



## TELANGANA ACADEMY OF SCIENCES

and



## NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

*Jointly Organize the Prestigious*

## TELANGANA STATE SCIENCE CONGRESS (TSSC-2018)



22<sup>nd</sup>-24<sup>th</sup> December 2018



To mark the 131<sup>st</sup> Birth Anniversary of Sir Srinivasa Ramanujan, FRS  
(National Mathematics Day) and the Diamond Jubilee Celebrations (60 Years) of the  
National Institute of Technology Warangal

*(131 is the biggest single digit prime-numbered three digit prime and  
60 is the lowest two digit number with the highest number of factors)*

*Focal Theme*

**Science & Technology for an All Round and  
Sustainable Development of the Telangana State**

*Venue*

**NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL**

## Telangana State Science Congress (TSSC-2018)

Andhra Pradesh Academy of Sciences (APAS) was established in the undivided state of Andhra Pradesh in the year, 1963, for promoting scientific knowledge including practical application to problems of the State welfare. APAS has been rechristened as "Telangana Academy of Sciences (TAS)" after the formation of the Telangana State.

TAS has been actively involved in disseminating scientific knowledge to the society through its activities by organizing meets, discussions, seminars, conferences and symposia and bringing out books and publications of popular science. The Academy takes forward scientific creative activity through education, research and discovery by identification and nurturing of scientific talent among the young.

As part of its major flagship activities, the TAS is holding first ever Telangana State Science Congress (TSSC-2018) during 22<sup>nd</sup>-24<sup>th</sup> December, 2018 in association with the National Institute of Technology (NIT) Warangal as part of the latter's Diamond Jubilee Celebrations. The event also marks the 131<sup>st</sup> Birth Anniversary of the Indian Mathematical prodigal genius, Sir Srinivasa Ramanujan (22<sup>nd</sup> December, 1887), Which is observed, every year, as "**National Mathematics Day**". This event is mainly aimed at promoting interaction among the scientific community across various disciplines at National and International level, besides popularizing science among the teachers and students.

The TSSC-2018 will have scientific sessions on SEVEN major themes on Science and Technology besides some special sessions.

### About the Telangana Academy of Sciences (TAS)

Telangana Academy of Sciences has been working relentlessly to promote scientific temper in Telangana State. It has been recognizing eminent scientists / Professors and electing them to the fellowship of the Academy. TAS also promotes children science activities, encourages young scientists towards inventions, investigations and research in pursuit of excellence in the fields of Science and Technology. Its activities include organizing endowment lectures, seminars, symposia, popular exhibitions and programs on overall perception of science and society.

For the last 55 years, the activities of the Academy have immensely helped in sharing the academic scholarship among its Fellows and Associate Fellows, in particular and the scientific community, in general. They have also catalyzed popularization of science and inculcation of scientific temper among children and general public. The Academy, in a bid to reach the wider community and to extend its activities, has established Five Regional Centers at Nizamabad, Karimnagar, Hyderabad, Nalgonda and Warangal covering all the Districts of Telangana State.

### About the Focal Theme

The Focal theme for the Telangana State Science Congress-2018 is "**Science & Technology for an All Round and Sustainable Development of the Telangana State**". The State of Telangana is the youngest and the 29<sup>th</sup> State in India. It has been formed on 2<sup>nd</sup> June, 2014 through the AP Reorganization Act. Being an infantile federal state with rich cultural heritage and abundant natural and human resources but low industrial and literacy, the State of Telangana is poised to leap into an all round and sustainable development. Sustainable development addresses the socio-economic development catalysed by scientific, technological and industrial advances. The proactive cooperation and positive support of the scientific community would augment and empower the Government for a sustainable development of the Telangana State. The development of the State is intertwined with the advancements in Science and Technology in different fields, namely, cleaner & fuel efficient technologies, de-fluoridation of drinking water, solar energy harnessing housing technology, entrepreneurship development, human health, water resources, information technology, biotechnology, sustainable human resource management, etc. The TSSC-2018 will identify the key areas in the activities of planning for an all round and sustainable development of the Telangana State.

## About the National Institute of Technology Warangal (NITW)

The National Institute of Technology Warangal (NITW), formerly known as the Regional Engineering College Warangal, is the first among the chain of 31 NITs crowned as Institutes of National Importance. It was established by an Act of Parliament. The country's first Prime Minister, Pandit Jawaharlal Nehru laid the foundation stone on 10<sup>th</sup> October, 1959 for this Institute. Thus, 10<sup>th</sup> October, 2018 marks the commencement of the **Diamond Jubilee Celebrations** of NITW.

The Institute presently offers 8 B.Tech Programmes in Engineering, 25 M.Tech Programmes and 7 other Postgraduate Programmes (M.Sc., M.Sc (Tech.), MCA and MBA) and PhD Programmes in all the thirteen Departments including Engineering, Sciences, Humanities, Management and Physical Education. The institute is well-known for its Research and Development, state of the art laboratories, Industrial consultancy, Continuing Education Programmes for teachers and industrial personnel.

The World Bank supports the Institute through Technical Education Quality Improvement Programme (TEQIP) and currently Phase III is in progress. The MHRD has recognized NITW as one of the six E&ICT Academies in the country. NITW also hosts scores of advanced short-term training courses conducted by International academicians under the MHRD's Global Initiative for Academic Network (GIAN) Programme.

The institute has about 600 foreign students from as many as 40 countries. It has strong academic and research collaborations with several leading foreign universities and through programs like HERITAGE, EUPHRATES, HORIZON-2020, etc. Students and faculty avail themselves of several short-term international exchange and mobility programs through these channels.

The Institute is recognized by the MHRD to run a Teaching Learning Centre (TLC) for Higher Education and is recognized as a National Resource Centre (NRC) in Mathematics under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMNMNTT). The MHRD has also recognized NIT Warangal as a Mentoring Institute under its very proactive mission, the Rashtriya Avishkar Abhyans (RAA) to mentor the school science education in the State of Telangana.

A year-long **Diamond Jubilee Celebrations (DJC)** are planned with the kick start of a grand Inaugural Function on 8<sup>th</sup> October with none other than the Honorable Vice President of India, Sri M. Venkaiah Naidu as the Chief Guest followed by a National Conference on "**Evolution of World Class Technical Institutions - Issues & Concerns**" during 10<sup>th</sup>-12<sup>th</sup> October, 2018.

### About the Warangal City

Warangal is a historical city with rich cultural and diverse heritage. It was the capital city of the famous Kakatiya Kingdom during the 12<sup>th</sup>-14<sup>th</sup> Century AD. There are many intricately carved monuments built by the Kakatiyas in this region. The 1000 Pillar Temple, Warangal Fort, Ramappa Temple,etc., bear testimony to the historic period. Warangal has been identified as a heritage city by the UNESCO. The biennial Medaram Fair, the most populous 3-day cultural fair, Laknavaram Lake, Pakhal Lake and Eturunagaram Reserve Forests are excellent tourist attractions and are just within 100 kms from the City. There are also many other scenic waterfalls nearby.

The city is well connected by road and rail network to the rest of the Country. Warangal Railway Station is 12 kms and Kazipet Railway Station is just 2 kms away from NIT campus. The nearest Airport is Rajiv Gandhi International Airport at Hyderabad, another historic city and capital of Telangana State, at a distance of about 170 kms from NIT campus. Warangal City is adapted as one of the Smart Cities by the Government of India and is destined to be a highly happening city in the very near days to come.

# Telangana State Science Congress - 2018

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	<b>Ms. M. L. Madhavi</b> I/c. Asst. Secretary, TAS, Hyd		

## Telangana State Science Congress - 2018

Theme Sessions	Sectional Presidents	Sectional Secretaries
Physical & Mathematical Sciences	Prof. T. Amarnath School of Mathematics & Statistics University of Hyderabad, Hyderabad	Prof. R.L.N Sai Prasad Professor of Physics, NITW Prof. P. Malla Reddy Professor of Mathematics, KUC Prof. D. Srinivasacharya Professor of Mathematics, NITW
Engineering & Technology	Sri. R. N. Jayaraj Former Chief Executive Nuclear Fuel Complex, Hyderabad	Prof. M. Sydulu Professor of Electrical Engg., NITW Prof. T.D. Gunneswara Rao Professor of Civil Engineering, NITW Prof. K. Anand Kishore Professor of Chemical Engg., NITW
Chemical Sciences	Dr. R. B. N. Prasad Former Chief Scientist, IICT, Hyderabad	Prof. Ch. Sanjeeda Reddy Professor of Chemistry (Retd), KUC
Life Sciences & Agricultural Sciences	Prof. P. Appa Rao Vice-Chancellor University of Hyderabad, Hyderabad	Prof. M. Singaracharya Professor of Botany (Retd), KUC
Medical, Health & Pharmaceutical Sciences	Prof. Chandrakant Kokate Former Vice-Chancellor, KUC	Prof. G. Achaiah Professor of Pharmacy & Director, IQAC, KUC
Earth, Ocean, Atmospheric & Environmental Sciences	Dr. B. G. Sidharth Director, B.M. Birla Science Centre, Hyderabad	Prof. K.V. Jayakumar Professor of Civil Engineering, NITW
Special Session on Interaction of Scientists with Students	Dr. Ch. Mohan Rao Former Director, CCMB, Hyderabad	Prof. L. Krishnanand Professor of Mechanical Engineering, NITW Dr. M. Heeralal Department of Civil Engineering, NITW
Special Theme Sessions	Sectional Presidents	Sectional Secretaries
Smart Cities	Prof. CSRK Prasad Professor of Civil Engineering, NITW	Dr. Venkaiah Chowdary, NITW Dr. P. Srinivasa Rao, NITW Dr. Asit Kumar Khanra, NITW
Renewable Energy Sources	Prof. P. Anand Raj Professor of Civil Engineering, NITW	Dr. S. Srinath, NITW Dr. A. Veeresh Babu, NITW Dr. G. Raghavendra, NITW
Information & Communication Technology	Prof. D.V.L.N Somayajulu Chair, E&ICT Academy, NITW	Prof. T. Kishore Kumar, NITW Dr. S. Ravichandra, NITW Dr. Ms. V. Venkatamani, NITW
Science in the Service of Society	Prof. A. Ramachandraiah Professor of Chemistry, NITW	Prof. D. Dinakar, NITW Dr. Ms. K. Madhavi, NITW Dr. B. Srinivas, NITW
Women Scientists Meet	Dr. Ms. K. Padma School of Management, NITW	Dr. Ms. H. P. Rani, NITW Dr. Ms. G. Shamitha, KUC Dr. Ms. S. Jyothi, KUC
Science Teachers Meet	Prof. D.V.S.S Siva Sarma Professor of EEE, NITW	Dr. P. V. Rao, NITW Dr. Prakash Saudagar, NITW Dr. B. Rama Raju, NITW

Other Activities	Coordinators
Distinguished Lectures	Prof. Y. Pydisetty, Dean, Academic, NITW
Panel Discussion	Prof. LRG Reddy, Dean, SW, NITW
Young Scientists Meet	Prof. G. Rajesh Kumar, Dean, R & C, NITW
Poster Session	Dr. M. Joseph Davidson, NITW, Dr. D. Kasinath, NITW, Dr. K. Hari Prasad, NITW,
S & T Expo	Dr. A. Benerji Babu, NITW, Dr. Ms. J. Pranitha, NITW, Dr. B. Divakar, NITW
Web Coordination	Dr. B. Lakshmi, NITW, Dr. Rashmi Ranjan Rout, NITW, Dr. T. Ramakrishnudu, NITW
Press & Publicity	Dr. K. Kiran Kumar, PRO, NITW, Dr. V. Hari Kumar, NITW

## Telangana State Science Congress - 2018

The TSSC-2018 invites Abstracts of innovative and quality research papers from Engineers, Scientists, Industrialists, Technocrats etc., along with articles of popular science to promote scientific temper.

### **Submission of Abstracts:**

Abstracts of Scientific/Technical papers not exceeding 500 words are to be submitted online (<http://cms.nitw.ac.in/conference/tssc2018/>) on or before 15<sup>th</sup> November, 2018. Please indicate the theme of the session on the top right of the Abstract page to be considered for review.

### **Registration Fee:**

Category	On or before 30-11-2018	After 30-11-2018
Students and Research Scholars	Rs. 1,000/-	1,200/-
University / College Teachers	Rs. 2,000/-	2,500/-
Scientists from National / R & D Labs	Rs. 3,000/-	3,500/-
Industry representatives	Rs. 5,000/-	6,000/-

Registration Fee is to be paid by Demand Draft in favour of "Telangana State Science Congress - 2018" payable at SBI, NIT, Warangal Branch, Warangal or through NEFT to SBI bank Account Number: 37984107940 with IFSC code: SBIN0020149. **Cash will not be accepted.** Online registration has to be done through the conference portal after fee payment. If the Registration Fee is not paid on or before 30-11-2018, those abstracts will not be included in the conference proceedings. If anybody is interested to attend the Congress without presenting a paper, he/she is also permitted to register by paying the above mentioned Registration Fee.

### **Participation & Registration:**

All the delegates who wish to participate in Telangana State Science Congress-2018 must register. As this is a platform where people from several scientific/technical back ground will be participating, the participants are encouraged to register well within the deadlines.

### **Accommodation:**

Limited accommodation is available in the NIT Guest House, Visitors Block and Students Hostels. There are several hotels close to NIT campus, the details of which are available on the conference website.

**Contact for accommodation:** Prof. N. Narasaiah, Jt. Secretary, TSSC-2018, E-mail: nn@nitw.ac.in, Phone: 08332969384

### **Sponsorship:**

Sponsorship is requested from Industries, Government Organizations and Private Organizations to promote the TSSC-2018

Category	Tariff (Rs.)	Benefits
Conference Sponsor	2,00,000/-	One Full page multi-colour advertisement in the Souvenir and Five delegates free plus one complementary stall
Lunch/Dinner/Reg. Kit	1,00,000/-	One Full page multi-colour advertisement in the Souvenir and Two delegates free
Event Sponsor	50,000/-	One Full page Black and White advertisement in the Souvenir
High Tea	25,000/-	Half page Black and White advertisement in the Souvenir

### **S & T Exhibition Tariff:**

Equipment manufacturers, suppliers, service providers, Educational Institutions, Publishers and Industries can participate in the exhibition. Standard stall space (6' X 9') along with power supply are provided for display by paying Rs. 50,000/- per each stall for 3 days. Two free registrations will be allowed for each exhibitor. For any specific facility/requirement, the exhibitors may contact the Organizing Secretary well in advance.

Advertisement Tariff for the Souvenir	
Back Page Cover (Multi-Colour) :	Rs. 50,000/-
Front Inner Page (Multi-Colour) :	Rs. 40,000/-
Back Inner Page (Multi-Colour) :	Rs. 30,000/-
Inner Page (Multi-Colour) :	Rs. 20,000/-
Inner Half Page (Multi-Colour) :	Rs. 10,000/-

### **For Correspondence and e-Contact**

**Prof. K. Laxma Reddy**

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### **For Direct Personal Contact / Visit**

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Dean, IRAA Office, Ground Floor, SOM Building

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Phone (O): 0870-246 2008

Mobile: 08332969493, 08332969439

### **IMPORTANT DEADLINES**

Online Abstract submission, on or before	15 <sup>th</sup> November, 2018
Communication of acceptance of Abstracts by	20 <sup>th</sup> November, 2018
Payment of early Registration fee, on or before	30 <sup>th</sup> November, 2018

# TELANGANA STATE SCIENCE CONGRESS - 2018



**TELANGANA ACADEMY OF SCIENCES**

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