### **About University of Rajasthan:**

On the 8th of January 1947, the University of Rajputana appeared like a little star on the educational horizon of pre-independent India and now known as "University of Rajasthan". It has now accorded status of UGC - University with Potential for Excellence.

University Central Campus is spread over 338.14 acres. In the beginning, the University's jurisdiction encompassed the entire state. With the creation of other Universities, its affiliating jurisdiction was modified in geographical terms and presently UG and PG Colleges from Jaipur and Dausa districts affiliated to it. The University is still the hub of Higher Education in Rajasthan and attracts students from all over Rajasthan, rest of India and from abroad. The University believes that in its journey of 71 years, it has brought about a transformation in Higher Education in Rajasthan and the country at large.

### **About the Department:**

Department of Physics was established in the year 1960. The department has been given status of "Centre for Advanced Studies" (CAS) by University Grants Commission for (2015-20) with Condensed Matter Physics and High energy Physics as thrust areas. The Department offers M.Sc. (Physics) four semester programs and Ph.D. program in different experimental and theoretical fields. The department received support under FIST Phase-III Level-2 from DST, Govt. of India. Department is also a beneficiary unit in PURSE support granted by DST and UPE status granted by UGC to the university. In addition to these, individual research groups of the department have received financial support from several funding agencies like UGC, DST, SERB, DIET, BRNS, DRDO, CSIR, MNES, UGC-DAE-CSR, IUAC, BSR and ISRO etc. M.Sc. and research laboratories of this Department are well equipped. Some of the major equipment and facilities available in the Department include: X-ray diffract meter for study of powder and thin film materials and also EDAX facility, Scanning Probe Microscope (STM & AFM), Low energy electron accelerator, Vibrating sample magnetometer (20 K-1000 K), Mossbauer spectrometers with temperature variation (80K- 1000 K) and high pressures up to 10 GPa, resistivity measurement, High field Magnet Facility (8T), X-ray photo electron spectroscopy set-up, 2.5 m long neutron time of flight facility, Impedance analyzer, Vector network analyzer and Spectrum Analyzer Microwave signal generators EM simulation software's etc. Facilities available at USIC center are also accessible to the faculty members of this department.

### **About the Conference:**

Department of Physics, University of Rajasthan, Jaipur is going to organize two days National Conference on Advances in Material Science and Technology (NCAMST-2020) on 29<sup>th</sup> February and 1<sup>st</sup> March 2020. The objective of the National Conference is to provide an interdisciplinary platform to research scholars, students, teachers and technologist to share and discuss different current aspects related with material science and technology.

Materials science and technology (MST) is a multidisciplinary approach to science that involves designing, choosing and using. Materials science is a syncretic discipline hybridizing metallurgy, ceramics, solid-state physics, and chemistry. Breakthroughs in materials science are likely to affect the future of technology significantly. The underlying relationship between processing-structuring-properties of materials is called the materials paradigm. This paradigm is used to understand variety of research areas, including nanotechnology, biomaterials and metallurgy, energy storage materials and their products. Such investigations are the key aims for understanding. Therefore, the motive of this conference is to discuss the new developments in the field of material science and technology.

### **About the Pink City 'Jaipur'**

Jaipur is the capital of Rajasthan State. It evokes the royal nostalagia that once ruled the region and founded it in 1727. It is also called "Pink City" due to trademark color of its building. At the center of its stately planned street grid stands the opulent, colonnaded City Palace complex. Jaipur is a major tourist destination in *India* forming a part of the *Golden Triangle*. Famous tourist places of Jaipur are Hawa Mahal, Jal Mahal, City Place, Albert Hall, Amer Fort, Jantar Mantar, Nahargarh Fort, Jaigarh Fort, Birla Mandir, Galataji, Govind devji temple, Moti Dungari, Garh Ganesh Temple, Wildlife tourism (Lion safari) at Nahargrah fort and Zoo.

Jaipur has a hot *semi-arid climate* under Koppen's climate classification. Temperature remains relatively higher during summer from April to early July. During monsoon season, frequent heavy rains and thunderstorms are common. The winter months of November to February are mild and pleasant, with average temperatures ranging from 10 to 18 °C.

National Conference On

# Advances in Materials Science and Technology (NCAMST-2020)



# February 29 and March 1, 2020



# Organized By:

Department of Physics, University of Rajasthan, Jaipur- 302 004

e-mail: ncamst2020@gmail.com

# **Organizing Committee**

### **PATRON**

Prof. R. K. Kothari

Hon'ble Vice-Chancellor

### **CHAIRPERSON**

Prof. Deepak Bhatnagar *Head, Department of Physics* 

### **CONVENER**

Dr. Mangej Singh

### **CO- CONVENER**

Dr. Manisha Gupta

Dr. Sarita Kumari

### **ORGANIZING SECRETARIES**

Dr. Mamraj Singh

Dr. Narendra Jakhar

Dr. Amanpal Singh Clair

### **TREASURER**

Dr. Pura Ram

### **JOINT SECRETARIES**

Dr. Sunita Mahawar

Dr. Suchitra Yadav

# **Tentative Invited Speakers**

- Dr. P.K. Khanna, Director, CEERI, Pilani
- Prof. Sujeet Chaudhary, IIT Delhi
- Dr. A.K. Dharmadhikari, TIFR, Mumbai
- Dr. R.S. Beniwal, CSIR New Delhi
- Prof. Vinay Gupta, University of Delhi, Delhi
- Prof. N.L. Singh, MSU, Baroda, Gujrat
- Prof. Y.K. Vijay, IIS University, Jaipur
- Prof. B.L. Ahuja, MLSU, Udaipur
- Prof. Mahendra Dhaka, MLSU, Udaipur
- Prof. R.K. Sengwa, JNVU, Jodhpur
- Prof. Kedar Singh, JNU, Delhi
- Prof. Ramphal Sharma, *BAM University*, *Aurangabad*, *Maharashtra*
- Prof. Ajay Choudhary, *Govt. VISH Univ. Amravati, Maharashta*
- Prof. G.D. Sharma, LNMIT, Jaipur
- Dr. Fouran Singh, IUAC, New Delhi
- Dr. P.K. Kulhari, *IUAC*, *New Delhi*
- Dr. Rajendra Dhaka, IIT, Delhi
- Dr. Mukesh Kumar, Kurukshetra University, Kurukshetra, Haryana

# **Local Organizing Committee**

- Mr. Arvind Kumar, UOR, Jaipur
- Dr. Bharat Lal Meena, UOR, Jaipur
- Dr. Chhagan Lal, UOR, Jaipur
- Dr. Dalpat Meena, UOR, Jaipur
- Mr. Dinesh K. Yadav, UOR, Jaipur
- Dr. Dinesh Kumar, UOR, Jaipur
- Dr. H.S. Palsania, UOR, Jaipur
- Dr. J.S. Saini, UOR, Jaipur
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- Ms. Jyoti Saini, UOR, Jaipur
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- Dr. R.K. Singhal, UOR, Jaipur
- Dr. Ramvir Singh, UOR, Jaipur
- Dr. Rashmi Raniwala, UOR, Jaipur
- Ms. Rekha Yadav, *UOR*, *Jaipur*
- Dr. S.K. Gupta, *UOR*, *Jaipur*
- Dr. S.N. Dolia, UOR, Jaipur
- Dr. Sanjay Kumar, *UOR*, *Jaipur*
- Mr. Sanjeev Kumar, UOR, Jaipur
- Ms. Summaiyya Saleem, UOR, Jaipur
- Dr. Subhash Chandra, UOR, Jaipur
- Prof. Sudhir Raniwala, UOR, Jaipur
- Dr. V.K. Saxena, UOR, Jaipur

# **Topics to Cover in NCAMST-2020**

- > Hydrogen Storage Materials
- ➤ Solar Energy Materials
- Semiconductors & Technology
- > Sensors, Bio-Sensor Materials
- ➤ Magnetic, Ceramic and Glass Materials
- Nanocomposites, 2D and Functional Materials
- > Thermo and Piezoelectric Materials
- Dielectrics, Supercapacitors,Superconducting Materials
- > Hydride and Lithium Ion Batteries
- Carbon based Materials
- Sustainable Materials for Reducing Environmental Pollution
- Emerging Technologies in MaterialsScience

# Call for Abstract of Papers

Brief abstract of contributed papers in about 350 words for oral/poster presentations are invited for the National Conference on Advances in Material Science and Technology (NCAMST) to be organized in Department of Physics during 29<sup>th</sup> February and 1<sup>st</sup> March 2020. The abstract will include the title of paper (Times New Roman, Bold, 16 pt), author(s) name (Times New Roman, 12 pt, Bold,), affiliation and e-mail address of corresponding author (Times New Roman, Normal, 10 pt, italic), Text (1.5 line spacing, Times New Roman, 12 pt) on A4 size paper in MS Word (for help download the template). The abstract may be sent to the NCAMST Secretariat in electronic form ncamst2020@gmail.com up to, 20th February 2020. The acceptance of the abstract and mode of presentation (oral/poster) will be communicated to the author via email.

# Registration

Registration fees may be paid through **Demand Draft** in favor of **'Head, Department of Physics, UOR, Jaipur',** payable at **Jaipur** or the **receipt of electronic transfer** (using NEFT/RTGS) in account of **'Head, Department of Physics, UOR, Jaipur'**, A/c No. 674705002534, IFSC Code – ICIC0006747, ICICI Bank, University Campus, Bapu Nagar Jaipur with the dully filled Registration Form to the "Convener, NCAMST-2020, Department of Physics, University of Rajasthan Jaipur, JLN Marg Jaipur-302004". The registration form with registration fee must reach latest by **25**<sup>th</sup> **February 2020**. There will be on-spot registration with extra charges.

Faculty/Scientists/Academician/Industry: 1500 Rs. Students/Scholars/Accompanying person: 1000 Rs. On-spot Registration charges: Rs 500 extra in both categories

## Accommodations

Accommodation to invited speakers/ guests will be provided by the organizers of the conference in university guest house. Other participants will have to make their own arrangements for their stay during the conference. Enough hotels/ guest houses are available close to University of Rajasthan campus. Limited accommodation in University Guest House may also be arranged by the organizers on prior request and advance payment. The guest house charges are Rs. 1265/- per day during the conference period on sharing basis.

# **Important Dates**

Last date of Abstract Submission: 
✓ 20<sup>th</sup> February 2020

Last date of Registration: 
✓ 25<sup>th</sup> February 2020

# **Contact Information**

Dr. Mangej Singh

Convener, NCAMST – 2020 Mobile: +91-9829166219

Email: mangej.singh@gmail.com

ncamst2020@gmail.com

Registration	No.
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# **Registration Form**



### NATIONAL CONFERENCE

on

# Advances in Materials Science and Technology (NCAMST-2020)

### February 29 and March 1, 2020

Venue: Department of Physics, University of Rajasthan, Jaipur

Name:	
Designation:	
Institution:	
Address for Communication:	
Title of Contributed Paper:	
Whether presenting paper- YES/NO	Presentation: Oral /Poster
By Demand Draft (All DD should be in favor of 'Head Department of Physics, UOR, Jaipur' payable at Jaipur)	By NEFT/RTGS Transfer (A/C Name: 'Head Department of Physics, UOR, Jaipur, A/C No.:674705002534, Bank: ICICI Bank, IFSC code:ICIC0006747, Bank Address: ICICI Bank, University Campus Bapu Nagar Jaipur)
DD NO.:  Date of Issue:  Amount:	UTR No.:
Bank:	(LTD No. / Country alia companies and the time of
Branch: Place:	(UTR No. / Counter slip compulsory at the time of registration)
By Cash (Fee Deposition at desk in Conferen	
	Sr. No. Date
Date:	Signature of Candidate

**Important NOTE:** Please send dully filled Registration form (scanned copy) with demand draft/online payment receipt of registration fee at email: <a href="mailto:ncamst2020@gmail.com">ncamst2020@gmail.com</a> or 'Convener NCAMST-2020, Department of Physics, University of Rajasthan, JLN Marg Jaipur-302004 Rajasthan'.