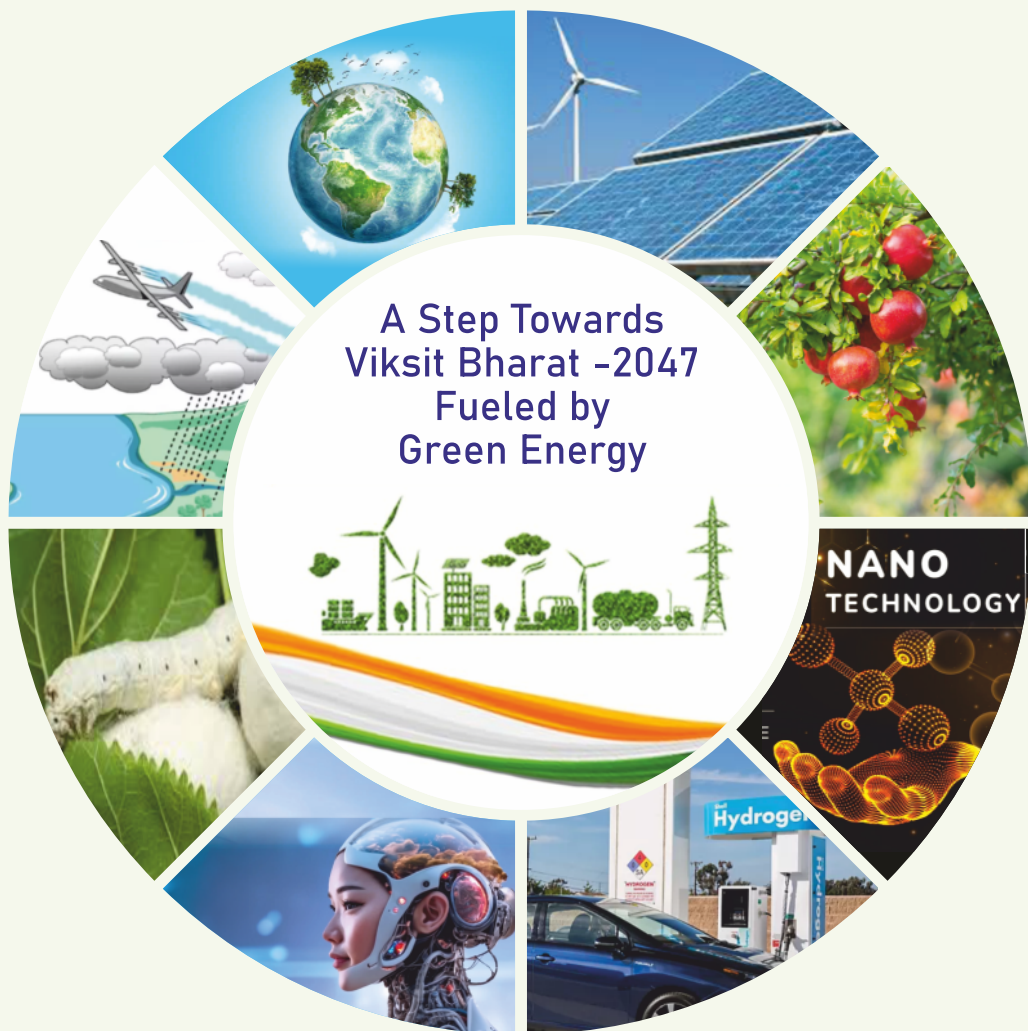


National Conference On

# INNOVATIVE TECHNOLOGIES FOR RURAL DEVELOPMENTS AND THEIR COMMERCIALISATION

3<sup>rd</sup> to 5<sup>th</sup> March 2025

A Multi -Mega Event : NC-ITRDC-2025



Organized by :



Centre For Research &  
Technology Developments, (CRTD),  
Sinhgad Institutes  
Solapur-413255 (India)



In collaboration with  
School of Physical Sciences  
Punyashlok Ahilyadevi Holkar Solapur University,  
Solapur - 413255 (India)



&  
National Research Centre On Pomegranate  
(Under Ministry of Agriculture, Govt. of India)  
Solapur - 413255 (India)

## Preamble

Rural development is the process of improving the quality of life and economic well-being of people living relatively isolated and sparsely populated areas. The need for rural communities to approach development from a wider perspective has created more focus on a broad range of development goals rather than merely creating incentive for agriculture or resources based businesses. Education, entrepreneurship, physical infrastructure and social infrastructure all play an important role in developing rural regions.

With a Vision of “Development of human being through research” the SPSPM has established the “Centre for Research & Technology Developments”, Sinhgad Institute, Solapur (India) in N.B.Navale Sinhgad college of Engineering Solapur. This centre mainly focuses on top ten problems of next fifty years .To begin with Energy, Environment, health care, water resources; food, fuel and fodder from agriculture are attempted.

The Punyashlok Ahilyadevi Holkar Solapur University and National Research Centre On Pomegranate, Solapur (NRCP) have come forward to collaborate with CRTD for organizing this multi mega event in the interest of Nation particularly rural community shouldered the responsibility of spreading these technologies for rural development, A Step Towards Viksit Bharat -2047.

The CRTD has ventured in a big way to undertake rural development program with innovative technologies It consists of mainly four groups of events as follows:

NC-ITRDC - 2025 is the first of its kind to be organized by CRTD, Solapur. The aim of this conference is to bring together leading academicians, scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Physical Sciences, Life Sciences, and Engineering & Technology.

The participating distinguished scientists and delegates shall provide new ideas and new directions that will inspire academicians and researchers, especially the budding young generation, to take up Fundamental Research as a bedrock in all emerging areas of science and technology, no matter what the discipline is. New ways of interdisciplinary as well as international collaboration will be debated. The aim is to inspire a path to new discoveries, new paradigms for development and new ways of delivery at unparalleled speed and scale with sustainability, all empowered by science and technology. But the bigger purpose of NC-IRTD-2025 is to find new ways in advancing the tools of cutting-edge frontier technologies to create an equitable, sustainable, and human centric Viksit Bharat @2047 that will be a role model for the rest of the world.

## A Multi-Mega Event

### NC-ITRDC-2025



## Event Schedule

Sr. No.	Events	Dates		
		Mon. 3rd March	Tue. 4th March	Wed 5th March
1.	National Conference on Engineering the materials for technology application with special reference to renewable energy & agri-bioresources.	←		→
2.	Industrial Exhibition & Trade Show of renewable energy and agri-bioresources technologies. (Display, demonstrate and sale)	←		→
3.	Science & Technology Exhibition by students.	←	→	
4.	Skill Development Programs for Farmers.		↔	
5.	Launching of a project on "Empowerment of Rural Communities with Mulberry" by District Sericulture Department, Solapur	↔		
6.	Talent Search (Quiz Competition) for college students.			↔
7.	Activities of Incubation Center			↔
8.	Workshop on value added product for farmers.		↔	
9.	Interaction with Scientists for Viksit Bharat-2047 (Meet with Scientists)	↔		

## Focus of Conference

- Renewable Energy & Rural Development: Solar, Wind, Tidal, Biomass and Geothermal Energies. Solar Thermal, Solar Photovoltaic, Solar cells, Fuel cells, Super capacitor, Photocatalist, Green chemistry, Biomass energy conversion, Biomass Gasifires, Bio and Hospital Waste Management and Power Co-generation.
- Nanomaterials & Bio-Nanocomposites, Applications of nano technology in Energy, Environment, Water resources, Health care, Agro and Food technologies, Gas-sensor.
- Sericulture Resources & Rural Development : Processing of mulberry leaves , Silk fibroin for futuristic electronics ,Energy, Enoveriment , Water purification and Health care application
- Nano-Technology Assisted Agriculture: Food production, Processing and Preservation. Pomegranate farming and processing.
- Post harvest management & Value chain development in fruit crops
- Nano-bio Materials, Nano Medicine, Biotechnology, Health Science and Tissue Engineering, Medicinal plant and their bio-nano composites.
- Advanced Trends in Telecommunication and Advanced Electronics Design Technology, Wireless and Sensor Networks.
- Transportation Engineering, Structure, Bridge and Tunnel Eco-building, Rain Water Harvesting and Management.
- ICT, Cloud Computing, Big Data, Data Mining, Image Processing, Artificial Intelligence, Cyber Security.
- Manufacturing, Design, Automobiles, Thermal Engineering, Fluid Mechanics, Composite Materials.
- Advances in Science and Engineering Technologies for Rural Development.
- Frontier Technologies for human centric Viksit Bharat @2047.

### **Call for Abstracts :**

A copy of the Abstract of the paper may be submitted /emailed ([crtidprogram@gmail.com](mailto:crtidprogram@gmail.com)) to the "Convener NC-ITRDC- 2025" on or before 8th Feb 2025. Abstracts may confine to A4 Size paper having a maximum of 300 words. The abstract should include full titled typed in capital letter & center. The authors names & affiliations may follow the title. The name of authors presenting the paper should be underlined. The email- address of corresponding author, as well as affiliation of all author & their complete address should be given. The text, in single spacing may start after a gap of one line letter size should be 12 in Times New Roman fonts Authors should submit the PDF files of their abstracts via email .All the abstracts accepted for presentation NC-ITRDC-2025 will be printed in an Abstract Book or copied in CD

### **Exhibition (Business Opportunities at NC-ITRDC-2025) :**

ITRDC 2025 will provide you with an ideal opportunity to meet the people, who really matter to you and yours business. It will build meaningful relationship, showcase products & technology solutions, service as well as directly interact with people who make the strategic decision. As an exhibitor, this event offers a host of business opportunities. The important feature of exhibition is display, demonstrate and sale.

### **Skill Development Programs for Farmers :**

Skill Development program schedule on 4th March, 2025. The primary objective of the workshop was to develop an action plan for skill development initiatives. Agriculture is one such important sector under the peaceful uses of renewable energy having major impact on rural development. The faith of the commercialization of renewable and nuclear energies technologies is very much dependant on the interest of the youth of the nation. The young engineers can play a key role in this direction. With this motive in mind, it is planned to organize the renewable and nuclear energies technologies for intercollegiate competition in NC-IDRTC 2025. It consists of mainly exhibition competition in NC-ITRDC - 2025. It consists of mainly exhibition competition and Quiz completion. The more details are available on website. (<http://sinhghadsolapur.org>)

### **Participants :**

Anybody interested in renewable energies technologies for Viksit Bharat 2047 from any field is invited to participate in the multi mega event. College students are especially invited to take part in the inter collegiate quiz and exhibition completion organized on the topics of National Conference. Manufacturers are invited to avail this opportunity to exhibit their product to the pool of targeted users. Farmers, Industrialist, Professors and students are invited to take part in the special workshop on technologies for Sericulture and Pomegranate Farming. Researchers are invited to make the presentation in the form of poster/oral.



### Chief Patrons

**Prof. M. N. Navale**

Founder President, STES, Pune &  
Chairman SPSPM, Kamalapur. (India)

**Prof. Dr. Prakash A. Mahanawar**

Vice Chancellor,  
PAHSUS, Solapur. (India)

**Dr. (Mrs.) Sunanda M. Navale**

Founder Secretary,  
STES, Pune. (India)

**Dr. Rohit M. Navale**

Vice President (H.R.) STES, Pune &  
Gen. Secretary SPSPM, Kamalapur. (India)

**Dr. Mrs. Rachana Navale Ashtekar**

Vice President (Admin)  
STES, Pune. (India)

### Patrons

**Mr. Sanjay S. Navale**

Jt. Secretary, SPSPM, Kamalapur &  
Campus Director, Sinhgad Institutes,  
Solapur. (India)

**Prof. Dr. L. B. Dama**

Pro. Vice Chancellor,  
PAHSUS, Solapur. (India)

**Smt. Yogini Ghare**

Registrar, PAHSUS,  
Solapur (India)

## Organizing Committee NC-ITRDC-2025

1. **Prof. Dr. S. H. Pawar** Chairman, NC-ITRDC-2025 & Research Director, CRTD, Sinhgad Institutes, Solapur.
2. **Prof. Dr. S. D. Nawale** Convener, NC-ITRDC-2025 & Principal, NBNSCOE, Solapur.
3. **Dr. Rajiv. A. Marathe** Convener, (Agriculture) NC-ITRDC-2025 & Director, ICAR-NRCP, Solapur
4. **Prof. Dr. B. J. Lokhande** Co-convener, NC-ITRDC-2025 & Director, School of Physical Sciences, PAHSUS
5. **Dr. Nilesh Gaikwad** Co-Convener, NC-ITRDC-2025 & Sr. Scientist, ICAR-NRCP -2025

### Members

#### i) NBNSCOE, Sinhgad Institutes, Solapur

6. Dr. S. S. Shirgan, Secretary (Academic)
7. Prof. K. S. Patil, Secretary (Administrative)
8. Dr. R. T. Vyavhare
9. Dr. S. M. Jagade
10. Dr. P. P. Tapkire
11. Dr. V. S. Biradar
12. Mr. A. K. Shaikh
13. Dr. V. V. Kharat
14. Dr. I. M. Chandarki
15. Dr. S. H. Kshirsagar
16. Dr. K. C. Mujawar
17. Dr. A. A. Kamble
18. Dr. S. R. Patil
19. Dr. M. H. Naikwadi
20. Dr. A. M. Kazi
21. Mr. S. T. Jagtap
22. Dr. P. S. Bhalerao
23. Mr. S. M. Chavan
24. Ms. Nikhat Shaikh
25. Dr. D. I. Navale

#### ii) PAH Solapur University, Solapur

26. Prof. V. B. Patil
27. Dr. V. M. Prakshale
28. Dr. V. M. Gavhane
29. Dr. U. K. H. Bangi
30. Shri. S. N. Pawar
31. Shri. A. A. Patil
32. Shri. A. A. Waghmare

#### iii) ICAR-NRCP

33. Dr. Somnath Pokhare
34. Dr. Namrata Giri

#### iv) District Sericulture

35. Mr. Vinit Pawar

### **Deliverable form the Event :**

- Gain the latest information about state of the art renewable and technologies for Viksit Bharat 2047.
- Learn Social & economical aspects of renewable and energies implementation.
- Review the recent policy developments impacting the Indian renewable energy sector.
- Gain understanding of government policies and priorities.
- Achieve strategic and operational excellence to address the goal of advancing renewable energy.
- Participate in interactive panel discussion tackling some of the most pressing issues, facing the industry.
- Experience sharing through presentation and case studies.
- Interact and network with the stakeholders & policy makers for Viksit Bharat 2047.
- Opportunity to Display, Demonstrate and Sale the products by industries.

### **Registration Information :**

Registration Fees will be applicable as Follows: (All figures are in INR)

	Upto 18th Feb 2025	After 18th Feb 2025
National Conference: A) Students B) Deligates	1500 2000	2000 2500
Workshop/ skill Development	500	750
Exhibitors 12000 to 20000	15000 to 25000 (As per space & position)	(As per space & Position)
Inter Collegiate Quiz Competition(Team Entry )	2000 Entry fee+ Registration of National Conference for four students	2500 Entry fee+ Registration of National Conference for four students

### **Payment Details :**

All payments should be made payable at NBNSCOE National Conference on Innovative Technologies For Rural Developments And Their Commercialisation (NC-ITRDC-2025) A/c. No. 916010038065803 Axis Bank Ltd., Hotgi Road, Solapur. IFSC Code : UTIB0001043

### **Important Deadlines**

Abstract Submission	: 8 <sup>th</sup> February 2025
Intimation of Acceptance	: 15 <sup>th</sup> February 2025
Last date for the receipt of accepted papers	: 18 <sup>th</sup> February 2025
Booking of stall for Exhibitors	: 10 <sup>th</sup> February 2025
Participate Registration	: 18 <sup>th</sup> February 2025

## **Background of the Organisations :**

### **1. Centre for Research and Technology Developments, Sinhgad Institutes, Solapur.**

Sinhgad Institute is one of the largest providers of quality education in India. Prof. M .N. Navale Founder President of Sinhgad Institute established these centers of excellence with the vision of bringing technical education to the masses. Today, Sinhgad Institute provides education from KG to PG and also runs doctoral programs. Starting with Sou. Venutai Chavan Polytechnic in 1993, today we have nearly 85 education institutes located at 12 campuses nurturing the dreams of over 86,000 students in various disciplines every year. The location of these campuses is in pollution-free, lush green and picturesque environment conducive to learning. We always endeavor to meet the growing needs of higher technical and management education by adopting new technologies, methodologies, disciplines, resources and even attitudes. We always welcome and quickly respond to new suggestion and innovative ideas to upgrade the quality of education at Sinhgad Institutes. Considering the need of nation, the Sinhgad Institute Solapur has established recently "Centre for Research and Technology Developments Sinhgad Institutes, Solapur that meet to global needs. The centre has planned the Multi Mega Event on "Innovative Technologies for Rural Development & Their Commercialization (NC- ITRDC-2025)", to showcase the significance and promote the usage of innovative technologies for rural development that dreams come true of Mahatma Gandhi.

### **2. School of Physical Sciences, Punyashlok Ahilyadevi Holkar, Solapur University**

The School of Physical Sciences is dedicated to excellence in teaching and research, with a strong focus on equality, diversity, and inclusion. Established under the university's school system in 2008, it comprises the Department of Physics and the Department of Electronics Science. The Physics Department offers a two-year M.Sc. in Physics with specializations in Applied Electronics, Materials Science, Condensed Matter Physics, and Energy Studies, while the Electronics Science Department provides a two-year M.Sc. in Electronic Science. Physics departments offer Ph.D. programs in their respective fields. The School boasts state-of-the-art research facilities, including a BET Surface Area and Pore Size Analyzer, Thickness Profilometer, UV-Vis Spectrophotometer, Electrochemical Workstations, Electrospinning Unit, and Chemical Vapor Deposition Unit. Additionally, it houses gas sensor measurement units, microwave hydrothermal units, and a PCB laboratory, supporting advanced research in energy storage, photovoltaic devices, sensors, magnetic materials, aerogels, and cloud computing. Faculty members are engaged in high-impact research funded by DST-SERB, BRNS-DAE, CSIR, RUSA, and UGC. Students benefit from national scholarships, fellowships, industrial training, SET/NET workshops, and learn-and-learn programs. The school also emphasizes extracurricular involvement through initiatives like the National Service Scheme and the AVISHKAR Research Festival, fostering holistic student development.

### **3. National Research Centre on Pomegranate, Solapur**

The ICAR-National Research Centre on Pomegranate, Solapur (Maharashtra), was established on June 16, 2005 by the Indian Council of Agricultural Research, New Delhi, as a step to strengthen research and development in pomegranate. This is the only institute working solely on pomegranate. The centre was established to fulfil the growing demand for pomegranate both in domestic and export market by tapping the immense production potential prevailing in the country. Since its inception centre is playing pivotal role and leading the research efforts in pomegranate for the country. The major contribution of the centre includes maintenance of world's largest pomegranate germplasm repository, development of new pomegranate varieties Solapur Lal & Solapur anardana, unraveling pomegranate genome sequence, tissue culture protocol with bio-hardening in pomegranate, Integrated disease and pest management schedule which is very popular amongst farmers, bioformulations for nutrition management, Sea protocol for export of pomegranate to long distant markets processing and value addition technologies by centre has also paved way for entrepreneurship development

## About Solapur :

It is located in south-eastern Maharashtra & easily accessible via air, road & is an important railway junction on the North South train line. It is an ancient historical and religious place with Shri Shivyogi Siddhameshwar, also famous for Lord Vitthal is at Pandharpur in this District. Swami Samarth of Akkalkot has followers from all walks of life. The well-known temple, Tuljabhavani Temple is dedicated to the Hindu goddess Bhavani at Tuljapur near to Solapur. In month of February it enjoys moderate climate.

## Places of visit



Shivgyi Siddhameshwar  
Solapur



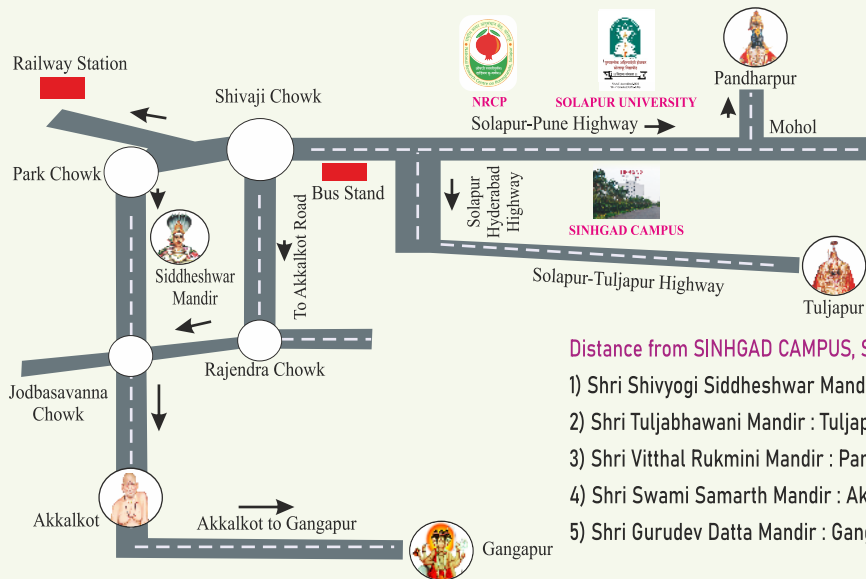
Lord Shri Vitthal  
Pandharpur



Tulja Bhavani  
Tuljapur



Shri Swami Samarth  
Akkalkot



### Distance from SINHGAD CAMPUS, Solapur

- 1) Shri Shivgyi Siddheshwar Mandir : Solapur City-10km
- 2) Shri Tuljabhawani Mandir : Tuljapur-54 km
- 3) Shri Vitthal Rukmini Mandir : Pandharpur-70 km
- 4) Shri Swami Samarth Mandir : Akkalkot-48 km
- 5) Shri Gurudev Datta Mandir : Gangapur-100 km

## Address for Correspondence

**Prof. (Dr). S. H. Pawar**

(Emeritus Scientist)

M.Sc., Ph.D., F.I.C.C., F.M.A.Sc.

Chairman NC-ITRDC-2025 and Former V.C. and  
Research Director, Centre for Research & Technology Developments,  
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Email: - [crttdprogram@gmail.com](mailto:crttdprogram@gmail.com)  
Website: <http://sinhgadsolapur.org>