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

ज्ञान-विज्ञान विमुक्तये

18th Refresher Course in Physical Sciences & Nano Sciences (ONLINE MODE)

16th November – 28th November, 2020

Course coordinators:

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List of Participants:

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1	DR. A. V. JHONE VERJHULA
2	DR. A.ZAMARA
3	DR. ANSU KUMAR ROY
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5	DR. BENOY ANAND
6	DR. BHARAT KUMAR
7	DR. BULUMONI KALITA
8	DR. CHARU DWIVEDI
9	DR. CHETAN VISHNU CHANMAL
10	DR. DEBARGHYA GOSWAMI
11	DR. JITENDRA KUMAR VATS
12	DR. KRISHNA KUMAR BHARGAV

13	DR. LINGARAJU
14	DR. MANOJ KUMAR
15	DR. NAVAL KISHOR LOHANI
16	DR. PRADIP KUMAR MONDAL
17	MR. PRAMOD KUMAR SEN
18	DR. PREMLATA YADAV
19	DR. PRINCE
20	DR. PURA RAM
21	DR. RATAN DAS
22	DR. RAVINDRA ALANGE
23	DR. S. KARTHIKEYAN
24	DR. SADHUCHARAN MALLICK
25	DR. SAMIR MORESHWARRAO BAGADE
26	DR. SAVITHA NALINI
27	DR. SHAILESH GANPAT PAWAR
28	DR. SHEETAL ANTIL
29	DR. SONAL SAHAI
30	DR. SUGARAJ SAMUEL R
31	DR. SURABHI SINGHAL
32	MR. SURESH KUMAR
33	DR. SWATI DATTU PATIL
34	MR. YADORAO SITKURA BOPCHE

Schedule

Week - 1

DATE	10:00- 11:00 am	11:00 am – 11:30 am	11:30 am – 01:00 pm	1:00 pm – 2:00 pm	2:00 pm - 03.00 pm	03.00 pm - 03.30 pm	03.30 pm - 05.00 pm
Monday, November 16, 2020	Registration	Tea Break	Combined Inaugural Session	Lunch Break	Interaction with the Course Coordinators	Tea Break	**Dr. D K Aswal** *"Aswal Model of Inclusive Growth"*

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
Tuesday, November 17, 2020	**Prof. Sanjay Puri** *"Kinetics of Phase Transitions"*	**Tea Break**	**Prof. Arun Pratap** *"Evolution of Condensed Matter Physics: from crystals to quasi-crystals & nano-crystals"*	**Lunch Break**	**Dr. Praveen Kumar** *Effect of Thermomigration-Electromigration Coupling on Mass Transport in Cu Thin Films"*	**Tea Break**	**Prof. Bansi D. Malhotra** *"Fundamentals & Applications of Nanostructured Codes Based Metal Oxides Biosensors for Cancer Detection"*
Wednesday, November 18, 2020	**Prof. Vinay Gupta** *"Nitride based quantum well structures for short wavelength photonic devices"*		**Dr. Suryanarayana Jammalamadaka** *"Nonvolatile memories for data storage and bio sensing"*		**Prof. Bijoy K. Kunar** *Magnetic Nano-structures: 5G frequency band front-end devices*		**Prof. S. Kannan** *"Nanofabricated hydrogel: A versatile pltform for drug delivery and treatment of cancer"*
Thursday, November 19, 2020	**Dr. Sobhan Sen** *"Fluorescence Spectroscopy and its Utility in Everyday Life: A Primer"*		**Dr. Rajendar S Dhaka** *Photoemission spectroscopy: what can we learn about materials and how?*		**Prof. Sameer Sapra** *"2D nanomaterials for optoelectronic and catalytic applications"*		**Prof. S.K. Tripathi** *"Chalcogenide Glasses and its Optical Properties"*
Friday, November 20, 2020	**Dr. Anil Kumar** *"Introduction to Intellectual Property Right"*		**Prof. Chandra Shakher** *"Digital Holographic Interferometric Microscope for imaging of Biological Cells and Bacteria"*		**Dr. Balaji Birajdar** *"Nanoscale Characterization using Electron Microscopy"*		**Prof. C. Sekar** *"Engineered Metal oxides for Neurochemical Sensing Applications"*
Saturday November 21, 2020	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 - 3.30pm	3.30 pm – 3.45 pm	3:45 pm-5:15 pm
Monday November 23, 2020	**Prof. P. K. Bhatnagar** *"Organic Light emitting diodes (OLEDs) and latest developments"*	Tea Break	**Prof. Kedar Singh** *"Semiconducting Quantum Dots: Fascinating Class of Materials for Spintronics and Photovoltaic Applications"*	Lunch Break	**Dr. Pankaj Poddar** *"Multifunctional platforms for multi-model cancer cell imaging, drug delivery: An in vitro and in vivo xenograft study"*	Tea Break	**Dr. Priyanka Sabarwall** *"DNA nano probes based innovative diagnostics solutions for human health and environment"*
Tuesday, November 24, 2020	**Dr. Fouran Singh** *"Nanoscience using ion beams"*		**Prof. P Predeep** *"Perovskite solar cells: Principles and practices"*		**Dr. S. Angappane** *"Self-Cleaning Structural Colors by TiO2/Ti Nanostructures"*		**Dr. Hari Om Yadav** *"CSIR NMITLI program"*
Wednesday, November 25, 2020	**Dr. P.V. Mohanan** *"Nanoparticles toxicity: Requirement of regulatory guidelines "*		**Prof. Satyabrata Patnaik** *"New ideas in materials science"*		**Dr. Pradeep Kumar** *"2D materials: Synthesis, Properties and Applications"*		**Prof. Subhasis Ghosh** *"Physics of Low Dimensional Systems"*
Thursday, November 26, 2020	**Prof. Dinesh Mohan** *"Nanobiochar: A sustainable solution for agricultural and environmental applications"*		**Dr. Satyender Singh** *"Design of Nano-Porous Anodic Alumina for Controlled Synthesis of 0D and 1D Nanostructures"*		**Dr. Tanuja Mohanty** *Defect engineering studies in 2D materials*		**Dr. Sidharth Kumar Prasad** *"Exploring the early Universe Matter (Quark Gluon Plasma) via Heavy-Ion Experiments"*
Friday, November 27, 2020	Evaluation Dr. Ashim K. Pramanik Dr. Poonam Mehta		Evaluation Dr. Supriya Sabbani Dr. Pritam Mukhopadyay		Evaluation Dr. Dinabandhu Das Dr. Ratneswar		Evaluation Dr. Pijus Sasmal Dr. Vinod Kumar
Saturday November 28, 2020	Evaluation Prof. B K Kanaujia Dr. Manoj Munde		Feedback session with the coordinator		Feedback Session & Group Discussion among participants 2.00 pm to 03.30 pm		Valedictory Session 03.30 pm