmail.com
23.	Penny Joshi Assistant Professor Department of Chemistry D S B Campus Kumaun University,Nainital- 263002 (Uttarakhand)	Mintra Colony, Chhoti Mukhani, Haldwani (Uttarakhand)	F	Gen	Chemistry	Kumaun University	Tel(O): Tel(R): Mobile:0740937 2939 Email:penny.jos hi@gmail.com
24.	Prasoon Kumar Joshi Assistant Professor Department of Chemistry M.B. Govt. P.G. College, Haldwani- 263139 (Uttarakhand)	Maa Kalika colony Bisht Dhara Bithoria No.-01 Haldwani (Uttarakhand)	M	Gen	Chemistry	Kumaun University	Tel (O): Tel (R): Mobile:0941051 8757 Email:prasoonjo shi2012@gmail. com
25.	Rajdeep Malik Assistant Professor Department of Chemistry Gurukul Kangri University, Haridwar-249404 (Uttarakhand)	C-77, Shri Ram Nagar Jwalapur, Haridwar (Uttarakhand)	M	Gen	Chemistry	Gurukul Kangri University	Tel(O): Tel(R): Mobile:0750035 3095 Email:rajdeepm alik@gmail.com
26.	Ranjana Shah Assistant Professor Department of Chemistry Govt. P.G. College, Bageshwar-263642 (Uttarakhand)	210/510, Khazanchi Mohalla Almora (Uttarakhand)	F	Gen	Chemistry	Kumaun University	Tel(O): Tel(R): Mobile:0941292 8436 Email:rshah438 @gmail.com
27.	Rashmi Rautela Assistant Professor Department of Chemistry Govt. P.G. College, Ranikhet, Almora- 263645 (Uttarakhand)	Shiv Bhawan Saila Khola Chaughapata Almora (Uttarakhand)	F	Gen	Chemistry	Kumaun University	Tel (O): 05966- 220372 Tel (R): Mobile:0941241 7006 Email:rashmirau tela03@gmail. com

28.	Ravendra Kumar Assistant Professor Department of Chemistry C.B.S.H., G.B.P.U. Ag.& Tech. Pant Nagar-263145 (Uttarakhand)	1748/12 Sector – VI T.a. Colony Pant Nagar U S nagar (Uttarakhand)	M	SC	Chemistry	G B Pant University of Agri. & technology	Tel(O): Tel(R): Mobile:0975920 4533 Email:ravichemi stry.kumar@ gmail.com
29.	Remalakshmy Poduval Assistant Professor Department of Chemistry Devaswom Board College, Thalayola, Parambu Midyayikkunnu P.O. Kerala-686605 (Kerala)	D-4, Silpa Geethanjali Appts Kalikkotha Road Fort Tripunithora Ernakulum (kerala)	F	Gen	Chemistry	Mahatma Gandhi	Tel (O): 048291-236136 Tel (R): Mobile:8907078 866 Email:hemapod uval@gmail. com
30.	Riyaj Ahemd Mansoori Assistant Professor Department of Chemistry Govt. P.G. Arts & Science College, Rattam (N.P.0 Near Nagar Nigam- 457001 (M.P.)	46, Commerce Colony Mohan Nagar Rattam (M.P.)	M	OBC	Chemistry	Vikram University	Tel(O):07412- 235149 Tel(R): Mobile:0942402 0936 Email:rizelu57 @gmail.com
31.	Santosh Kumar Dubey Assistant Professor Department of Chemistry University College, Kurukshetra-136119 (Haryana)	MTH-7, University Campus Kurukshetra University, Kurukshetra (Haryana)	M	Gen	Chemistry	Kurukshetra University	Tel(O):01744- 238049 Tel(R): Mobile:0829530 5200 Email:dubey522 9@gmail.com
32.	Sayed Hasan Mehdi Assistant Professor Department of Chemistry Shia P.G. College, Sitapur Road, Lucknow-226020 (U.P.)	403/409, Katra Bizan BEG, Chaupatiya O.P. Chowk (Lucknow)	M	Min	Chemistry	Lucknow University	Tel(O):0522- 6450005 Tel(R): Mobile:0893202 6584 Email:mehdi.say ed@gmail.com
33.	Shamrao Tanaji Disale Assistant Professor Department of Chemistry Kankavli College, Kankavli Vidyanagar Tal. Kankavli Dist. Sindhudurg-416602 (Maharashtra)	A/11, Nakshatra apartment Shivajinagar, Kankavli Tal. Kankavli Dist. Sindhudurg- 416602 (Maharashtra)	M	Gen	Chemistry	Mumbai University	Tel (O): 02367- 232053 Tel (R): Mobile:0865275 7703 Email:shyamdis ale@gmail.com
34.	Sharad Chandra Mishra Assistant Professor	Gali No. N-3, Near ENT Hospital Adarsh	M	Gen	Chemistry	Kumaun University	Tel (O): Tel (R): Mobile:

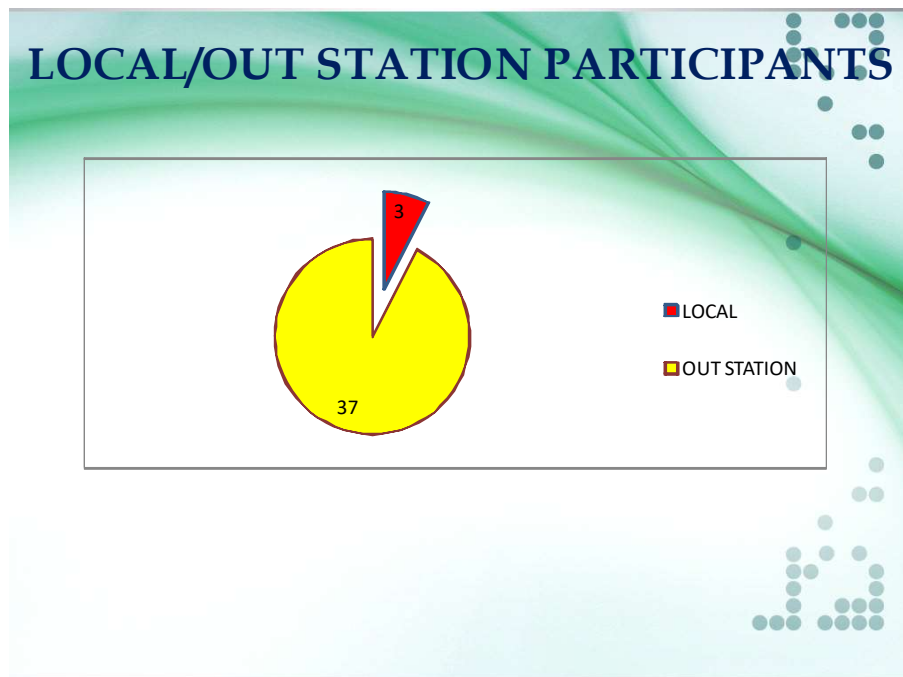
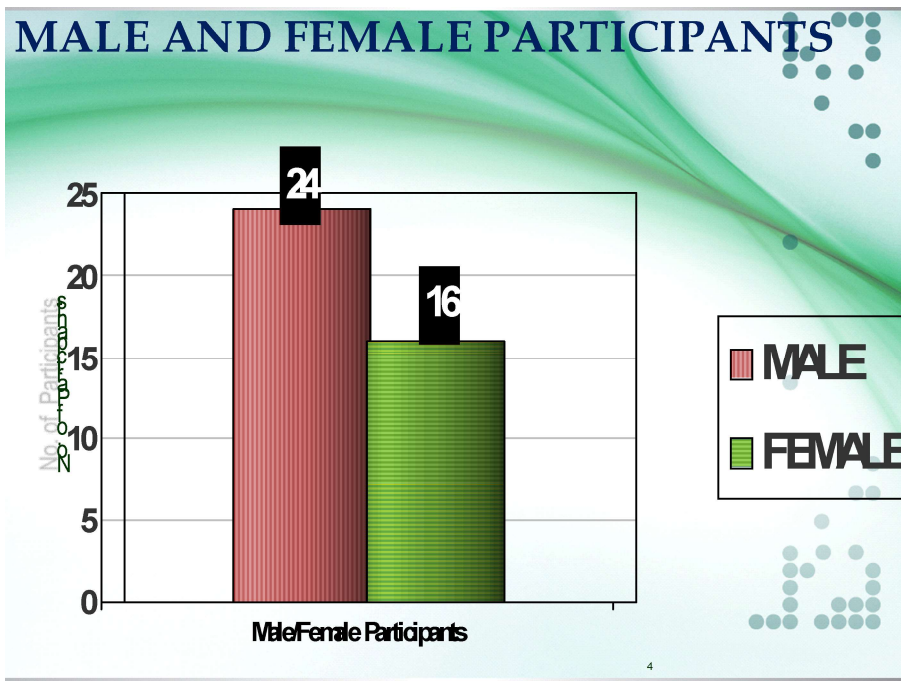
	Department of Chemistry M.B. Govt. P.G. College, Haldwani-263139	Nagar K.D. Road Haldwani (Uttarakhand)					09411596339 Email:drsharadmishra96@gmail.com
35.	Shasti Ballabh Mishra Assistant Professor Department of Chemistry M.B. Govt. P.G. College, Haldwani-263139 (Uttarakhand)	Vill. Bhagwanpur (jai singh) P.O. Kathgharid Haldwani Nainital (Uttarakhand)	M	Gen	Chemistry	Kumaun University	Tel (O): Tel (R): Mobile: 09411710636 Email:drsbmishra@gmail.com
36.	Shrikant Govindrao Kalane Assistant Professor Department of Chemistry Late Pundalikrao Gawali Arts & Science Mahavidyalaya, Shirpur Jain Tq. Malegaon Dist. Washim-444504 (Maharashtra)	Kalitaru, Selu Road Near Water Tank Malegaon Dist. Washim-444504 (Maharashtra)	M	Gen	Chemistry	S.G.B. Amravati University	Tel(O): Tel(R): Mobile:08275828685 Email:shrikantkalane@gmail.com
37.	Sunita Upadhyay Assistant Professor Department of Chemistry M.B. Govt. P.G. College, Haldwani-263139 (Uttarakhand)	22, A Paripura Triveni Clinic Sitarganj (U S Nagar), Uttarakhand	F	Gen	Chemistry	Kumaun University	Tel (O): Tel (R): Mobile: 09149329728 Email:sunitaupadhyay11@gmail.com
38.	Tanuja Bisht Assistant Professor Department of Chemistry Govt. P.G. College, Champawat-262523 (Uttarakhand)	D/o Shri M.S. BishtPushp Raj Kunj, Cinema Line, Pithoragarh (Uttarakhand)	F	Gen	Chemistry	Kumaun University	Tel (O): Tel (R): Mobile: 08979794959 Email:tanujabisht.16@gmail.com
39.	Titas Biswas Assistant Professor Department of Chemistry Gurudas College, 1/1, Suren Road Narkardanga Kolkata-700054 (West Bengal)	165/E, Nayapatti Road, Jersore Enclave Flat No. A-3 Kolkata (W.B)	M	SC	Chemistry	Calcutta University	Tel(O):033-23703841 Tel(R): Mobile:09433752056 Email:titas.biswas@gmail.com
40.	Vaishali Lal Assistant Professor Department of Chemistry Govt. Home Science P.G. College, Hoshangabad-461001(M.P.)	H.N.-7, Ward No.-20 Pratap Nagar Rasuliya Hoshangabad-461001(M.P.)	F	ST	Chemistry	Barkhatullah University	Tel (O): 07574-254072 Tel (R): Mobile:09827009494 Email:vaishali.lal.in@gmail.com



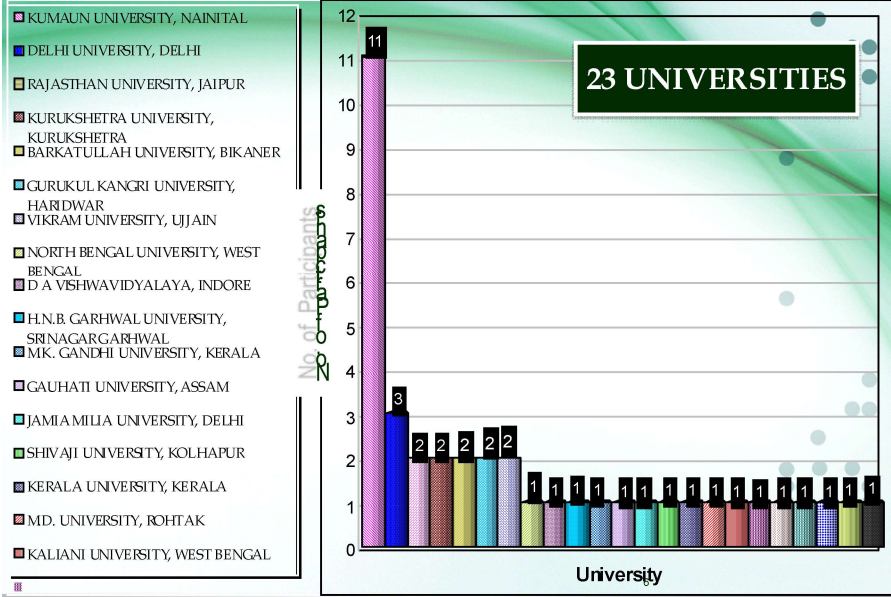
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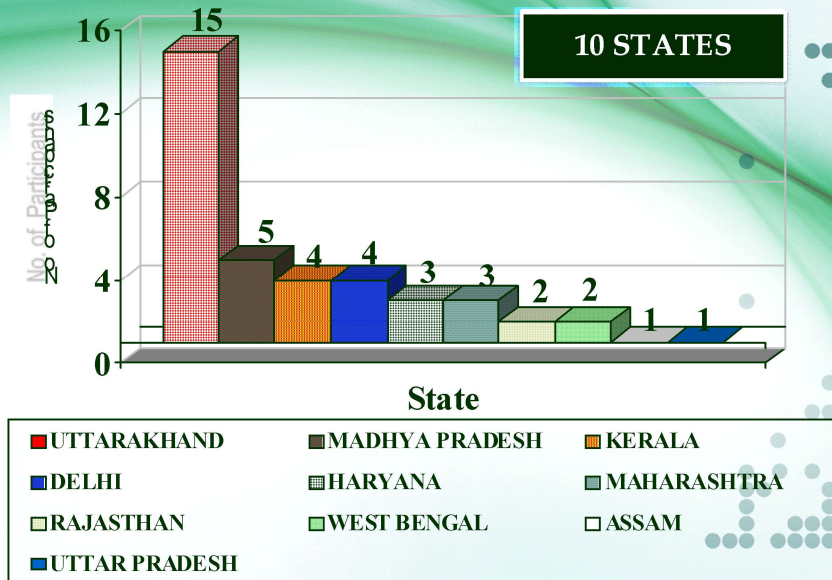
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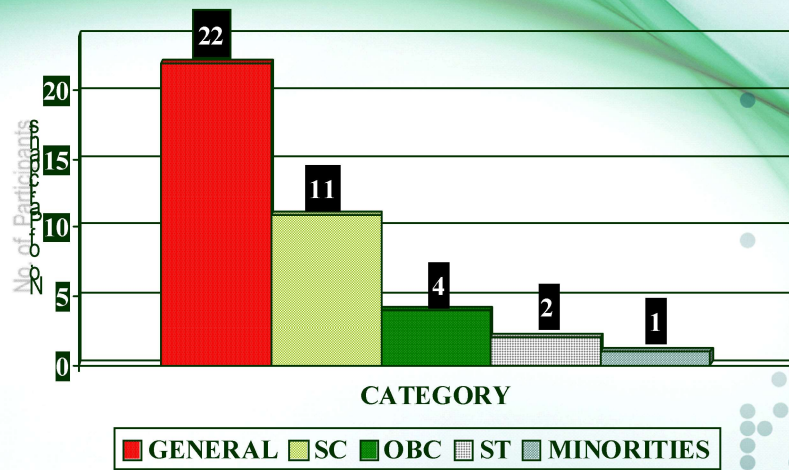
## UNIVERSITY WISE REPRESENTATION



## STATE WISE REPRESENTATION

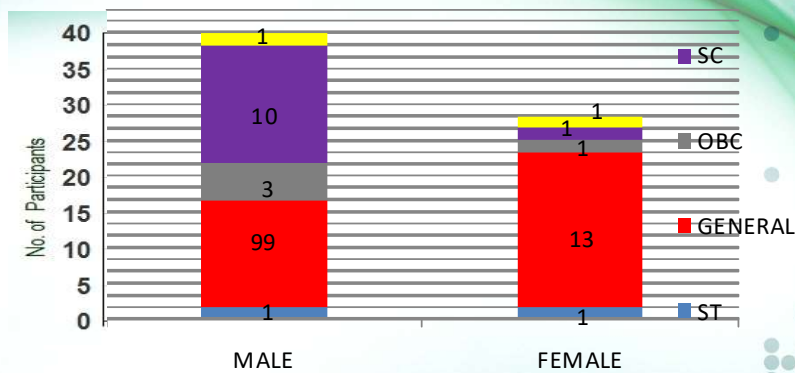


## CATEGORY WISE REPRESENTATION

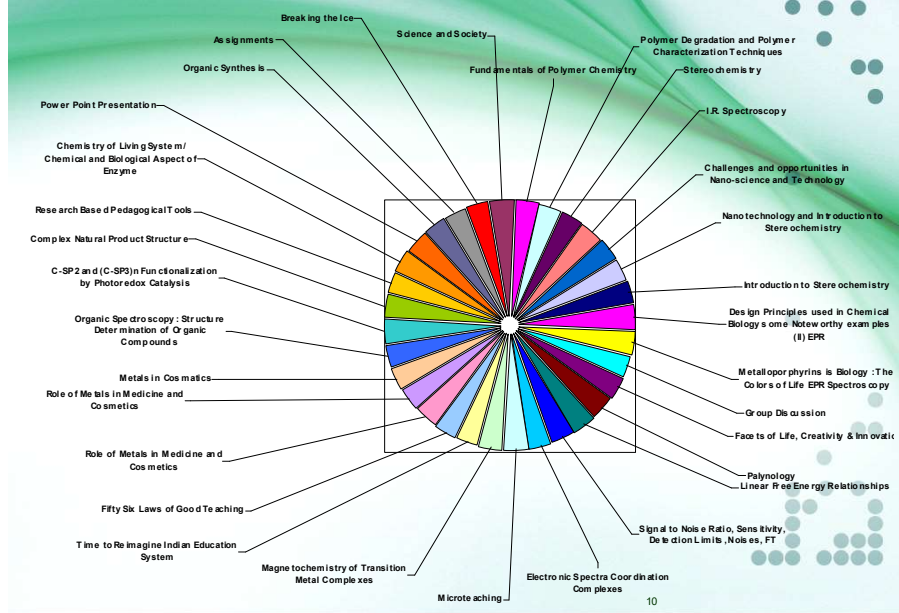


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## SUB-CATEGORY WISE REPRESENTATION



# CURRICULAM ASPECTS



## List of Day Officers

UGC-Human Resource Development Centre, Kumaun University, Nainital  
RC in Chemistry (16 July to 04 August 2018)

DATE	DAY MONITORS'
Day-1	Penny Joshi & Sharad Chandra Mishra
Day-2	Tanuja Bisht & Santosh Kumar Dubey
Day-3	Prasoon Kumar Joshi & Anita Bisht
Day-4	Rashmi Rautela & Pankaj Sarkar
Day-5	Jaspal Singh & Antara Sharma
Day-6	Ashwani Kumar, Sunita Upadhyay & Anoop Kumar
Day-7	Beena & Ravendra Kumar
Day-8	Biswajit Nath, Shrikant Govindrao Kalane & Neha Kapoor
Day-9	Devendra Kumar Mahawar , Remalakshmy Poduval & Bharti Bahuguna
Day-10	Gopal Prasad Sahu & Rajdeep Malik
Day-11	Hinna Hamid, Amar Jensi Solanki & Ranjana Shah
Day-12	Asha Gurjar & N Manoj Dohare
Day-13	Jotiram Krishna Chavan & Shamrao Tanaji Disale
Day-14	Lakshmy M. & Riyaj Ahemd Mansoori
Day-15	Lalit Mohan & Vaishali Lal
Day-16	Mahender Sambharia & Sayed Hasan Mehdi
Day-17	Manju Kumari Saroj & Titas Biswas
Day-18	Shasti Ballabh Mishra & Manoj Dhuni

<b>Equipment In-charge</b>	-	Anoop Kumar
<b>Computer Lab In-charge</b>	-	Titas Biswas
<b>Meditation Room In-charge</b>	-	Vaishali Lal
<b>Mess In-charge</b>	-	Prasoon Kumar Joshi
<b>Health and Fitness Zone In-charge</b>	-	Gopal Prasad Sahu

## Evaluation of Participants

### R.C. in Chemistry (16 July to 04 August 2018)

S.I. No.	Name of the Participant	Overall response 25 marks	Research Project Proposal 20 marks	Power Point Presentation 15 Marks	Micro Teaching 10 marks	GD 10 marks	GPA 20 marks	Total Max. Marks 100
1.	Amar Jensi Solanki	24	14.0	11.0	8.0	7.5	19.0	<b>83.5</b>
2.	Anita Bisht	24	13.0	11.0	8.0	7.5	15.0	<b>78.5</b>
3.	Anoop Kumar	24	15.0	12.0	8.0	8.0	19.0	<b>86.0</b>
4.	Antara Sharma	24	14.0	11.0	8.0	8.0	17.0	<b>82.0</b>
5.	Asha Gurjar	24	15.0	12.0	7.5	8.0	16.0	<b>82.5</b>
6.	Ashwani Kumar	24	14.0	12.0	7.5	8.0	17.0	<b>82.5</b>
7.	Beena	24	14.0	13.0	8.0	8.5	15.0	<b>82.5</b>
8.	Bharti Bahuguna	24	13.0	11.0	8.0	8.0	17.0	<b>81.0</b>
9.	Biswajit Nath	24	16.0	14.0	7.5	9.0	16.0	<b>86.5</b>
10.	Devendra Kumar Mahawar	24	15.0	14.0	8.0	7.5	19.0	<b>87.5</b>
11.	Gopal Prasad Sahu	24	14.0	11.0	7.5	7.5	15.0	<b>79.0</b>
12.	Hinna Hamid	24	17.0	14.0	7.5	8.5	18.0	<b>89.0</b>
13.	Jaspal Singh	24	16.0	13.0	8.0	8.0	18.0	<b>87.0</b>
14.	Jotiram Krishna Chavan	24	13.0	11.0	8.0	7.5	17.0	<b>80.5</b>
15.	Lakshmy M.	24	13.0	11.0	8.0	8.0	17.0	<b>81.0</b>
16.	Lalit Mohan	24	16.0	12.0	8.0	7.5	17.0	<b>84.5</b>
17.	Mahender Sambharia	24	17.0	11.0	8.0	7.5	16.0	<b>83.5</b>
18.	Manju Kumari Saroj	24	15.0	13.0	8.0	8.0	16.0	<b>84.0</b>
19.	Manoj Dhuni	24	15.0	12.0	8.0	7.5	16.0	<b>82.5</b>
20.	Manoj Dohare	24	15.0	12.0	8.0	8.0	16.0	<b>83.0</b>
21.	Neha Kapoor	24	15.0	12.0	8.0	8.0	19.0	<b>86.0</b>
22.	Pankaj Sarkar	24	13.0	11.0	8.0	7.5	15.0	<b>78.5</b>
23.	Penny Joshi	24	17.0	13.0	8.0	7.5	18.0	<b>87.5</b>
24.	Prasoon Kumar Joshi	24	14.0	13.0	8.0	7.5	19.0	<b>85.5</b>
25.	Rajdeep Malik	24	13.0	12.0	8.0	7.5	15.0	<b>79.5</b>
26.	Ranjana Shah	24	15.0	12.0	8.0	8.0	17.0	<b>84.0</b>
27.	Rashmi Rautela	24	14.0	12.0	8.0	7.5	19.0	<b>84.5</b>
28.	Ravendra Kumar	24	17.0	14.0	8.0	8.0	16.0	<b>87.0</b>
29.	Remalakshmy Poduval	24	14.0	12.0	8.0	8.5	17.0	<b>83.5</b>
30.	Riyaj Ahemd Mansoori	24	15.0	12.0	8.0	7.5	19.0	<b>85.5</b>
31.	Santosh Kumar Dubey	24	16.0	12.0	8.0	7.5	16.0	<b>83.5</b>
32.	Sayed Hasan Mehdi	24	16.0	12.0	8.0	7.5	19.0	<b>86.5</b>
33.	Shamrao Tanaji Disale	24	16.0	13.0	8.0	8.0	17.0	<b>86.0</b>
34.	Sharad Chandra Mishra	24	13.0	11.0	8.5	8.0	19.0	<b>83.5</b>
35.	Shasti Ballabh Mishra	24	14.0	11.0	8.5	9.5	16.0	<b>83.0</b>
36.	Shrikant Govindrao Kalane	24	13.0	12.0	8.5	7.5	17.0	<b>82.0</b>
37.	Sunita Upadhyay	24	13.0	11.0	8.5	7.5	18.0	<b>82.0</b>
38.	Tanuja Bisht	24	18.0	14.0	8.0	7.5	19.0	<b>90.5</b>
39.	Titas Biswas	24	15.0	12.0	8.0	8.5	18.0	<b>85.5</b>
40.	Vaishali Lal	24	14.0	11.0	8.0	8.0	16.0	<b>81.0</b>

Director

Course Coordinator

**Evaluation of Resource Persons**  
**R.C. in Chemistry (16 July to 04 August 2018)**

<b>S. No.</b>	<b>Name of Resource Person</b>	<b>Grading (Excellent + Good in %)</b>
1.	Prof. C.K. Das	93
2.	Prof. Ganesh Pandey	93
3.	Prof. P.S. Kalsi	92
4.	Prof. Anurag Srivastava	92
5.	Prof. R.D. Kaushik	92
6.	Prof. D.S. Rawat	92
7.	Prof. Premraj	92
8.	Prof. Chandra Kala Pant	92
9.	Prof. Swapandeep Chimni	92
10.	Prof. S.P. Rathi	91
11.	Prof. V.K. Sharma	90