

## DECLARATION

The Information furnished above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the Course. If selected, I shall attend the course definitely for the entire duration. I also undertake the responsibility to inform the Director, UGC-Human Resource Development Centre, JNTUH, sufficiently in advance (at least one week), in case I am unable to attend the Course.

Place :

Date :

Signature of the Applicant  
Name:

## SPONSORSHIP CERTIFICATE

Certified that \_\_\_\_\_ is a regular employee of our institution since \_\_\_\_\_, and is hereby sponsored for the Refresher Course on “**Advances in Materials Science and Applications**”, at UGC –Human Resource Development Centre, JNTU Hyderabad during the period **15-07-2019 to 27-07-2019**. From the year \_\_\_\_\_, our College is affiliated to \_\_\_\_\_ University, which is approved by the UGC. Our College is \_\_\_\_\_ (included / not included) under 2(f) & 12(b) of UGC act. He /She will be permitted to attend the course without fail, if selected.

Signature of the Registrar /  
Principal / Director with Seal

Place:

Date :

### **Note to Sponsoring Authority:**

- It is mandatory that the sponsored teachers, **if selected**, should be deputed for the Course.

### **Financial Assistance:**

The outstation teacher-participants may be paid upto a limit of A/C III tier railway fare (all trains) or A/C deluxe bus fare **on production of tickets**.

### **Accommodation:**

Accommodation will be provided to the non-local participants at University Guest House of JNTUH, Kukatpally, Hyderabad.

### **Venue:**

UGC-Human Resource Development Centre, JNTU University Hyderabad, Kukatpally, Hyderabad - 500 085.

### **Important Dates:**

Last date for Receipt of Application : **06-07-2019**  
at UGC - HRDC, JNTUH, Hyderabad

Intimation of Selection to the : **08-07-2019**  
candidates through e-mail/web/letter

Confirmation by Participants : **09-07-2019**  
by e-mail / FAX / Letter

Course Commencement : **15-07-2019**

**Note:** Participants are requested to look into website regularly for Selection List and for any other important information. **Even if the hard copy of the selection letter is not received by the selected participant, web information can be taken as authentic and he / she can attend the Course by producing the relieving letter from the concerned authorities.**

### **Address for all Correspondence:**

#### **The Director**

UGC – Human Resource Development Centre,  
JNTU Hyderabad  
Kukatpally, Hyderabad - 500 085  
Telangana State, INDIA.

040- 23151610

040 - 23158661-4 Extn. 2310 / 2316 / 2312 / 2313

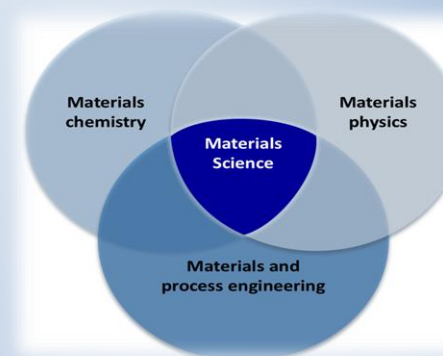
Mobile: 8008103814 (All working days from 10.30 am to 5.00 pm only)

e-mail: directorhrdcjntuh@jntuh.ac.in

web: www.jntuhhrdc.in

# Refresher Course on “Advances in Materials Science and Applications”

**(15-07-2019 to 27-07-2019)**



**Coordinator:**

**Dr. K. Vijaya Kumar**

Professor, Department of Physics,  
JNTUH College of Engineering Sultanpur,  
Pulkal (M), Sangareddy-District,  
502 273, Telangana State, India.

Sponsored by  
**University Grants Commission**

Organized by



**UGC-HUMAN RESOURCE DEVELOPMENT CENTRE**  
Jawaharlal Nehru Technological University Hyderabad  
Kukatpally, Hyderabad - 500 085  
Telangana State, INDIA

### Introduction:

The UGC-Human Resource Development Centre (formerly known as UGC-Academic Staff College), Jawaharlal Nehru Technological University Hyderabad, was established in the year 2000 and sponsored by University Grants Commission.

The UGC-Human Resource Development Centre organizes Orientation Programmes, Refresher Courses, Short Term Courses and Workshops on thrust areas for in-service teachers and also for newly appointed teaching faculty on a regular basis.

### The Refresher Course will enable the teachers to:

- Provide opportunities for teachers in service, to exchange experience with their peers and learn mutually from each other;
- Provide a forum for serving teachers to keep themselves abreast of the latest advances in various subjects;
- Create the culture of learning and self improvement among the teachers;
- Provide opportunities to further widen their knowledge and to pursue research studies, and
- Give an introduction to new methods and innovations in higher education and enlighten them so that the participants can in turn develop their own innovative methods of instruction.

During the current academic year 2019-2020, a Two-Week Refresher Course on “**Advances in Materials Science and Applications**” is proposed to be organized during **15-07-2019 to 27-07-2018**, in the campus of JNT University Hyderabad. The number of participants is limited to a maximum of 40, and the selection will be based on the priority of ‘first -come-first-serve’.

### Eligibility:

- **Faculty members working in universities and colleges** that are included under Section 2(f) of the UGC Act, even though they may not yet be fit under Section 12 (B), may be invited to participate in the orientation and refresher courses. The teachers of colleges that do not yet come within the purview of Section 2(f), but have been affiliated to a university for at least five years, will be permitted to participate in the courses.
- **Faculty from the departments of Physics, Chemistry and Materials Science.**
- Teachers have to be sponsored by the concerned Principal of the College / Head of the Institution for considering the participation in the Course.
- It is mandatory that sponsored teachers, if selected, should participate in the Course.

- **Part-Time/Adhoc/Temporary/Contract Teachers** who have been teaching for at least three academic sessions in an Institution which has been affiliated to a University for at least two years may be permitted to participate in the Course.

### Registration Fee:

Every Teacher Participant shall pay an admission fee (non-refundable) of Rs. 1000/- through D.D. in favor of Director, UGC-Human Resource Development Centre, JNT University Hyderabad, payable at Hyderabad, along with the through proper channel application.

### How to Apply:

A filled-in form of application duly signed by the faculty member and forwarded by the Head of the institution, along with Demand Draft, should reach the Director, UGC-HRDC, JNTUH, on or before 06-07-2019.

### Confirmation by Participants:

Confirmation by Participants is a must, as per the date specified overleaf. If the confirmed number of participants is less than 30, the course may be re-scheduled.

### Main Subject Contents:

- **Main Subject Contents:**
- **Synthesis & Processing**
- **Ceramics & Glasses**
- **Composite Materials**
- **Magnetic Materials**
- **Functional Materials**
- **Energy Materials**
- **Materials Chemistry**
- **Materials Mechanics**

\* *Contents may vary slightly.*

### Note:

During the course, each teacher-participant will be required to present a seminar presentation and also work on a mini project on important topics related to the theme of this course.

### Faculty:

Resources persons are drawn from different Universities like IITH, HCU, OU, KU, JNTUH, R&D Institutes like ARCI, DMRL, CMET, IICT.

## APPLICATION FORM

### Refresher Course on

### “Advances in Materials Science and Applications”

1. Name: .....
2. Date of Birth & Age: .....
3. Gender (M / F): .....
4. Qualifications:.....
5. Category: SC/ST/OBC/Any other.
6. Teaching Experience:.....
7. a) Designation :  
b) Department:  
c) Pay Scale & Present Basic :
8. a) Institution :  
b) Affiliating University:
9. Whether your University/College is included under 2(f) & 12 (B) of UGC act: YES / NO
10. Address for Communication:  
.....  
.....  
.....
11. College Address:  
.....  
.....
12. Phones Nos:  
(O)..... (R).....  
MOBILE:..... Fax:.....  
E - mail ID: .....
13. D.D.No., Date and Bank details:  
.....
14. Nearest Railway Station :.....
15. Accommodation Required? YES / NO
16. Previous Participation in UGC-HRDC Orientation & Refresher Courses:

S. No	Course Title	Date	Place

Phone: 040-23151610  
Fax: 040-23156795  
Web : www.jntuhhrdc.in  
EMail:directorhrdcjntuh@jntuh.ac.in



**UGC-HUMAN RESOURCE DEVELOPMENT CENTRE**  
**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

(Establishment by Govt. Act No. 30 of 2008)

Kukatpally, Hyderabad – 500 085, Telangana State, India.

**Dr. G.K. VISWANADH**

B.E (Civil), M.E.(Hydraulics), Ph.D., F.I.E.

Professor of Civil Engineering &

**DIRECTOR**

Lr. No. JNTUH/UGC-HRDC/RC-AMS/2019-20

Date: 08-07-2019

Dear Participants,

Sub: UGC-HRDC, JNTUH, Hyderabad - Two Weeks Refresher Course on “Advances in Materials Science and Applications” from 15-07-2019 to 27-07-2019 – Selection for attending the Programme– Intimation – Reg.

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This is with reference to your hardcopy/online application expressing interest in participating in the Refresher Course on “Advances in Materials Science and Applications” to be organized by the UGC Human Resource Development Centre, JNT University Hyderabad. We are happy to inform that, you have been provisionally selected for the above Course scheduled from 15-07-2019 to 27-07-2019.

Participants should submit the Relieving letter from the Head of the Institution at the time of Registration.

The course is scheduled from 10.00 AM on 15<sup>th</sup> July, 2019, at UGC Human Resource Development Centre, JNT University Hyderabad, Kukatpally, Hyderabad – 500 085. You are requested to report at 9.30 A.M. on 15-07-2019 for registration. Kindly confirm your participation through e-mail on or before 10-07-2019 without fail. Looking forward to meet you on 15-07-2019.

Yours sincerely

**DIRECTOR**

**Refresher Course on “Advances in Materials Science and Applications”  
(15-07-2019 to 27-07-2019)**

**List of selected participants:**

S No	Name of the Candidate	Department	College	Address
1	Dr. A. Kishore Kumar	Chemistry	Vardhaman College of Engineering	Kacharam, Shamshabad, Hyderabad, T.S.
2	Srinivas Reddy	Physics	Mahatma Gandhi Institute of Technology	Gandipet, Hyderabad, T.S.
3	Dr. Kumaraswamy Gullapelli	Chemistry	Mahatma Gandhi Institute of Technology	Gandipet, Hyderabad, T.S.
4	Dr. Anil Kumar K.M.	Physics	Milad-E-Sherief Memorial College	Near KSRTC Bus Stand, NH-47, Kayamkulam, Kerala
5	Dr. Katta Venkateswarlu	Chemistry	Yogi Vemana University	Kadapa, A.P.
6	Dr. L. Subramanyam Sarma	Chemistry	Yogi Vemana University	Kadapa, A.P.
7	N. Maramu	Physics	Kakatiya University of Technologu & Science	Hasanparthy, Warangal, T.S.
8	Dr. Saji S.k	Physics	University College	MG Road, Palayam, Thirvananthapuram, Kerala
9	Dr. S. Arul Mugilan	physics	Kamarajar Government Arts College	Surandai, Tirunelyeli Dist., Tamilnadu
10	Busi Anil kumar	Chemistry	Nanakram Bhagwandas Science College	Charkaman, Hyderabad, T.S.
11	Mehar Minnath	Chemistry	Jyothirgamaya DGM MES Mampad College	Malappuram, Kerala
12	Dr. Sai Chandra Jillepalli	Chemistry	JNTUH College of Engineering Sulthanpur	Sulthanpur, Pulkal, Sangareddy Dist., T.S.
13	Pravin Kharade	Chemistry	Karmaveer Hire Arts, Science, Commerce & Education College	Gargoti, Bhudargad, Kolhaapur, Maharashtra
14	Dr. Binli S	Physics	College o Engineering Trivandram	Thiruvananthapuram, Kerala
15	Dr. Y. Prashanthi	Chemistry	Mahatma Gandhi University	Nalgonda, T.S.
16	Dr. Mallikarjun Baswaraj Swami	Electronics	Maharashtra Udayagiri Mahavidyalaya	Nanded road, Somnathpur, Dist. Latur, Maharashtra
17	Vivek Verma	Physics	Hindu College	University of Delhi
18	M. Anand Pandarinath	Physics	Vidya Jyothi Institute of Technology	Aziz Nagar gate, C.B Post, Moinabad, Hyderabad, T.S.
19	Dr. Suresh Arjula	Mechanical Engineering	Jntuh College of Engineering Jagtial	Jagitial, Nachpally, T.S.
20	Jayashri B Mutagar	Physics	Shri. K.H. Patil Government First Grade College	Hulkoti, Karnataka

S No	Name of the Candidate	Department	College	Address
21	Prabha Salokhe	Chemistry	Yashwantrao Chavan Warana Mahavidyalaya	Warananagar, Maharashtra
22	Dr. G. Aravind	Physics	Methodist College of Engineering & Technology	King Koti Road, Abids, Hyderabad, T.S.
23	Dr. Santosh Jagdeo Uke	Physics	J.D. Patil Sangludkar Mahavidyalaya	Daryapur, Dist. Amravati, Maharashtra
24	Mahesh Rajendran	Physics	Vidya Jyothi Institute of Technology	Aziz Nagar gate, C.B Post, Moinabad, Hyderabad, T.S.
25	Rajendra Mungmode	Physics	Seth Kesarimal Porwal College of Arts and Science and Commerce	Kamptee, Nagpur, Maharashtra
26	Beede Suneelkumar M	Chemistry	Goytmm	Kalaburgi, Karnataka
27	Sudhakar Maske	Physics	Srimati. Indira Mahadev Behere College	Khed, Maharashtra
28	Shyamrao Bhagat	Chemistry	I.C.S. College of Arts Commerce and Science	Khed, Maharashtra
29	Nagaraju G	Mechanical Engineering	Rajiv Gandhi University of Knowledge Technologies	Basar, T.S.
30	V. Chandra Sekhara Rao	Mechanical Engineering	Rajiv Gandhi University of Knowledge Technologies	Basar, T.S.
31	Sudhakar Maske	Physics	Srimati. Indira Mahadev Behere College	Khed, Maharashtra
32	Shakeel Ahmed Md	Physics	Government First Grade College	Bhalki, Karnataka
33	Roopa Kulkarni	Chemistry	Government First Grade College	Kalaburagi, Karnataka
34	Mayadevi Kalgi	Physics	Government Science College	Nrupatunga Road, Bengaluru, Karnataka
35	Sara Durga Bhavani	Chemistry	Government Degree College	Zaheerabad, Ranga Reddy Dist., T.S.
36	Dr. Ravi Ramlu Vidule	Chemistry	SSGM College	Loha Dist., Nanded, Maharashtra
37	Dr. R. Vijaya Kumar	Materials Research Centre	IISc, Bangalore	Karnataka - 560012
38	Madderla Sarasija	Chemistry	University College of Science	Satavahana University, Malkapur Road, Karimnagar, T.S.
39	Pius Augustine	Physics	Sacred Heart College	Thevera, Kerala
40	Dr. Dharamendra Bhagawanji Dupare	Chemistry	Shri Dr. R.G. Rathod Arts and Science	Murtizapur, Di-Akola, Maharashtra

**Note:**

- The participants who have not submitted the original application through proper channel along with Demand Draft are requested to submit the scanned copy by 10-07-2019 and the original copy at the time of Registration on 15-07-2019.
- No Dearness Allowance will be paid to the participants, however local hospitality will be arranged by HRDC to all the participants.
- This course is being conducted based on the new draft guidelines of UGC, in case if there are any modifications, the same will be effected.

**DIRECTOR  
UGC-HRDC, JNTUH**

**UGC-sponsored Refresher Course on “Advances in Materials Science & Applications”  
(15-07-2019 to 27-07-2019)**

**1<sup>st</sup> week Time Table**

Date	10.00 to 11.30	11.45 to 1.15	2.00 to 3.30	3.45 to 5.15
15-07-2019 Monday	<b>Registration &amp; Inaugural Session</b>  Introduction and Overview of the Course By <b>Dr. K. Vijaya Kumar</b> Professor, Dept. Of Physics JNTUHCES, Sulthanpur, T.S.	<b>Graphene Composites</b> By <b>Dr. D. Suresh Babu</b> Retd. Professor, Dept of Physics, OU., Hyderabad	<b>Review of Solar Cell Technologies</b> By <b>Dr. D. Suresh Babu</b> Retd. Professor, Dept of Physics, OU., Hyderabad	<b>Role of Radar &amp; Lidar for atmospheric Research</b> By <b>Prof. I.V. Subba Reddy</b> Professor, GITAM University, Hyderabad
16-07-2019 Tuesday	<b>Composite Materials applications and testing issues and achievements in nano composites</b> by <b>Dr. K. Srinivas</b> Scientist, DMRL, Hyderabad	<b>Composite Materials applications and testing issues and achievements in nano composites</b> by <b>Dr. K. Srinivas</b> Scientist, DMRL, Hyderabad	<b>Advanced composites for Aerospace Applications</b> By <b>Dr. I. Srikanth</b> Scientist, DMRL, Hyderabad	<b>Achievements and Challenges of Nanocomposites</b> By <b>Dr. I. Srikanth</b> Scientist, DMRL, Hyderabad
17-07-2019 Wednesday	<b>Advanced Materials and Artificial Intelligence</b> By <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad	<b>Eternal Experimental Physics</b> By <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad	<b>Magnetic fluid nanostructures as an important class of biomedical functional nanomaterials</b> by <b>Dr. Narsing Rao Gade</b> Post-Doc. Fellow, Assoc. Professor, Dept. of Physics, MLRIT, Hyderabad	<b>Doppler weather radar for clouds and precipitation studies</b> By <b>Prof. I.V. Subba Reddy</b> Professor, GITAM University, Hyderabad
18-07-2019 Thursday	<b>NDT of SS Materials</b> By <b>Dr. S.V. Ranganayakulu</b> Professor in Physics, Dean R & D Guru Nank Institutions Technical Campus (GNITC). Hyderabad	<b>Quality Assurance of Weldments by Acoustic Emission Technique</b> By <b>Dr. S.V. Ranganayakulu</b> Professor in Physics, Dean R & D Guru Nank Institutions Technical Campus (GNITC), Hyderabad	<b>Surface Analysis by Photo Electron Spectroscopy</b> By <b>Dr. B. Sridhar</b> Senior Scientist, IICT, Hyderabad	<b>Nano Engineering Materials : Synthesis, Characterization and Applications</b> By <b>Dr. B. Sridhar</b> Senior Scientist, IICT, Hyderabad
19-07-2019 Friday	<b>Materials for Next Century</b> by <b>Dr. P. Venu Gopal Reddy</b> Retd. Professor, Osmania University, Hyderabad,	<b>Materials for Next Century</b> by <b>Dr. P. Venu Gopal Reddy</b> Retd. Professor, Osmania University, Hyderabad	<b>Lab. Session at Centre for Nano Science &amp; Technology, IST, JNTUH</b> By <b>Dr. K. Venkateswara Rao</b> Professor, CNST, IST, JNTUH	<b>Lab. Session at Centre for Nano Science &amp; Technology, IST, JNTUH</b> by <b>Dr. K. Venkateswara Rao</b> Professor, CNST, IST, JNTUH
20-07-2019 Saturday	<b>Introduction to spintronics and Heusler alloy thin films</b> By <b>Dr. S. Srinath</b> Professor, Dept. of Physics, HCU, Hyderabad, T.S.	<b>Data Science for Material Science Applications</b> By <b>Dr. Manoj Kumar</b> Dept. of Physics, HCU, Hyderabad	<b>Electronic Materials Processing</b> By <b>Dr. Y. Purushotham</b> Scientist, C-MET, Hyderabad	<b>Electronic Materials Processing</b> By <b>Dr. Y. Purushotham</b> Scientist, C-MET, Hyderabad

Tea break

Lunch Break

TEA BREAK

# UGC-sponsored Refresher Course on “Advances in Materials Science & Applications”

(15-07-2019 to 27-07-2019)

## 2<sup>nd</sup> week Time Table

Date	10.00 to 11.30		11.45 to 1.15		2.00 to 3.30		3.45 to 5.15
22-07-2019 Monday	<b>Becoming a better teacher</b> By <b>Prof. V. Viswanadham</b> Retd. Professor, O.U, Hyderabad	Tea break	<b>Becoming a better teacher</b> By <b>Prof. V. Viswanadham</b> Retd. Professor, O.U, Hyderabad	Lunch Break	<b>Presentation Skills</b> By <b>Mr. Rajeev Kachara</b> CEO, RKs Brainstorm, Hyderabad & Soft Skills Trainer	TEA BREAK	<b>Presentation Skills</b> By <b>Mr. Rajeev Kachara</b> CEO, RKs Brainstorm, Hyderabad & Soft Skills Trainer
23-07-2019 Tuesday	<b>Ferromagnetic/Ferroelectric Heterostructured Multiferroics for Low-power Consumption Applications</b> By <b>Dr. G. Venkataiah</b> Asst. Professor, HCU, Hyderabad		<b>X-Ray Diffraction: A Tool to Investigate Crystal Structure and Ferroelectric Domain Configurations</b> By <b>Dr. G. Venkataiah</b> Asst. Professor, HCU, Hyderabad		<b>Natural products : Isolation, Characterization &amp; Applications</b> By <b>Dr. K. Suresh Babu</b> Professor, MLRITM, Hyderabad		<b>Data Science with Science Data</b> By <b>Dr. Manoj Kumar</b> Dept. of physics, HCU, Hyderabad
24-07-2019 Wednesday	<b>Seminar Presentations by the Participants (S. No. 1 to 23)</b> <b>Subject Expert</b> <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad		<b>Seminar Presentations by the Participants</b>  <b>Subject Expert</b> <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad		<b>Seminar Presentations by the Participants</b>  <b>Subject Expert</b> <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad		<b>Seminar Presentations by the Participants</b>  <b>Subject Expert</b> <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad
25-07-2019 Thursday	<b>Seminar Presentations by the Participants (S. No. 24 to 33)</b>  <b>Subject Expert</b> <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad		<b>Seminar Presentations by the Participants</b>  <b>Subject Expert</b> <b>Dr. K. Venugopal Reddy</b> Retd. Professor, Dept. of Physics, Osmania University, Hyderabad		<b>Micro Teaching Evaluation</b>  <b>Expert:</b> <b>Dr. G. Bhuvanewara Lakshmi</b> Professor, Dept. of Education & Education Technology, School of Social Science, HCU, Hyderabad		<b>Micro Teaching Evaluation</b>  <b>Expert:</b> <b>Dr. G. Bhuvanewara Lakshmi</b> Professor, Dept. of Education & Education Technology, School of Social Science, HCU, Hyderabad
26-07-2019 Friday	<b>Micro Teaching Evaluation</b>  <b>Expert:</b> <b>Dr. G. Bhuvanewara Lakshmi</b> Professor, Dept. of Education & Education Technology, School of Social Science, HCU, Hyderabad		<b>Micro Teaching Evaluation</b>  <b>Expert:</b> <b>Dr. G. Bhuvanewara Lakshmi</b> Professor, Dept. of Education & Education Technology, School of Social Science, HCU, Hyderabad		<b>Advanced Ceramics and their Applications</b> By <b>Dr. Y. Srinivas Rao</b> Scientist F, ARCI, Hyderabad		<b>Technology Development-Issues involved-Experiences</b> By <b>Dr. Y. Srinivas Rao</b> Scientist F, ARCI, Hyderabad
27-07-2019 Saturday	<b>Cyber Crimes, Forensics and Security</b> By <b>Sri U. Ram Mohan IPS</b> SP, CID, Cyber Crimes, A.P.		<b>Cyber Crimes, Forensics and Security</b> By <b>Sri U. Ram Mohan IPS</b> SP, CID, Cyber Crimes, A.P.		<b>Cyber Crimes, Forensics and Security</b> By <b>Sri U. Ram Mohan IPS</b> SP, CID, Cyber Crimes, A.P.		<b>Valedictory session</b> →



Name of the Course	Schedule	No. of days	Sponsored by	No. of Participants
Refresher Course - Advances Materials Science and Applications	15.07.2019 to 27.07.2019	12	UGC	40

**Group Photo**

