Patron:

Prof. N.K. Taneja Vice-Chancellor CCSU, Meerut, India

Advisory Committee

Co- Patron:

Prof. Y. Vimala

Pro- Vice-Chancellor

CCSU, Meerut, India

University of

Vice-Chancellor.

Prof. P. K. Bajpai

Prof. R.K. Soni

CCSU, Meerut, India

CCSU, Meerut, India

CCSU, Meerut, India

Prof. P.K. Sharma

Prof. Bhupendra

GGV, Bilaspur, India

USA

India

Prof. Tankeshwar Kumar Vice-Chancellor, GJUS&T Hisar, India Prof. K.B. Pandeya President, IAPS Former Vice-Chancellor JRH University Chitrakoot, India **Prof. Bhu Dev Sharma** Clark Atlanta Univ, USA Prof. Ajay kumar Universidad Metropolitana SanJuan, USA Prof. H. S. Dhami VC, KU, Nainital, India

Local Advisory Committee

Prof. Rakesh Gupta CCSU, Meerut, India Prof. M. K. Gupta CCSU, Meerut, India Prof. Sanjay Bhardwaj CCSU, Meerut, India

Organizing Committee

Convener: Prof. Jaimala Head, Dept. of Mathematics **Co-Conveners:** Prof. Rakesh Kumar Department of Physics Prof. Hare Krishna Department of Statistics Prof. R.K. Soni Department of Chemistry Prof. S.R. Singh Department of Mathematics

Organizing Secretary: Dr. Mukesh Kumar Sharma Department of Mathematics

About IAPS

For the sake of the growth of scientific and technological knowledge for the betterment of human society through a common platform to the scientists of different subjects of Physical, Mathematical and Earth Sciences, International Academy of Physical Sciences (IAPS) was founded with its headquarters at Allahabad on December 4, 1994. It is a scientific organization which has already registered its place of repute in the academic society. A large number of scientists

Prof. M. N. Boyom Prof. Madhu Jain IIT, Roorkee, India Montplier, France **Prof. Avinash C Pandev** Prof. Carmen A. Vega IUAC, India University of Puerto, Prof. J.P. Mittal SAARC, BARC **Prof. P. N. Pandey** Prof. S.C. Agrawal (Retd.) CCSU, Meerut, India NGBU, Allahabad, Prof. D. Pandey (Retd.) CCSU, Meerut, India **Prof. G.C. Sharma Prof. Rahul Singhal** Ex Pro-Vice Chancellor, Central Connecticut State DBRAU, Agra, India University, USA

Prof. Beer Pal CCSU, Meerut, India **Prof. S. S. Gaurav** CCSU, Meerut, India Dr. Rup Narayan CCSU, Meerut, India

Members: Dr. Kanchan Singh, Dept. of Geography Dr. Anil Malik Dept. of Physics **Dr. Pradeep Chaudhry** Dept. of Statistics Dr. Nazia Tarannum Dept. of Chemistry Dr. Sandeep Kumar Dept. of Mathematics Dr. Saru Kumari Dept. of Mathematics Dr. Yogendra Gautam Dept. of Physics Dr.Vandana, MCA, SCRIET Er. Milind, CS, SCRIET Er. Laxmi Shankar, IT, SCRIET Er. Privank Sirohi, CS, SCRIET Er.Manav Bansal, IT, SCRIET

in India and abroad are involved in it through membership, fellowship and other academic activities. Its publications are helping in the isotropic expansion of scientific knowledge. It has organized twenty-three international conferences and several symposia on interdisciplinary themes in collaboration with reputed institutions in India and abroad so far.

Executive Council of International Academy of Physical Sciences

Chief Editor, Journal IAPS:

Prof. D. Pandey, Noida, India

Executive Secretary:

Executive Counselors:

Prof. Hare Krishna

Mob: +91-9897142947

Mob: +91-9358478150

Dr.beerpal@gmail.com

Mob: +91-9412632166

Mob. +91-7017396638

ranavd@gmail.com

Dr. Vandana

Prof. Beer Pal

hkrishnastats@yahoo.com

Prof. R.B. Misra, Lucknow, UP, India

Dr. Vikas Baranwal, Prayagraj, India

Prof. H.S. Shukla, Gorakhpur, India

Dr. A. Goswami, Riyadh, Saudi Arabia

Prof. A.K. Mishra, Chennai, India

Prof. M.K. Sharma, Hisar, India

Prof. S.K. Awasthi, Delhi, India

Dr. M.K. Gupta, Bilaspur, India

Dr. Bharat Dholkia, Surat. India

Co-Convener, CONIAPS XXIV

Co-Convener, CONIAPS XXIV

Dept. of Physics, CCSU, Meerut

Dr. Mukesh Kumar Sharma

mukeshsharma2k4@mail.com

Organizing Secretary CONIAPS XXIV

Dept. of Computer Appl., CCSU, Meerut

Dept. of Mathematics, CCSU, Meerut

Dept. of Statistics, CCSU, Meerut

Dr. Yumnam Rohen, Imphal, India

Executive Editor, Journal IAPS:

President:

Prof. K.B. Pandeya, Allahabad, India Vice- Presidents: Prof. H.S. Dhami, Almora, India Prof. P.K. Bajpai Bilaspur, Chhattisgarh, India **General Secretary:** Prof. P.N. Pandey, Allahabad, India Secretaries: Prof. J.P. Chaturvedi, Gorakhpur, India Prof. S.K. Narasimhmurthy, Shimoga, Karnataka, India Prof. C.K. Mishra, Ayodhya, UP, India Prof. B.K. Tiwary, Pondicherry, India Treasurer: Prof. Ravindra Dhar, Allahabad, India

Contact Persons

Prof. P.N. Pandev **General Secretary**, IAPS Vice Chancellor, NGBDU, Prayagraj, K-5, Sonal Apartment, 36 A N Jha Marg George Town, Prayagraj-211002, India Mob: +91-9450609696

pnpiaps@gmail.com

Prof. Jaimala Convener, CONIAPS XXIV Head, Dept. of Mathematics, CCSU, Meerut, India Mob: +91-9837991844 Ph(O): +91-9058316259 jaimalaccsu@gmail.com

Dr. Nazia Tarannum

Dept. of Chemistry, CCSU, Meerut Mob: +91-9198341073, 9760675360 Naz1012@gmail.com

Call for Papers

Deadline for Abstract submission: July 15, 2019. Acceptance Notification: up to July 20, 2019. Submission of Abstracts: Abstract can be submitted online using the link.

www.ccsuniversity.ac.in/coniapsxxiv.com or sent through:

email : coniaps24@gmail.com. File Format: MS-Word file in single column in Times New Roman, size 12 and line spacing 1.0 on www.iaps.org.in/coniaps.com

Word Limit: 500 words with the title, name(s) of the author(s) with affiliation(s)

and email-id(s). (The name of the presenting author must be underlined).

*Full length Papers be submitted upto 25th July, 2019.

*Papers presented in the Conference will be published in the Journal of International Academy of Physical Sciences after review by experts.







24th International Conference of

International Academy of Physical Sciences (CONIAPS XXIV)

on

INNOVATIONS IN PHYSICAL SCIENCES

August 09-11, 2019



Organized by

Department of Mathematics Ch. Charan Singh University (B⁺NAAC Certification) Meerut - 250004 (Uttar Pradesh), India email: coniaps24@gmail.com www.ccsuniversity.ac.in/coniapsxxiv.com

About the University

Ch. Charan Singh University (CCSU) was established in 1965, under UP Universities Act 1965, as Meerut University to cater to the needs of higher education in Western Uttar Pradesh. It was later renamed as Chaudhry Charan Singh University in the name of former Prime Minister of India, Ch. Charan Singh. Since its inception, the vision of the University has been to be an institute to produce such professionals who have global competence, vision, and skill as are necessary to meet the challenges of emerging global knowledge economy, by the power of innovation, creativity and efficient learning ability. It is committed to promote and protect dignity, equality, social justice and human rights for all sections of the society.

It was the first University in the country to introduce M. Phil. programme. In the University campus there are several regular and self-financed graduate, postgraduate and Ph.D. programs in the faculty of Science, Arts, Law, Commerce and Business Administration, and Agriculture. The University has a separate Engineering College named Sir Chhotu Ram Institute of Engineering and Technology (SCRIET) which offers courses like B. Tech. in different branches of engineering, B.B.A., B.Sc.(Hon.) CS, M.B.A., M.B.A. (Hospital Administration), Integrated M.B.A. (Hospital Administration) and M.C.A.

It has a vast and beautiful, 222-acrecampus in a pollution-free environment, having vast playgrounds and experimental fields, botanical gardens, gymnasium, indoor stadium, well equipped automated library, hostels for both girls and boys, spacious auditoriums, guest house, community center and health center. Life-size statues of the late Prime Minister Ch. Charan Singh and Swami Vivekanand, add on pride and beauty to the campus.

Aims and Objectives of the Conference

The 24th international conference of IAPS (CONIAPS XXIV) on 'Innovations in Physical Sciences' aims to bring together leading scientists and researchers from Institutes, Universities and Industries across the world to exchange and share their experiences and research results on all core and allied branches of Physical Sciences. To foster and conduct collaborative interdisciplinary research it provides a forum for the dissemination and discussion of the most recent innovations, trends and the practical challenges encountered and solutions provided in theory and practice. To encourage the personals engaged in the above fields and to maintain the integrity and competence, it recognizes the outstanding contributions of young scientists and others by providing awards and fellowships.

Scope and Call for Contributions

The scope of the conference will cover broad spectrum of Physics, Chemistry, Mathematics, Statistics, Material Sciences, Computer Sciences and Informatics, Bio-Informatics, Bio-Physics, Bio-Chemistry, Bio-Technology, Earth Sciences and other allied fields.

Innovative authors are kindly invited to contribute and to shape the conference through their high quality research papers related to the theme and topics of the conference describing original and unpublished results of conceptual, constructive, empirical, experimental or theoretical work.

The conference will embrace Keynote Address, Fellowship Award Lectures, Swami Bhajananand Saraswati Vedic Science Award Lecture and other Plenary Lectures, Invited Lectures, Young Scientist Award (YSA) presentations and general paper presentations (oral and poster).

About the Concerned Departments

• Department of Mathematics

From the day of its inception in 1969, Mathematics Department of CCSU has been an important force in the academics and a key part of University's educational mission. The Department was established with a motive to help deepen students' insights into the subject and produce vibrant and dynamic community of perfect scholars. Till date it is continuing with its aim by producing able graduates and researchers in different fields of pure and applied mathematics like Topology, Approximation Theory, Algebra, Fluid Dynamics, Operations Research, Reliability Theory, Fuzzy Sets and Systems, Cryptography etc. The department has made its own mark in the field of Mathematics Education. It has a well-equipped laboratory for working in Mathematics Education having several innovative educational games, charts, models and filmstrips. In addition, Department also runs a sixmonth diploma course in Vedic Mathematics. Notably there is an MoU between Tokyo University of Science, Japan and CCSU, Meerut under which, the students and faculty of three departments Chemistry, Physics and Mathematics will have an academic exposure to visit and study in Tokyo University of Science, Japan.

• Department of Chemistry

The department of Chemistry, established in 2002, offers M.Sc. in Chemistry, Biochemistry and Polymer Science & Chemical Technology and B. Sc. (Honours) in Chemistry. The department has collaborated with Institute of Chemical Engineering, Sofia, Bulgaria for carrying out joint research work. The department is involved in research activities in different fields of Polymer Science and Chemical Technology such as development of technology for recovering chemicals and useful products from polymer waste, biodegradable plastics, composites, etc. The department has acquired sophisticated instruments like Differential Scanning Calorimeter, FTIR, UV-Visible Spectrophotometer, HPLC, Differential Photo Calorimeter etc.

• Department of Physics

The department of Physics is the first generation department of the University. The research programs cover a number of areas like Materials Science, Nanotechnology, Renewable Energy, Thin Films, Condensed Matter Physics, MEMS, Nanoparticles, Photonics and Superconductors etc. The major laboratory available is Micro and Nanofabrication Lab (Class-1000 Clean Room Facility for Micro and Nanofabrication) equipped with MJB4-Optical stepper and Nanoimprint Lithography (NIL). Department also has 3-Target RF-DC and Magnetron sputtering System and vacuum coating unit for Thin Film deposition. Laboratories are equipped with Scanning Electron Microscope (SEM) with Energy and Wavelength Dispersive Spectroscopy (EDS & WDS) analysis tool, Scanning Tunnelling Microscope (STM) and Atomic Force Microscope (AFM).The Department has international collaborations with the UniversitàdegliStudi di Catanzaro "Magna Græcia" (UMG), Italy.

• Department of Statistics

The department offers Ph.D., M.Phil. and M.Sc. programs. Along with computer laboratories, department also have one statistical laboratory equipped with desk electronic and programmable calculators. The broad areas of research are Reliability Engineering, Survival Analysis, Computational Statistics, Bayesian Analysis, Quality Control, Operations Research and Applied Statistics.

• Department of Computers

The Department of Computers are proud to offer a wide range of UG and PG courses, like B.Tech. in CS/IT, B.Sc. (Hon.) CS and MCA under self-financed scheme as a part of SCRIET, CCS University which are rendering high quality students from all over India with an impressive placement record. The Departments are enriched with highly motivated, qualified and experienced faculty and the ambitious, amenable and craving students ; work together extensively to build interdisciplinary knowledge in emerging trends of CSE, IT Engineering and Computer Applications.

University also have departments of Biotechnology and Geography running under self-financed scheme.

About the City

Historical evidences predict that the Meerut city may have derived its name from 'Mayarashtra', the capital of the kingdom of Mayasura, Mandodari's father and Ravana's father-in-law. The city bears testimony to the great rebellion of 1857, the first war of independence. It is an ancient city located approximately 64 km north-east of New Delhi, the capital of India. It has one of the biggest army garrisons /cantonments of the country. It is famous for its scissors, sports goods and gazak. The city boasts of some very important historical as well as cultural heritage sites like Augharnath Temple, Shaheed Smarak, Surajkund, Gandhi Bagh, Dogra Temple, Shri Shantinath Digamber Jain Temple, St John's church, Pura Mahadev Temple, Hastinapur the capital of Padavas in Mahahbarata, Vidur Ka Tila, Draupadi Ki Rasoi, Srangirishi Ashram, Gandgari Taal and many more.

The temperature during August ranges approximately 25° Celsius to 32° Celsius.

How to reach

A range of flights operated by various private and public carriers are available throughout the world to and fro Delhi. Delhi Airport is around 70 Km from Meerut. Delhi is well linked to Meerut and the rest of India by extensive road and rail network.Government as well as privately run ordinary and luxury buses are available from various locations in India to Meerut/ Delhi.

Registration/ Accommodation Deadline for Registration: July 15, 2019.

Delegate Type	Fee	Accompanying Person@
Indian Resident	3000/- INR	2000/-INR
Non-stipendiary student	2000/-INR	NA
SAARC Countries	3000/-INR	2000/-INR
Others	\$150/-	\$100/-

*There is a rebate of 10% in registration fee for life members of the IAPS.

Branch Code: 0144 A/C no: IFSC code:

*Delegates registered on or before July 15, 2019 will be provided accommodation on demand, otherwise arrangement of accommodation on organizer's end will not be possible.

* Registration form can be downloaded from the website and be send to the organizers through email: coniaps 24(a) gmail.com, so that the necessary arrangements can be made.

Young researchers below the age of 35 years as on August 09, 2019 may send their single authored (may be with supervisor) full length research paper, not being presented or published anywhere, latest by July 15, 2019 for YSA.

For further query contact to: Prof. Jaimala Convener.

Mode of Payment: Online, or Demand Draft in favour of "Convener CONIAPS XXIV", payable at Allahabad Bank, Ch. Charan Singh University, Meerut

50487466214

ALLA0210144

Young Scientist Award (YSA)

Dr. Mukesh Kumar Sharma **Organizing Secretary**

CONIAPS XXIV Dept. of Mathematics, CCSU, Meerut Mob: +91-9058316259(O), +91-7017889204 coniaps24@gmail.com