

Preface

High Materials Entropy (HEM) have emerged as one of the fastest growing research fields in the materials science and After engineering. its discovery in 2004, which originally focused on forming solid solutions based on equiatomic compositions of metallic alloys, the field has expanded to cover multitude of materials and affiliated phenomena. The great potential for unfolding the fundamental effects of mixing large number of components in high concentrations the nogu evolution of microstructures and properties of materials and their speculated

engineering applications have attracted the attention of both scientists and engineers equally. Some of the recent topics of discussion in the HEM community include multicomponent diffusion and phase equilibria; mechanical. magnetic electrical and properties of HEMs: HEM coatings; nanocrystalline HEMs; interstitial hardening of HEMs and many more. In order to take stock of the а advancements and progress in the science and applications of HEMs, IWHEM 2020 is planned at Indian Institute of Technology Kanpur (IITK) . The intention of this workshop is to discuss the challenges and opportunities

offered by the field with a special focus the on fundamental understanding of thermodynamics, phase transformations, possibility of phase predictions. multicomponent diffusion and applications to design their synthesis novel methods. microstructures and mechanical and functional properties HEM. The deliberations will take place in the pristine and serene atmosphere of the green campus of IITK filled with academic flavour during March 7-8, 2020.

It is worth mentioning that IWHEM series of workshop is an Indian initiative. The previous two worshops were held at Chennai(2015) and Hyderabad (2017).

Conference Themes

- > Materials and Process Development of Medium and High Entropy Materials
- Phase Equilibria and Phase Transformations
- Multicomponent Diffusion
- ➤ Mechanical, Electrical and Magnetic Properties of HEMs
- Materials Characterization
- Modelling and Simulations
- High Entropy Ceramics and Composites
- > High Entropy Coatings
- Technologies and Applications of HEMs

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Call for Abstract

The conference will feature technical presentations by eminent speakers from R&D Academic institutions laboratories. Industries from India and abroad, as invited presentations. It will also have contributory papers by researchers and students in the form of poster presentations. Abstracts of the proposed contributory papers (not more than 400 words) should reach us by e-mail before 31st January, 2020. All communication with respect to the submission and acceptance of the abstracts should be sent to following address:

Email:iwhem2020@gmail.com

Registration

Interested participants are requested to register for conference by providing the following details: Name, Designation, Contact Address, Phone No. & Email, Nominal Fee for registration is required by the participants. This fee in INR 2500 for Indian participants and US \$ 100 by the Foreign participants..

Important Dates

Abstracts Submission up to Jan 31, 2020 Acceptance by Feb 15, 2020 Registration deadline Feb 20, 2020

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Welcome to Kanpur









Indian Institute of Technology Kanpur is situated in the western part of Kanpur city. It is a serene and wooded campus housing academic as well as residential places for students, staff and faculty. Nestling on the banks of the Kanpur eternal Ganga, stands as one of North India's major industrial centers with its own historical, religious and commercial importance. Nearest airport is Chaudhary Singh Airport, Charan Amausi, Lucknow, 90 kms from the IIT Kanpur campus.

It takes about one and half hours of drive to reach the campus. Kanpur is connected to all the major railway stations of the country by express, passenger super-fast and trains. Kanpur is connected by road with all the major cities of the country. It is situated on National Highway No. 2 on the Delhi-Agra-Allahabad-Calcutta route and on National Highway No. 25 on the Lucknow-Jhansi-Shivpuri route. Kanpur experiences a typical version of a humid subtropical climate that resembles the climate of Delhi to some degree.

Best time to visit Kanpur is either October–November or February– March. The city of Kanpur attracts tourists for its age old monuments and varied other constructions, which reflect the history of the place. Besides that, this city of Uttar Pradesh houses many parks, gardens, water bodies and religious places of visit. Some of them are Nana Rao Park, J.K.Temple, Moti Jheel. Allen Forest Zoo. Dwarakadhish Temple, Kamla Retreat. Jain Glass Temple, Massacre Ghat.