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

On the 8<sup>th</sup> 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 also 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 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 equipments 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 day National Conference on Recent Advances in Material Science and Technology (NCRAMST-2019) on 4-5 February, 2019. 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

# Recent Advances in Materials Science and Technology (NCRAMST-2019) February 4-5, 2019



# Organized By:

Department of Physics,

University of Rajasthan, Jaipur- 302 004

Phone No. 0141-2711239

E-mail: ncramst2019@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

## **Organizing Secretaries**

Dr. H.S. Palsania

Dr. S.K. Gupta

#### **Treasurer**

Dr. Narendra Jakhar

## Joint Secretaries

Dr. Mamraj Singh

Dr. Pura Ram

Dr. Sunita Mahawar

# **Tentative Invited Speakers**

Prof. R.P. Tandon, Department of Physics, Delhi University, Delhi

Prof. Vinay Gupta, Department of Physics, Delhi University, Delhi

Prof. N.L.Singh, Department of Physics, MSUniversity of Baroda

Prof. P.K. Jha, Department of Physics, MSUniversity of Baroda

Prof. Y.K. Vijay, Vivekananda Global University, Jaipur Prof. Pratibha Sharma, Department of Energy IIT Bombay, Mumbai

Prof. P.K. Dutta, Indian Institute of Technology, Kharagpur Prof. B.L. Ahuja, Professor, Department of Physics, MLSU, Udaipur

Prof. Mahendra Dhaka, Department of Physics, MLSU, Udaipur

Prof. Sudish Kumar, Department of Physics, MLSU, Udaipur

Prof. R.J. Sengwa, Department of Physics, JNVU, Jodhpur

Prof. Kedar Singh, Department of Physics, JNU, Delhi

Prof. Ramphal Sharma, BAM Univ. Aurangabad

Prof. Ajay Choudhary, Govt. VISH Univ. Amravati,

Prof. G.D. Sharma, LNMIT, Jaipur

Dr. Foreign Singh, Scientist, Inter University Accelerator centre, New Delhi

Dr. P.K. Kulhari, Scientist, Inter University Accelerator centre, New Delhi

Dr. Manju Unnikrishnan, CSIR-IIMT Bhubaneswar

Dr. Rajendra Dhaka, Department of Physics, IIT, Delhi

Dr. Pankaj Podar, Scientist National Chemical Laboratory,

# **Local Organizing Committee**

Amanpal Singh Clair, Department of Physics, UOR, Jaipur Arvind Kumar, Department of Physics, UOR, Jaipur Bharat Lal Meena, Department of Physics, UOR, Jaipur Chhagan Lal, Department of Physics, UOR, Jaipur Dalpat Meena, Department of Physics, UOR, Jaipur J.S. Saini, Department of Physics, UOR, Jaipur K.V.R. Rao, Department of Physics, UOR, Jaipur Kanchan Gehlot, Department of Physics, UOR, Jaipur Kishan Kumar, Department of Physics, UOR, Jaipur M.K. Gora, Department of Physics, UOR, Jaipur M.K. Mishra, Department of Physics, UOR, Jaipur Manisha Gupta, Department of Physics, UOR, Jaipur R.K. Singhal, Department of Physics, UOR, Jaipur Ramvir Singh, Department of Physics, UOR, Jaipur Rashmi Raniwala, Department of Physics, UOR, Jaipur S.N. Dolia, Department of Physics, UOR, Jaipur Sanjay Kumar, Department of Physics, UOR, Jaipur Sanjeev Kumar, Department of Physics, UOR, Jaipur Sarita Kumari, Department of Physics, UOR, Jaipur Subhash Chandra, Department of Physics, UOR, Jaipur V.K. Saxena, Department of Physics, UOR, Jaipur

## **Topics to cover in NCRAMST-2019**

- Condensed Matter and Material Science
- Hydrogen storage materials (Metals/alloys/nano materials/thin films)
- Solar energy materials (inorganic/organic/hybrid)
- Semiconductors & technology
- Sensors, Bio-sensors material
- Magnetic, Ceramics and glasses materials
- Nanocomposites, Smart and functional materials
- Thermo and Piezoelectric materials
- Dielectrics, Supercapacitors, superconductivity materials
- Hydride and lithium ion Batteries
- Material Science & Engineering
- · Thin films technology
- Carbon materials as like Graphene, graphene oxides, reduced-GO
- Current environmental Pollution and Management
- Emerging technologies in material sciences

## **Call for Abstract of Papers**

Brief abstract of contributed papers in about 500 words for oral/poster presentations are invited for the National Conference on Recent Advances in Material Science and Technology (NCRAMST) to be organized in Department of Physics during 4 - 5<sup>th</sup> February, 2019. The abstract will include the title of paper (Bold, 14 pt, Times New Roman), author(s) name, affiliation, e-mail address of corresponding author (Normal, 10 pt, Times New Roman), keywords (maximum five) in MS Word (single line spacing, Times New Roman, Font size -12 pt). The margin will be one inch on all side of A4 size paper. The abstract may be sent to the Secretariat in electronic NCRAMST form ncramst2019@gmail.com upto, 26th January, 2019. Selected papers will be presented through oral presentations while other papers will be presented in poster form.

# 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, NCRAMST-2019, Department of Physics, University of Rajasthan Jaipur, JLN Marg Jaipur-302004". The registration form with registration fee must to reach latest **by 31**<sup>st</sup> **January**, **2019**. There will be on-spot registration with extra charges.

Faculty/Scientists/Academician: 1000 Rs.

Students/Scholars/Accompanying person: 600 Rs.

On-spot Registration charges: Rs 400 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: 26<sup>th</sup> January, 2019 Last date of Registration: 31<sup>st</sup> January, 2019

#### **Contact Information**

#### Dr. Mangej Singh

Convener, NCRAMST – 2019 Mobile: +91-9829166219 Email: mangej.singh@gmail.com ncramst2019@gmail.com

#### Dr. S.K. Gupta

Organizing Secretary
Mobile: +91- 9414069309
Email: <a href="mailto:shail2405@gmail.com">shail2405@gmail.com</a>

Department of Physics, University of Rajasthan Jaipur-302004