

GOVERNMENT VIDARBHA INSTITUTE OF SCIENCE AND HUMANITIES, AMRAVATI



(An Autonomous Institute of the Govt. of Maharashtra; Reaccredited by NAAC with 'A' grade (CGPA 3.32)

Website: http://gvishamt.org



0N



ICMPE-2024

July 01-02, 2024



The Department of Physics & Electronics, Government Vidarbha Institute of Science & Humanities. Amravati. (M.S.), India 444 604



IQAC, Sant Gadge Baba Amravati University, Amravati. (M.S.), India 444 602
Pre Indian Administrative Services Training Institute, Amravati. (M.S.), India 444 604



Patron

Hon'ble Shri. Chandrakantdada Patil

Minister, Higher and Technical Education, Govt. of Maharashtra



Co-Patron

Shri. Vikas Chandra Rastogi

Principal Secretary, Higher and Technical Education, Maharashtra State

Dr.R.S. Mali

Chairman, Governing Council, GVISH & Former Vice- Chancellor KBCUM University, Jalgaon

Dr. Milind A. Barhate

Vice- Chancellor, Sant Gadge Baba Amravati University, Amravati

Dr.S.K.Deolankar

Director (Higher Education)

Maharashtra State

Dr. S. E. Bhandarkar

Director,

Govt. Vidarbha Institute of Science and Humanities (Autonomous)
Amravati and Joint Director (HE), Amravati Division

Registration Link

https://forms.gle/KTRKpJRLEPdQFF7B8

Convener

Prof. S. P. Yawale

Head

Dept. of Physics & Electronics, GVISH, Amravati

Organizing Secretary

Prof. Dr. M. P. Lokhande

Dr. R. V. Barde

Dept. of Physics & Electronics, GVISH, Amravati

Coordinators

Dr. D. R. Bijwe

G.S. Tompe Arts, Commerce & Science College, Chandur Bazar

Prof. G. T. Lamdhade

Vidyabharti Mahavidyalaya, Amravati

Co- Convener

Prof. D. S. Dhote

Principal,

Shri Brijlal Biyani Science College, Amravati

Chairman

Dr. Smt. Sangita S. Yawale

Director, Pre Indian Administrative Services Training Institute, Amravati

Dr. S. A. Waghuley

Director, IQAC, SGB Amravati University,

Amravati



International Advisory Committee

Prof. C. S. Adgaonkar, Ret. Prof. of Physics, Institute of Science, Nagpur

Prof. V. S.Deogaonkar, Ret. Prof. of Physics, Shri Shivaji Science College, Amravati

Prof. Chang Kook Hong, Chonnam National University, South Korea

Prof. Shanhu Liu, Henan University, Kaifeng, P.R. China

Dr. H. Peng, East China Normal University, Shanghai, China

Prof. V.J. Fulari, V.C., Dr.BAMU University, Chhatrapati Sambhajinagar, India

Prof. Saikat Maitra, V.C., Maulana Abul Kalam Azad Technical University, Kolkata, India

Prof. Sanjay Dhole, Savitribai Phule Pune University, Pune, India

Dr. R. G. Atram, Vice Chancellor, Dr. B. R. Ambedkar University, Mahu, India.

Prof. Nandu Chaure, Savitribai Phule Pune University, Pune, India

Prof. Shashikumar Dhiman, Vice Chancellor, Himachal Pradesh Technical University, Shimla, India.

Dr. Mahavir Singh, Former Senior Principal Scientist, CSIR-NPL, New Delhi

Prof. Sawanta Mali, Chonnam National University, South Korea

Dr. Kishor Kumar Sadasivuni, Centre for Advanced Materials, Qatar University, Qatar

Prof. L. P. Deshmukh, Ret. Prof. P A. Holkar Solapur University, Solapur

Prof. V. B. Patil, P.Ahilyadevi Holkar Solapur University, Solapur, India

Prof. S. H. Behare, Ret. Professor, BAMU, Chhatrapati Sambhajinagar

Prof. V. L. Mathe, Savitribai Phule Pune University, Pune, India

Dr. Sanjay Latthe, Vivekanand College (Autonomus), Kolhapur, India

Prof. Dr. Devrai Singh, Purvanchal University, Jaunpur

Prof. C. D. Lokhande, D.Y. Patil Deemed University, Kolhapur, India.

Prof. S. V. Dudul, Dean, S&T SGB Amravati University, Amravati, India

Prof. K. M. Jadhav, Ex Prof., Dr. BAMU, Chhatrapati Sambhajinagar

Prof. K. S. Thind, Canada.

Prof. O. P. Chimankar, RTM University Nagpur,

Prof. S. B. Kondawar, RSTM Nagpur University, Nagpur, India

Prof. S. J. Dhoble, RSTM Nagpur University, Nagpur, India

Prof. A. C. Kumbharkhane, SRTM University, Nanded, India

Prof. Aiay Chaudhari, Institute of Science, Mumbai, India

Dr. U.P. Manik, Professor & Head, Dept. of physics S.P. College, Chandrapur

Dr.D. K.Burghate, Ret. Principal, Shri Shivaji Science College, Nagpur,

Dr. Jagramsing Yadav, Govt. Polytechnic, Khurja, Bulandshehar, India

Prof. K. K. Raina, Vice Chancellor, Ramaiah University of Applied Sciences, Bangalore, India

Prof. Satish Sharma, RSTM Nagpur University, Nagpur, India

Prof. P. B. Dahikar, Shri SAS College, Palandur, Bhandara, India

Prof. S. I. Patil, Ex Pro Vice Chancellor Solapur University Solapur.

Shri. Avneet Kumar Joshi, Director and Head, CIPET, Chandrapur,

Dr. Atigur Rehman, TIFR, Mumbai, India.

Dr. S. B. Kulkarni, Director, Institute of Science Mumbai, India.

Prof. M. K. Patil, Dean, S&T Faculty, SRTMU, Nanded

Prof. K. S. Kanse, Chairman BoS Physics, SRTMU, Nanded

Dr. D. H. Gadani, Gujrat University, Ahmedabad

Dr. H.S. Tripathi, Chief Scientist & Head, CSIR

Prof. Ram Payre, Ex Professor, IIT, BHU, Banaras

National Advisory Committee

Dr. G. R. Dhokane, Chairman, Board of Studies in Physics, SGB Amravati University, Amravati

Prof. W. S. Barde, Shri Shivaji Science College, Amravati

Prof. A. U. Ubale, Institute of Forensic Science, Aurangabad.

Prof. Y. B. Gandole, Principal, Adarsh Mahavidyalay, Dhamangaon.

Dr. N. R. Pawar, Arts, Commerce and Science College, Maregaon.

Dr. V. B. Pawade, LIT, RTM, Nagpur University

Dr. N. S. Wadatkar, Government Polytechnic, Amravati.

Prof. Pradip Sharma, Govt. Holkar Science College, Indore, India

Dr. K. R. Nemade, Indira Gandhi Kala Mahavidyalaya, Ralegaon.

Dr. W. J. Gawande, Ret. Asst. Professor, GVISH, Amravati.

Dr. C. S. Ulhe, Y C Arts & Science College, Mangrurpir, Washim.

Prof. S. B. Sawarkar, Shri Shivaji College, Akola

Dr. S. B. Unhale, Prof. HS Pundkar Arts, Comm. & Sci.College, Balapur.

Dr. K. B. Raulkar, Vidyabharti Mahavidyalaya, Amravati

Dr. Parvez Saudagar, J. B. Science College, Wardha.

Prof. S. G, Shende, Shri Shivaji College, Akola.

Prof. G. D. Agrahari, Shri Brijlal Biyani Science College, Amravati.

Dr. R. J. Gajbe, Vidyabharti Mahavidyalay, Amravati.

Dr. G. G. Muley, SGB Amravati University,

Dr. A. U. Bajpeyee, ACS College, Amravati,

Dr. Suiata Kale, SGB Amravati University, Amravati.

Prof. K. M. Mude, Bhavans College, Andheri West, Mumbai

Dr. B. M. Mude, Ramnarayan Ruia College, Mumbai.

Dr. Shivanarayan Bajaj, JES College, Jalna.

Dr. I. S. Mohurley, SSJ College, Arjuni Morgaon

Prof. Pravin S. More, Mithibai Science College, Mumbai.

Dr. Sudesh Deshpande, Hiduja Hospital, Mumbai.

Prof. M. Y. Salunke, Institute of Science, Nagpur.

Dr. M. A.Giri, Gramin Mahavidyalaya, Mukhed

Dr. Pritesh Jadhao, Gondwana University, Gadchiroli

Dr. Madhuri Bhende, Prof. Ram Meghe Engineering College, Amravati

Prof. S. M. Yenorkar, Shri Shivaji College, Parbhani

Dr. Praful Shirbhate, Gopikabai Gawande Mv. Umarkhed

Dr. P.S. More, Institute of Science, Mumbai



Organizing Committee

Prof. J. T. Ingle Dr. A. B. Nawale Dr. S. R. Jigaieni

Dr. Zakir Khan

Shri. V. K. Bhosle Shri. P.P. Rathod

Dr. C. M. Khairnar

Dr. Kishor Patil

Dr. Ankita Karule

Dr. K. R. Banarase Dr. Rutuja Bobade

Dr. D. P. Deshmukh

Dr. Sarika Khapre Dr. Poonam Fartode

Dr. Pratiksha Nichit

Dr. R. M. Belekar

Dr. K. G. Sonawane

Dr. Kalpana Nagde

Technical Committee

Dr. A. V. Kohale Dr. G. K. Reddy

Dr. N. V. Shirbhate

Dr. N. V. Shirbhate Dr. S. R. Takpire

Dr. A. R. Chaudhary

Dr. A. M. Kute

Dr. A.V. Rajgure

Dr. M. S. Katore

Shri. A. V. Tiwari

Shri. A. P. Deshmukh

Shri. S. P. Tiwari

Ku. K. M. Kalmegh

Shri. A. P. Bangar

Shri. S. V. Tayde

Ms. M. S. Dixit

Conference Structure

Conference will have Key Note Lectures, Plenary Talks, Invited Talks, Oral Presentations and Poster presentations.

Background

The International Conference on Material Physics and Electronics for sustainable development (ICMPE-2024) is a multidisciplinary event aiming at uniting academicians, industry professionals and young researchers to share their ideas and knowledge. This will augment the present state of knowledge in the respective fields of study for societal development and economic prosperity. The conference aims to establish an open debate forum through this platform by gathering plethora of academicians, young scientists, researchers and engineers. The conference will focus on the advanced topics to satisfy the global demand for novel materials and difficulties in the field of material science and nanotechnology. This will provide a platform to present the latest research findings, discuss the challenges and opportunities in the field of material science and electronics. Sustainable industrialization and infrastructure with innovation can unleash economic forces that generate employment and income. New ideas may erupt in such August gathering of eminent researchers from all over the world under one roof. Such activities will expose all the delegates accountable to the commitments to improve the people access to good health and health care.

Conference Topics

- Advance Materials
- Carbon Nanostructures and Graphene
- Optoelectronic Materials
- Spintronics
- Environmental and Green Materials
- Nano-engineering and its applications
- Biosensors and Bio-electronics materials
- Meta materials
- Dielectrics

- Biomaterials and Medical Devices
- Computational Modelling of Metals and Materials
- Nano-technology & Nano Engineering
- Gas sensors and Smart Materials
- Ceramics, Glasses and Composite Materials
- Polymer science
- Energy Materials
- Organic Electronics and Devices
- DFT and Molecular Dynamics Soft Instrumentation

Important Dates:

Abstract Submission - 30 May 2024

Full Length Paper Submission - 30 May 2024 (on or Before)

Intimation of Acceptance - 10 June 2024

Submission of Papers

Interested authors are requested to submit full length manuscript of research paper in MS-Word including paper title, name of authors, affiliation and e-mail address of the corresponding authors. The font should be Times New Roman, size 12, 1.5. spacing Please mail your paper at e-mail icmpe2024@gmail.com

Paper Publication

The selected and peer reviewed papers will be published in Scopus index https://www.scopus.com/sourceid/19700186890#tabs=2 journal, Journal of Electrical Systems published by Engineering and Scientific Research Groups (ESR Groups) having ISSN: 1112-5209. Authors are requested to download the paper template from website of journal https://journal.esrgroups.org/jes . The template ready manuscript should be submitted to conference email-icmpe2024@gmail.com

The publication fee Rs 500/- will be charged extra.

FEES DETAILS

	Registration Fees
-	Rs. 1000
-	Rs. 1500
-	Rs. 3000
-	USD 75
-	Rs. 500 (Indians)
	USD 20 (Foreign delegates)
	- - - -

Registration fees include the conference kit, breakfast, lunch and dinner. Delegates will have to make their own arrangements for accommodation.

Contact for Correspondence:

Dr. S. P. Yawale (Convener) +91-8830317223 & 9423125231 Dr. Deepak Dhote (Co-Convener) +91-9422857431

Contact for Accommodation:

Dr. S. R. Jigajeni: +91-8767425913 & 9209629752

Dr. D. R. Bijwe:+91-9822699149



The registration fees may be paid Online/ Internet Banking to:

Account Holders Name:

Government Vidarbha Institute of Science & Humanities, Amravati

A/C NO : 11062260046

Bank Name : State Bank of India
Branch Name : Camp Amravati
IFSC code : SBIN0003866

MICR code : 444002107

ABOUT THE INSTITUTE

The Government Vidarbha Institute of Science and Humanities, Amravati is a premier autonomous education institute in the Vidarbha region of Maharashtra, affiliated to Sant Gadge Baba Amravati University, Amravati. Founded in 1923, it is one of the oldest academic institutions in the country and has celebrated its centenary in 2023. The institute has achieved many milestones in its journey of the hundred years and has been awarded the prestigious 'A' grade by the National Assessment and Accreditation Council (NAAC) with CGPA 3.32. It is a multi disciplinary institute that offers education from 11th standard to Ph.D. program. The institute has 21 undergraduate and 19 postgraduate programmes and is a research centre for Ph.D. in 20 subjects.

Over the last ten decades, the institute has shaped students to become stalwarts in science, politics, literature, teaching, law, medicine, economics, arts and culture. We hone the faculty of scientific enquiry and thinking of our students to bring revolutionary and radical changes in various fields of life. We rely on blending theoretical and practical teaching and learning. From the academic year 2021-22, we are offering NEP-2020 pattern at undergraduate and postgraduate level, from 2023. The new syllabi of the academic programs are set to boost physical, mental, social, emotional and intellectual development of the students. This is a student-centric approach wherein the students have freedom to choose the subjects to satisfy their insatiable curiosity for knowledge.

The serene, non-polluted and congenial ambience of the institute is ideal for the pursuit of higher education and research. We have botanical garden, administrative block, yoga bhavan,hostels, library and parking facility. There are three auditoriums with the capacity of 1040, 300 and 150 respectively, a separate Majlis hall for the musical performances. The campus accommodates a separate building of the Pre Indian Administrative Services Training Institute.

About the Department:

The Department of Physics & Electronicsis one of the largest and oldest departments in the institute. It was established in 1935 and was affiliated to Nagpur University before the inception of Amravati University. The post graduate department offers Condensed Matter Physics and Electronics as electives. There are three dedicated research laboratories viz. Materials Science, Nano-materials and luminescence. Research students work in the diversified field such as, Gas Sensors, biomaterials, dielectric materials, luminescent materials and thin films. Around 30 research students are simultaneously working in these fields. Till this date 93 students have been awarded doctorate degree in Physics and Electronics. More than 300 research papers are published in the National and International Journals by the faculties and students of the department. The department possess rich instrumentation facilities including: X Ray Spectrophotometer, FTIR, UV Visible Spectrophotometer, LCR Meter, Spin coater, SILLAR and Spray Pyrolysis. One major and nine minor research projects, funded by UGC, are completed and few patents are published.

Tentative Schedule

Day 1- 01 July 2024

8.00 AM to 9.30 AM - Registration & Breakfast

9.30 AM to 11.00 AM - Inauguration & Key Note Address

Technical Session -I

11.00 AM to 11.30 AM - Plenary Talk-I 11.30 AM to 12.00 PM - Plenary Talk-II 12.00 PM to 12.30 PM - Plenary Talk-III

12.30 PM to 1.30 PM - Lunch

Technical Session -II

 2.00 PM to 2.30 PM
 Plenary Talk -IV

 2.30 PM to 3.00 PM
 Plenary Talk -V

 3.00 PM to 3.30 PM
 Tea Break

 3.30 PM to 5.30 PM
 Oral Presentations

6.00 PM to 7.30 PM - Cultural Program 7.30 PM to 9.00 PM - Dinner

Day 2 - 02 July 2024

9.30 AM to 10.15AM Key Note Address

Technical Session -III

10.15 AM to 10.45 - Plenary Talk-VI 10.45 AM to 11.15 PM - Plenary Talk-VII

11.15 PM to 1.00 PM - Oral/Poster Presentations

1.00 PM to 2.00 PM - Lunch

2.00 PM to 3.30 PM - Valedictory Function









