

## ABOUT THE UNIVERSITY

Amravati University was established on Maharashtra Day, the 1st May 1983, to cater to the educational needs of rural population of western Vidarbha. The university has its jurisdiction within five districts of Vidarbha viz. Amravati, Akola, Yavatmal, Buldana and Washim. By now, this sapling has grown into a gigantic tree having about 4 lacs students. It is noteworthy to state that the University has a lush green campus of 470.63 acres with 28 Teaching Departments, a conducted Model Degree College at Buldana and nine Faculties satisfying the knowledge appetite of the students. University's efforts towards excellence are supplemented by substantial grants from various funding agencies like UGC, DST, DBT, AICTE, DRDO, DAE, RGSTC, etc. the university has a special recognition by way of collaborations with the premier institutes in and outside the country. The University has been re-accredited (3rd Cycle) by NAAC in 2016 with "A" grade (CGPA 3.07).

## ABOUT THE DEPARTMENT:

(<https://sgbau.ac.in/departments/Physics/Default.aspx>)

## ABOUT SHRI SHIVAJI SCIENCE COLLEGE

Shri Shivaji Education Society, Amravati founded by a great visionary and former union minister for Agriculture Late Dr. Panjabrao alias Bhausaheb Deshmukh, runs Shri Shivaji Science College, Amravati. The college has completed sixty glorious years of its existence in 2018. We can proudly declare that it has indeed grown from a seedling into a tree that has not only sheltered thousands of youngsters but also has molded them into great personalities, now scattered across the globe. Consistent with earlier cycles, NAAC has endorsed quality of this college by adjudging it as "A Grade" College with CGPA 3.13 in Third Cycle of accreditation. The College has also earned a special reputation for being conferred with the status of a "College with Potential for Excellence", by the UGC, in the first phase and now stepped up in the second phase of CPE. The college has also been identified by Department of Science and Technology for grants under FIST. Sant Gadge Baba Amravati University has also nominated this college as "Lead College" of the University.

([www.shivajiscamt.org](http://www.shivajiscamt.org))

## PATRONS

<b>Dr. Murlidhar Chandekar</b> Hon'ble Vice Chancellor Sant Gadge Baba Amravati University, Amravati	<b>Shri. Harshwardhan Deshmukh</b> Hon'ble President Shri Shivaji Education Society, Amravati
<b>Dr. Rajesh Jayapurkar</b> Hon'ble Pro-Vice Chancellor Sant Gadge Baba Amravati University, Amravati	<b>Dr. KVR Murthy</b> Hon'ble President Luminescence Society of India, Baroda

## STEERING COMMITTEE

<b>Dr. S.K. Omanwar</b> Chairman Professor (HAG) & Head, Department of Physics, SGBAU, Amravati	<b>Dr. V.G. Thakare</b> Co-Chairman Principal, Shri Shivaji Science College, Amravati	<b>Dr. S. V. Moharil</b> Retd. Professor, RTM, Napur University, Nagpur
<b>Dr. P. A. Wdegaonkar</b> Management Council Member, SGBAU, Amravati	<b>Dr. S.A. Waghuley</b> Convener Dept. of Physics, SGBAU, Amravati	<b>Dr. V.B. Bhatkar</b> Convener Head, Dept. of Physics, Shri Shivaji Sci.College, Amravati
<b>Dr. G.G. Muley</b> Co-Convener Dept. of Physics, SGBAU, Amravati	<b>Dr. W.S. Barde</b> Co-Convener Shri Shivaji Science College Amravati	<b>Dr. S.J. Dhoble</b> Co-Convener President, LSI (Maharashtra Chapter)
<b>Dr. A.B. Lad</b> Co-Convener President, IAPT (RC-08)	<b>Dr. D. T. Ingole</b> Director, IIL, SGBAU, Amravati	<b>Dr. P.A. Nagpure</b> Organizing Secretary Shri Shivaji Science College, Amravati

## NATIONAL ADVISORY COMMITTEE

<b>Dr. Shekhar Mande</b> Secretary, DSIR and Director General, CSIR, New Delhi	<b>Dr. A. K. Singhvi</b> Honorary Scientist, J.C. Bose Fellow and Raja Ramanna Fellow, PRL, Ahmadabad	<b>Dr. (Mrs) K. Singh</b> Ex-Vice Chancellor, SGBAU, Amravati
<b>Dr. M. D. Sastri</b> Ex-BARC, Principal SO & Director of R & D Division Indian Institute of Gemology, Mumbai	<b>Prof. (Dr.) S. H. Pawar</b> Ex-Vice-Chancellor D. Y. Patil Uni., Kasaba Bawada, Kolhapur	<b>Dr. S. I. Patil</b> Pro-Vice-Chancellor, Solapur University, Solapur
<b>Dr. B.N. Jagatap</b> Professor, IIT Mumbai & Expert member, RUSA, Govt. of Maharashtra	<b>Dr. P. Gopalan</b> Director, The Thapar Institute of Engineering and Technology, Patiala	<b>Dr. Divi Harnath</b> Ex-Director, LMD Group, NPL, New Delhi and Professor, NIT Warangal
<b>Dr. S. C. Meharotra</b> Professor Emeritus-UGC, Dr. BAMU, Aurangabad	<b>Dr. Shishir Deshpande</b> Director, IPR, & Project Leader, PRL, Ahmadabad	<b>Dr. D. P. Ojha</b> Professor and Chairman, School of Physics, Sambalpur Uni., Orissa
<b>Dr. D. P. Bisen</b> Professor, Department of Physics, Pt. RS University, Raipur	<b>Dr. A. G. Page</b> Director- Technical, Metallurgical Services, Mumbai 400 086	<b>Dr. K. Somahya</b> Director, RGU of Knowledge Technologies, Hyderabad
<b>Dr. B. C. Bhatt</b> Ex- BARC, Emeritus Scientist, BARC Mumbai	<b>Dr. P. D. Sahare</b> Professor, Dept. of Physics Delhi University, New Delhi	<b>Dr. Dorendrajit Singh</b> Professor & Head, Dept. of Physics, Manipur Uni., Imphal
<b>Dr. C. K. Jayshankar</b> BSR Fellow SV University, Tirupati	<b>Dr. Meera Ramrakhiani</b> Head, Dept of Physics, R.D. University, Jabalpur	<b>Dr. G. Murlidharan</b> Professor, RG Rural Uni., Gandhigram, Tamil Nadu

<b>Dr. Namita Bramhe</b> Professor & Head, Pt. RS Sushukla Uni., Raipur CG	<b>Dr. R. G. Atram</b> Director, Institute of Science, Nagpur	<b>Dr. Sripalbhai Desai</b> Institute of Gemology, Mumbai
<b>Dr. M. D. Sirsat</b> Professor, Dr. BAMU, Aurangabad	<b>Dr. D. K. Koul</b> Head, RSSD, Mod. Lab, BARC, Mumbai	<b>Dr. B. H. Pawar</b> Ex-Head, SGBAU, Amravati
<b>Dr. V. K. Deshpande</b> Professor, VNIT, Nagpur	<b>Dr. S. T. Bendre</b> Professor, NMU, Jalgaon	<b>Dr. M. S. Kulkarni</b> BARC, Mumbai
<b>Dr. K. R. Nagbhushana</b> Professor, PES Institute, Bangalore	<b>Dr. F.C. Raghuwanshi</b> Dean Faculty of Science & Technology, SGBAU, Amravati	<b>Dr. N. S. Kokode</b> Dean, Gondwana University, Principal, NH College Bramhapuri

## LOCAL ORGANIZING COMMITTEE

<b>Dr. N. G. Belsare</b>	<b>Dr. Dipak Dhote</b>	<b>Dr. A. W. Asole</b>
<b>Dr. G. N. Choudhari</b>	<b>Dr. D. V. Atkare</b>	<b>Dr. S. G. Bhadange</b>
<b>Dr. S. P. Yawale</b>	<b>Dr. S. W. Anwane</b>	<b>Dr. A. S. Aswar</b>
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<b>Dr. Vinod Kallyamwar</b>	<b>Dr. N. R. Pawar</b>	<b>Dr. G. T. Lamdade</b>

## SCIENTIFIC PROGRAMME COMMITTEE

Chairperson : Prof. S. V. Moharil

<b>Technical Committee</b>	<b>Program Committee</b>	<b>Publication Committee</b>
<b>Dr. D.Harnath</b>	<b>Dr. S. A. Waghuley</b>	<b>Dr. R. P. Sonekar</b>
<b>Dr. D.P. Bisen</b>	<b>Dr. N. B. Ingle</b>	<b>Dr. A. B. Lad</b>
<b>Dr. S.J. Dhoble</b>	<b>Dr. Kamlesh Alt</b>	<b>Dr. D. S. Thakare</b>
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<b>Dr. G.G. Muley</b>	<b>Dr. S. S. Arsad</b>	<b>Dr. Gajanan Korpe</b>
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<b>Dr. Yuvraj Tamgadge</b>	<b>Dr. Zakir Khan</b>	<b>Dr. Ritesh Palaspagar</b>
<b>Dr. N.S. Wadatkar</b>	<b>Dr. Rajesh Barde</b>	<b>Dr. Sanjay Takpire</b>
<b>Dr. Vaishali Thakare</b>	<b>Dr. Rupali Wankhade</b>	<b>Dr. Vaishali Raikwar</b>

## CONTACTS FOR CORRESPONDENCE

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# NSIMD-2019

## NATIONAL SYMPOSIUM ON INNOVATIVE MATERIALS & DEVICES

24-25 June 2019

Jointly Organized by



Department of Physics  
SANT GADGE BABA AMRAVATI  
UNIVERSITY, AMRAVATI



Department of Physics  
SHRI SHIVAJI SCIENCE  
COLLEGE, AMRAVATI

# 2019 IYPT



SCIENCE - SOCIETY - WORLD - SUSTAINABLE DEVELOPMENT



## ANNOUNCEMENT

We are pleased to announce that Department of Physics, Sant Gadge Baba Amravati University, Amravati and Shri Shivaji Science College, Amravati-MS INDIA, are jointly organizing the National Symposium on Innovative Materials and Devices, which will be held during 24-25 June 2019.

Year 2019 is being celebrated as International Year of Periodic Table (2019-IYPT). Moreover, this year's theme is to foster Science for Society-World with special reference to Sustainable Development. In tune with this theme, NSIMD aims to provide a platform for the presentation of new work related to innovative materials and devices for sustainable development. The discussions on inter-disciplinary topics will be broadening the material knowledge, and will promote academic collaborations amongst participants. The outcome of the event will drive the academia-industry-regulator networking towards sustainable society.

Contributions are welcome from scientists, researchers and students, working in academia and industry from all fields, in which the principal topic of research predominantly features, either material synthesis or applications or designing of devices. The technical sessions include invited talks and oral/poster presentations of these/research papers from the researchers.

## SCOPE OF THE SYMPOSIUM

The Symposium NSIMD-2019 will provide an interactive platform to present the most recent advancements in innovative materials and devices for sustainable development. Various aspects of this interdisciplinary field, such as synthesis and characterization of novel materials, investigation of their chemical, electrical, optical and other properties and their relevance with development of society will also be discussed. Evidently, the present Symposium will thus cover a wide range of activities from synthesis to applications of a variety of innovative materials such as, Luminescent Materials, Sensors, Biomaterials, and Devices useful for addressing the sustainable use of energy, water, environment etc. These materials are expected to have potential for innovation/incubation and/or startups for sustainable development.

## Topics of the Symposium

- Luminescent Materials and Applications
- Nanomaterials / Thin Films / Crystal Growth Technology
- Nanomaterials for Energy Conversion and Storage
- Organic/Inorganic Hybrid Nanomaterials
- Magnetic Materials
- Plasma Materials Interactions
- Nano-Biotechnology /Biomaterials
- Antimicrobial resistance
- Biosensors
- Photo-catalysis and Photo-electro-catalysis / Electrochemistry
- Green Chemistry and Synthesis
- Polymers
- Solar Energy Materials and Solar Cells
- Self-Cleaning Coatings
- Water Pollution and Treatment / Environmental Clean-up
- Circular Economy and Social Inclusion in Energy and Environment Sectors

## SPECIAL SESSIONS

To encourage young promising researchers, at least 10 entries will be selected after thorough review of the submission. Special sessions are planned to encourage young Ph.D. holders/ Ph.D. degree scholars. THREE Selected winners will have an opportunity to be accommodated as Post Doc in renowned institutions. (This is in process of confirmation) Special sessions are planned to encourage young M.Sc. Students who are involved in innovative projects at their PG Studies. THREE Selected winners will have an opportunity to have summer/winter training program in renowned institutions. (This is in process of confirmation) There will be three parallel post-lunch sessions on the first day out of which TWO, will be in the form of competitions.

## PARALLEL SESSIONS

### Young Ph. D's Competition

**Theme:** Innovative Materials/ Sensors/ Devices/ systems for sustainable developments.

**Eligibility:** Who have completed Ph.D. in last 5 years or completing their Ph.D. during 2019 & who have at least 2 SCOPUS indexed publications.

### Innovators Competition

**Theme:** Products / Devices / Sensors for Startups / Incubation.

**Eligibility:** Any researcher below the age of 40 years having good profile

### PG Project Competition

**Theme:** Innovative Materials/ Sensors/ Devices/ systems for sustainable developments

**Eligibility:** Who are undergoing or completed P.G. Degree in last 2 years and intending to pursue Ph.D. program.

### Bio-Materials/ Bio Sensors

**Theme:** Especially useful for biological / medical applications

**Eligibility:** Any researcher

There will be two tire evaluations and two separate panels of judges at each level for the evaluation / assessment of competitors.

## DATES TO REMEMBER

- Intimation of participation & Registration** - 30<sup>th</sup> May 2019
- Submission of abstracts and full papers** - 05<sup>th</sup> June 2019
- Intimation of acceptance of papers** - 10<sup>th</sup> June 2019
- Request for accommodation** - 15<sup>th</sup> June 2019

## ACCOMMODATION

Accommodation will be arranged (Free of cost) at the University Guest House (for Invited Speaker), Faculty Hostel and Student's Hostel in the University campus. However, if desired, efforts will be made to arrange accommodation at participant's own cost in various Hotels in the city only on the pre-payment basis. Please send your request for further information.

## FINANCIAL ASSISTANCE

Participants are requested to make their own arrangements for travel, registration fees, etc. However, depending upon the availability of funds, few selected young presenters may be granted partially second-class sleeper train fare on request.

## REGISTRATION FEES

Category	Indian Cur. (in Rs)	Overseas Cur. (US \$)
Delegates	1500	150
Faculty from Educational Institutes	1500	150
Delegates from Industries	2000	200
Accompanying persons	1500	150
Members of organizing committee	1200	120
P.G. Students	1000	100

## REGISTER & SUBMIT YOUR ABSTRACT HERE

[https://docs.google.com/forms/d/e/1FAIpQLSdM0sItgYHCpD\\_PawSpW5gpmROe3iF1Z7FcrfYR6Kwb89fEdg/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdM0sItgYHCpD_PawSpW5gpmROe3iF1Z7FcrfYR6Kwb89fEdg/viewform?usp=sf_link)

Payments of registration fees will be accepted online only, at the following bank account:

**Bank of Maharashtra, SGBAU Branch**  
**A/c Name: NSIMD 2019 | A/c No.: 60329008841**  
**IFSC code: MAHB0001331**

## SUBMISSION OF ABSTRACTS AND MANUSCRIPTS

Abstracts are to be uploaded at the time of online registration as a word doc in a given template, before 05<sup>th</sup> June, 2019, for the consideration of inclusion in the conference proceeding after review by two referees.

The deadline for receiving short/full length papers for publication in the Conference Proceedings will be 05<sup>th</sup> June, 2019 by mail to [nsimd2019@gmail.com](mailto:nsimd2019@gmail.com). All invited and the selected contributed papers, after review, will be published in the proceedings of the NSIMD 2019.

*It is proposed to publish the selected research papers presented in the conference in the reputed Journals after review, with the consent of authors at nominal publication fees.*

## ABOUT CITY

Amravati city, a regional headquarter of Amravati Division of Maharashtra state, is well known as an educational hub in the region, together with its social, spiritual, historical and political advancements. Historical landmarks such as the Amba Devi Temple, 'Koundinyapur' a place from where Lord Krishna eloped with Rukhmini from the venue of the wedding ceremony, the "Melghat Tiger Project", Muktagiri (a Jain holy place), and "Chikhaldara" a hill station in the Satpura valley all are within 80 km radius of Amravati.

In recent years, "Bamboo Garden" situated in the city emerged as a major attraction for tourists. Above all, Amravati is also identified as a sacred land as it is the workplace of Saints like Sant Gadge Baba and Rashtasant Tukdoji Maharaj. As a recognition of the dissemination of his message of cleanliness and eradication of superstition by Sant Gadge Baba, the Amravati University, was renamed as "Sant Gadge Baba Amravati University". Besides, the city is a big marketing centre for oranges and Cotton, the main crops of the region.

## HOW TO REACH AMRAVATI

Amravati city is well connected by rail and road. Nearest airport is situated at Nagpur. Amravati is 150 km towards west from Nagpur on National Highway no.6. The nearest train stations are Amravati, Naya Amravati and Badnera. All mail and express trains on Mumbai Howrah route as well as Ahamadabad-Chennai route stop at **Badnera** railway station (10 km from venue). Delhi-Chennai passengers have to change train at Nagpur. Also there are direct trains for CSMT-Mumbai, Nagpur, Pune, Jabalpur, Tirupati and Surat from Amravati railway station (3 km from venue) and for Yashvatpuram- Bangalore, Kacheguda-Hyderabad and Indore-Jaipur from New Amravati railway station (6 km from venue).

Delegates are requested to plan for their, to & fro travel in advance, The University Campus is about 10 km away from Badnera railway station.