# 34<sup>th</sup> GUJARAT SCIENCE CONGRESS-2020

8 - 9 February, 2020

#### THEME: THE VALUE OF OUR SCIENCE AND THE WELL-BEING OF FUTURE GENERATIONS







Organized by

# **Ganpat University, Faculty of Science**

Under the Aegis of

**Gujarat Science Academy** 

# Co-Sponsored by

















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# Theme: The Value of our Science and The Well-being of Future Generations

There have been extensive discussions on the state of science in India and the hurdles that keep us from a place amongst the better performing nations in research and innovation. A reexamination of the past shows that despite adequate funding and opportunities, we as a community have not delivered up to our full potential. These have raised questions which need to be addressed, to ensure the continuity of support, that we receive.

With the exception of a few technology-driven sectors like Space, Atomic Energy, Agriculture and Pharmaceuticals, there are plenty of areas of basic sciences where missed several opportunities. Large experimental facilities were created but seldom utilized optimally. And presently we are, mere purchasers of critical instruments a fact that makes intellectual slaves and a nation exposed to international pressures.

Some of the reasons for this predicament and trivial growth of science are; a general ease of career advancement in the university system through the API system; lack of emphasis on quality research and publications in the universities; over-dependence on scientometrics; inappropriate pay structures and, the absence of accountability on the use of funds; insurmountable administrative hurdles. Therefore, in universities, incremental science has now become a satisfactory livelihood and conceptual developments are rarely attempted. In respect of teaching also, we have not been able to develop ecosystems that produce a larger number of internationally competitive students. We have also not been able to keep the teachers, sufficiently enthused about their profession. Loss of laboratories from schools, has deprived students from the fun of learning through experimentation.

Today, we are approaching a precarious future, likely to be compromised in a variety undesirable ways. We in Gujarat are replete with resources like large biodiversity, coastal tract, vibrant petroleum and automotive industry, large mineral deposits and excellent physical infrastructure but unlike our entrepreneurship, we are yet to make a lasting impact in the field of Science Education, Research and Innovation. The entire Scientific fraternity of Gujarat including its managers, teachers and researchers need a self-audit of its efforts for corrective measures, to ensure that the State can measure up to challenges to survive in the intellectual space.

Recent successes of Nobel Prizes to Indians, who had their early education here, assures that our education firmament in general has been robust. What is needed is an overall synergy and urgency in turning it with the need of the times by creating liberal courses without disciplinary boundaries that generate newer career opportunities such that a new generation of employable, goal-driven, socially responsible and flexible youth can emerge to deliver science and education at the highest level.

GSA has been creating programs for training but these have been measured efforts due to limited resources. The time is now ripe to develop synergies, convert these initiatives into mega, time bound mission-mode, bottoms up programs, where only merit is a criterion for all i.e. from career to funding.

Our aim should be, that we in Gujarat are able to take as much pride in the level of Science and Teaching, as we do in our entrepreneurship and our business acumen. The GSC 2020, to be held on the high-tech and socially responsible educational campus of GANPAT UNIVERSITY will be a right forum to discuss and to create a future road map for Science in Gujarat.

# **Gujarat Science Academy**

Gujarat Science Academy (GSA), established in 1978, is a premier academic organization comprising eminent scientists of Gujarat in all spheres of science and engineering. At present, GSA has 290 Fellows and Associate Fellows, besides ordinary members. Gujarat Science Congress is held annually in different parts of Gujarat. GSA activities include improvements of sciences education; new directions in research; training programs for students and teachers; outreach counseling; recognition of outstanding teachers, students and lecture awards for scientists/teachers of distinction.

# **Ganpat University**

Ganpat University, established under Gujarat State Act No.c19 of 2005 on 12-04-2005 is recognized university under section 2(f) of UGC Act, 1956 and member of AIU, New Delhi. It is an established hitech education campus located near Kherva, 15 km away from Mehsana and 45 km away from Gandhinagar.

The splendid, multi-disciplinary and highly professional education campus pervades in 300 acres land with eco-friendly atmosphere. The University offers Diploma, Bachelor's, Master's and Doctoral Programs in technical and professional disciplines.

The campus is endowed with amenities like banks, ATMs, post office, separate hostels for girls and boys, health center, gymnasium, staff quarters, canteen, shopping complex, guest house, sports complex, open air theatre etc.

#### **Mehsana Urban Institute of Sciences**

Mehsana Urban Institute of Sciences has been established in 2006 with a mission to meet the educational needs of the youth in the area of professional studies in sciences and to provide state of the learning opportunities. The Institute offers B.Sc & M.Sc programmes. The institute is having well equipped laboratories with latest instruments, class rooms with OHP and multimedia projector, computer laboratory with hi-speed internet facilities and rich collection of periodicals, journals and books in library. Students of this institute are placed in almost all the areas of pure and applied science.

Institute has received Econs Flagship Award "Most Upcoming Institute" conferred by Confederation of Education Excellence, (CEE) New Delhi in April 2017. Mehsana Urban Institute of Sciences has been selected as Capacity Building Cell (BTCBC) in North Gujarat Region by GSBTM, Government of Gujarat in August 2018.



# **Invited Speakers**

Prof. K.N. Vyas, FNAE

Secretary, DAE and Chairman AEC Anushakti Bhawan, Mumbai

Prof. Shekhar Mande, FNA

Director General, CSIR, New Delhi

Prof. Sandeep Verma, FNA

Secretary,

Science and Engineering Research Board, Ministry of Science & Technology, New Delhi

Prof. Sanjeev Dhurandhar, FASc

Professor Emeritus, IUCAA, Pune, Maharashtra

Prof. Pankaj Joshi, FNA

Vice Chancellor, CHARUSAT, Gujarat

Dr. Narottam Sahoo, FGSA

Advisor, Gujarat Council for Science and Technology, Gandhinagar, Gujarat

Dr. V. Kamble, FGSA

Former Director, Vigyan Prasar

Prof. P. N. Gajjar, FGSA

Head, Dept. of Physics Gujarat University

# GSA Executive Committee (2018-20)

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AU, Ahmedabad

Prof. D. K. Raval

SPU, VVNagar

# Highlights of the Congress...

- Key Note Address
- SR Thakore Memorial Lecture
- Lunal & Planetary Science Society's Endowment Lecture
- Dr. A.S. Divatia Memorial Lecture
- Plenary Lectures
- Panel Discussion
- · Awards and Presentations
- Poster Sessions

#### **Accommodation**

Accommodation (Rs. 300/day/person) at hostel or guest house will be arranged on first come first serve basis and on advance payment.

For Accommodation kindly contact the following person:

#### Dr. Nagji Rabari

Head, Mathematics Department, MUIS, Ganpat University

Contact No.: +919998250242

Email: gsc2020acco@ganpatuniversity.ac.in

# **Transportation**

Daily transport from designated pickup points in Ahmedabad, Gandhinagar, Mehsana, Palanpur, Visnagar, Himmatnagar will be available. Details will be provided on the website by Feb.1, 2020.

For transportation kindly contact the following person:

#### Mr. Ajay Desai

Assistant Professor, Chemistry Department, MUIS, Ganpat University

Contact No.: +919879741279

Email: gsc2020trans@ganpatuniversity.ac.in

**Important Dates:** Abstract Submission: 25-12-2019 | Notification of acceptance: 05-01-2020

# **Registration Fee\***

Category	On or before 10-01-2020 Early bird Registration	After 10-01-2020	Spot
UG & PG (Student)	800	1000	1200
Research Scholar	800		
Faculty/Post-Doc.	1200	1500	2000
Industry	5000	6000	7000
Accompanying person	1000 (Conference kit is not included)		

Registration fees will cover conference kit, breakfast, lunch and dinner. For spot registration conference kit and accommodation is not guaranteed. \*GST included

Registration Link: www.gsc2020.ganpatuniversity.ac.in Registration: Registration fees can be paid through DD/Cheque in favour of "Mehsana Urban Institute of Sciences" payable at Mehsana or fees can be paid through net banking.

Bank Name: The Mehsana Urban Co. Op. Bank Ltd.

Account No.: 002610010011271 IFSC Code: MSNU0000026

Branch Name: Ganpat Vidhyalay, Kherva-384001

Micr No.: 384313503

#### **Abstract Submission**

- Abstract must be in MS Word (.docx) format, not exceeding 200 words. Abstract to be submitted to gsc2020@ganpatuniversity.ac.in
- While sending e-mail, write in subject "Abstract
   - your name Category Code your category"
   form the following.

#### **Abstract Format**

- Font: Times New Roman, Font Size: 12
- · Title: Bold, Centre justified
- Authors: Italic, Centre justified all authors + affiliation and Corresponding author's e-mail (mark\*)
- · Category: Normal, Left justified
- Abstract: Normal, Left justified, single space (200 words)
- Poster Size: 4×3 feet (h×w)

### **Categories**

<b>Category Code</b>	Category Name	
1	Life Sciences, Pharmacy, Medical, Forensic Science	
2	Physics, & Materials Science	
3	Mathematics, Statistics, Computer, IT	
4	Engineering Sciences	
5	Genetics and Biotechnology	
6	Chemical Sciences	
7	Geography, Earth, Environment and Planetary Science	

#### **Office Bearers**

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& Executive Dean

e Dean 8

Dr. Girish Patel

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Dean, Faculty of Science & Principal, MUIS

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Dr. Keyur D. Bhatt

Head, Department of Chemistry, MUIS

#### Mrs. Manali N. Shah

Assistant Professor of Physics, MUIS

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Venue:

Auditorium, New MBA Building, Ganpat University http://www.mubiob.ac.in/ & http://www.gsc2020.ganpatuniversity.ac.in