



UGC-Human Resource Development Centre  
यूजीसी-मानव संसाधन विकास केंद्र  
Jawaharlal Nehru University, New Delhi  
जवाहरलाल नेहरू विश्वविद्यालय, नई दिल्ली



Website: <https://www.jnu.ac.in/mmttc>

**21<sup>st</sup> Refresher Course in Physical Sciences & Nano Sciences (ONLINE MODE)**  
**20<sup>th</sup> September – 5<sup>th</sup> October, 2023**

**Course coordinators:**

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**List of Participants:**

Sl. No	NAME	Sl. No	NAME
1	Alok Kumar Singh Jha	21	Nasir Alam
2	Anita Kumari	22	Parul Jain
3	Arun Malla Chowdhury	23	Raja Nisar Ali
4	Babu K Thomas	24	Rakesh Kr Singh
5	Barilang Mawlong	25	Rakesh Kumar Meena
6	Beena	26	Ram Bhuwan Patel
7	Begum Umme Jamil	27	Ritesh Kumar Chourasia
8	Bibekananda Sundaray	28	S. Arulmozhi
9	Chidanand Murageppa Kanamadi	29	Sabna M
10	G. Shankar	30	Savita Budhwar
11	Jitendra Kumar Vats	31	Savithri Devi E
12	Kailash Nemade	32	Sayanee Jana
13	Kamal Kishor Thakur	33	Shashi Shekhar
14	Kavita Yadav	34	Shilpi Agarwal
15	Keval Jaynatilal Gadani	35	Soumabha Bag
16	Kshetrimayum Newton Singh	36	Sushil Kumar
17	Mahendra Kumar Mehar	37	Sushil Shukla
18	Manisha	38	Sweta Singh
19	Manju Kumari Saroj	39	Tanuja Mohanty
20	Nandita Palit	40	Vikas Sharma

## Schedule

### Week – I

DATE	09.30 am - 11.00 am	11:00 am – 11:30 am	11:30 am – 01:00 pm	1:00 pm 2:00 pm	2:00 pm - 03.30 pm	03.30 pm - 03.45 pm	03.45 pm - 05.15 pm
Wednesday, September 20, 2023	Registration	Tea Break	Inaugural Programme	Lunch Break	Interaction with the Course Coordinators	Tea Break	<b>Prof. Mahesh Kumar</b>  <i>2D materials for gas sensors</i>
Thursday September 21, 2023	<b>Dr. Pankaj Podar</b>  <i>The art and science of crystal growth and their applications: from last frontiers of condensed matter to the nanoscale</i>		<b>Dr. Ram Janay Choudhary</b>  <i>Tuning the electronic and magnetic properties of transition metal oxides thin films via strain engineering</i>		<b>Prof. Venkata Krishnan</b>  <i>Green Chemistry and Renewable Energy</i>		<b>Prof S. Patnaik</b>  <i>New Materials for Energy &amp; Information Storage &amp; Transmission</i>
Friday, September 22, 2023	<b>Prof B.K Singh</b>  <i>Nuclear Physics</i>		<b>Prof Sanjay Puri</b>  <i>Kinetics of Phase Transitions</i>		<b>Prof Surya Kant Tripathi</b>  <i>Exponential Condensed Matter Physics</i>		<b>Prof N.L Singh</b>  <i>Milestones in Development of Nuclear Physics and Applications in Daily Life</i>
Saturday September 23, 2023	Project Work Research Design		Project Work Data tabulation & Analysis		Project Work Report Preparation		Project Work Presentation Preparation

## Week - II

DATE	09.30 am - 11.00 am	11.00 am – 11.30 am	11:30 am-01.00 pm	1.00 pm- 2.00 pm	2.00 pm - 3.30 pm	3.30 pm – 3.45 pm	3:45 pm-5:15 pm
Monday, September 25, 2023	<b>Prof. Chandana Rath</b> <i>Investigation on structure dependent Physical properties in Nanostructured oxide materials</i>	Tea Break	<b>Prof.Dambarudhar Mohanta</b>  <i>Exfoliation, structure formation and exciton dynamics in layered nanomaterials</i>	Lunch Break	<b>Prof. Vijay K. Thakur</b>  <i>Polymer composites</i>	Tea Break	<b>Prof. B. P Singh</b> <i>Empowering Sustainability with Modern Trends in Nuclear Energy Generation and Waste Management</i>
Tuesday, September 26, 2023	<b>Dr. Pratima Solanki</b>  <i>Biosensor</i>		<b>Prof. Mahesh Kumar</b>  <i>2D Materials based for gas sensors</i>		<b>Dr. Parasmani Rajput</b>  <i>Applications of spectroscopic methods based on synchrotron radiation and its impact</i>		<b>Prof. Sunil Kumar</b>  <i>Nano and Nematodes</i>
Wednesday, September 27, 2023	<b>Prof. Kashayap K. Dubey</b>  <i>Waste water treatment</i>		<b>Prof. Sujeet Chaudhary</b>  <i>“Vacuum Techniques”</i>		<b>Dr. Ram Prajapati</b>  <i>Theory, computational and simulation studies in Astrophysical plasmas</i>		<b>Prof. Sobhan Sen</b>  <i>Utility of Fluorescence Spectroscopy and Microscopy in Everyday Life: A Primer</i>
Thursday September 28, 2023	<i>Gazetted Holiday</i>		<i>Gazetted Holiday</i>		<i>Gazetted Holiday</i>		<i>Gazetted Holiday</i>
Friday, September 29, 2023	<b>Dr. Rehan Khan</b>  <i>Nanotoxicology, Drug delivery and inflammatory diseases; A generalized view</i>		<b>Prof. B. C. Yadav</b>  <i>Self-healing Nano-Materials and their Applications</i>		<b>Prof. Bijoy K Kuanr</b>  <i>Microwave/RF</i>		<b>Dr. Sameer Rahatekar</b>  <i>Natural Polymers Based Functional Nano fibres for Antimi</i>
Saturday September 30, 2023	Project Work Data tabulation		Project Work Data tabulation		Project Work Data tabulation		Project Work Data tabulation

### Week – III

DATE	09.30 am - 11.00 am	11.00 am – 11.30 am	11:30 am-01.00 pm	1.00 pm-2.00 pm	2.00 pm - 3.30pm	3.30 pm – 3.45 pm	3:45 pm-5:15 pm
Monday, October 2, 2023	<i>Gazetted Holiday</i>	Tea Break	<i>Gazetted Holiday</i>	Lunch Break	<i>Gazetted Holiday</i>	Tea Break	<i>Gazetted Holiday</i>
Tuesday, October 3, 2023	<b>Prof. R. K. Gupta</b> <i>Nanostructured Materials for Water Remediation Applications</i>		<b>Dr. Vijay K. Goel</b> <i>Structure based antimalarial drug discovery</i>		Evaluation		Evaluation
Wednesday, October 4, 2023	Evaluation		Evaluation		Evaluation		Evaluation
Thursday October 5, 2023	Evaluation		Feedback Session		<i>Valedictory Session</i>		