



**Samarth Educational Trust
Arvind Gavali College of Engineering
Satara – 415015
IIC AGCE
Annual Report 2023 – 2024**



Vision

“To be a self-funded department catering to the needs of young entrepreneurs with innovative ideas of national/international importance and societal needs”

Mission

“Develop a mechanism with required infrastructure that can enable students and faculty to innovate and prototype their innovation with support from the Government, industry, and academic institutions”

Objectives

- **To encourage innovation and entrepreneurship within the institute.**
- **Establish and nurture ecosystem for scouting ideas and provide support for their implementation**
- **Provide support and guidance for converting ideas into patents, copyrights.**
- **Provide start-up supporting mechanism for student’s projects and innovative ideas from students and faculty.**

Journey of the IIC

Samarth Educational Trust, Arvind Gavali College of Engineering, Satara has established Institution’s Innovation Council (IIC) as per the guidelines of ‘MoE’s Innovation Cell (MIC) in the year 2019.

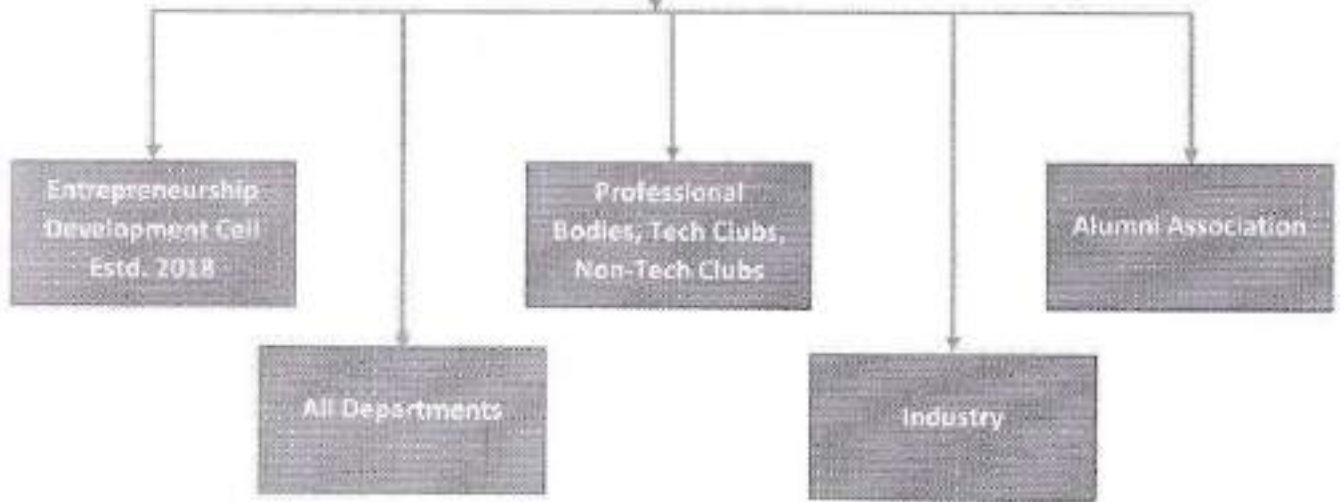
The initiative was to create an entrepreneurial culture at the institute and also support other institutions in the region. After establishment of the Institution’s Innovation Council in 2019, efforts were taken to inculcate the culture of innovation driven entrepreneurs through student projects. One of the principal factors stressed upon was the encouragement of women to enter into this emerging field.

IIC AGCE is actively involved in organizing and conducting seminars, workshops, field trips, interactive guest lectures, etc. Students as well as faculty members are encouraged to participate in innovation competitions, quizzes, discussions, etc. An important milestone reached by IIC AGCE is the submission of Startup ideas to the DBATU Forum of Innovation, Incubation & Enterprise (DFIIE).



Stakeholders of AGCE – IIC

Stakeholders of IIC – AGCE



Key Functionaries of IIC – AGCE

Dr. Vilas A. Pharande
President
IIC – AGCE



Dr. Gayatri S Mirajkar
Convener
IIC – AGCE

Prof. Arjun A. Kadam
Startup Activity Coordinator
IIC – AGCE



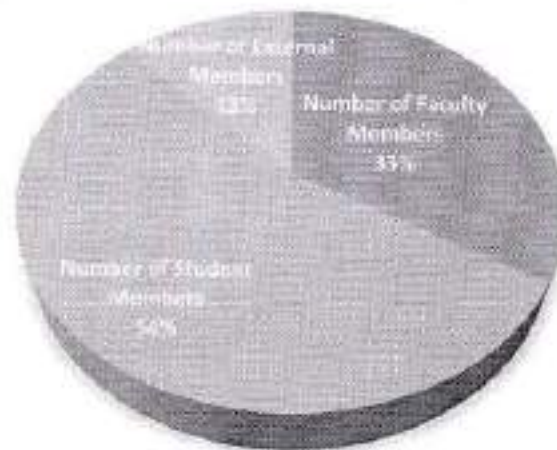
Prof. Suhas P. Patil
Innovation Activity Coordinator
IIC – AGCE

Prof. Bhagyashri P. Pol
Social Media Coordinator
IIC – AGCE



Resource Strength of IIC-AGCE:

Resource Strength of IIC-AGCE



■ Number of Faculty Members ■ Number of Student Members ■ Number of External Members

Pi-Chart showing the resource strength of IIC-AGCE



The IIC member details for the academic year 2023 – 2024 are as follows:

Total number of IIC Members: 23

Sr. No.	Name of Member	Member Type (Teaching/ Non-teaching / External Expert)	Key Role/ Position assigned in IIC
1	Dr. Vilas Pharande	Principal	President
2	Dr. Sagar Shinde	External Expert	Patent Expert
3	Mr. Omkar Waikar	External Expert	Expert from nearby industry (Member)
4	Mr. Sushant Kulkarni	External Expert	Expert from nearby industry (Member)
5	Dr. Gayatri Mirajkar	Professor	Convener, IPR Activity Coordinator
6	Mr. Suhas Patil	Assistant Professor	Innovation Activity Coordinator, Member
7	Mr. Arjun Kadam	Assistant Professor	Startup Activity Coordinator, Member
8	Mrs. Bhagyashri Pol	Assistant Professor	Social Media Coordinator
9	Mr. Vijay Gujar	Assistant Professor	ARIIA Coordinator, Member
10	Mr. Ankur Kamble	Assistant Professor	NIRF Coordinator
11	Dr. Manali Shah	Professor	Internship Activity Coordinator
12	Ms. Gayatri Desai	Student	Innovation Coordinator
13	Ms. Gayatri Desai	Student	Innovation Coordinator
14	Ms. Aalmas Shaikh	Student	Internship Coordinator
15	Mr. Ajinkya Safai	Student	Startup Coordinator
16	Ms. Siddhi Bhosale	Student	Social Media Coordinator
17	Ms. Pragati More	Student	IPR Coordinator
18	Mr. Rohan Kadam	Student	Member
19	Mr. Rohan Kadam	Student	Member



20	Ms. Sayali Pawar	Student	Member
21	Ms. Shravani Kulkarni	Student	Member
22	Mr. Shrikant Salunkhe	Student	Member
23	Ms. Shruti Shinde	Student	Member



Highlight of Facilities

1. Incubation Unit:

Dr. A. P. J. Abdul Kalam Innovation and Incubation Cell

Facilities Provided:

- **Training**
Pre-feasibility studies, Project appraisal, Market research, and techno-commercial studies.
- **Mentoring**

Infrastructure:

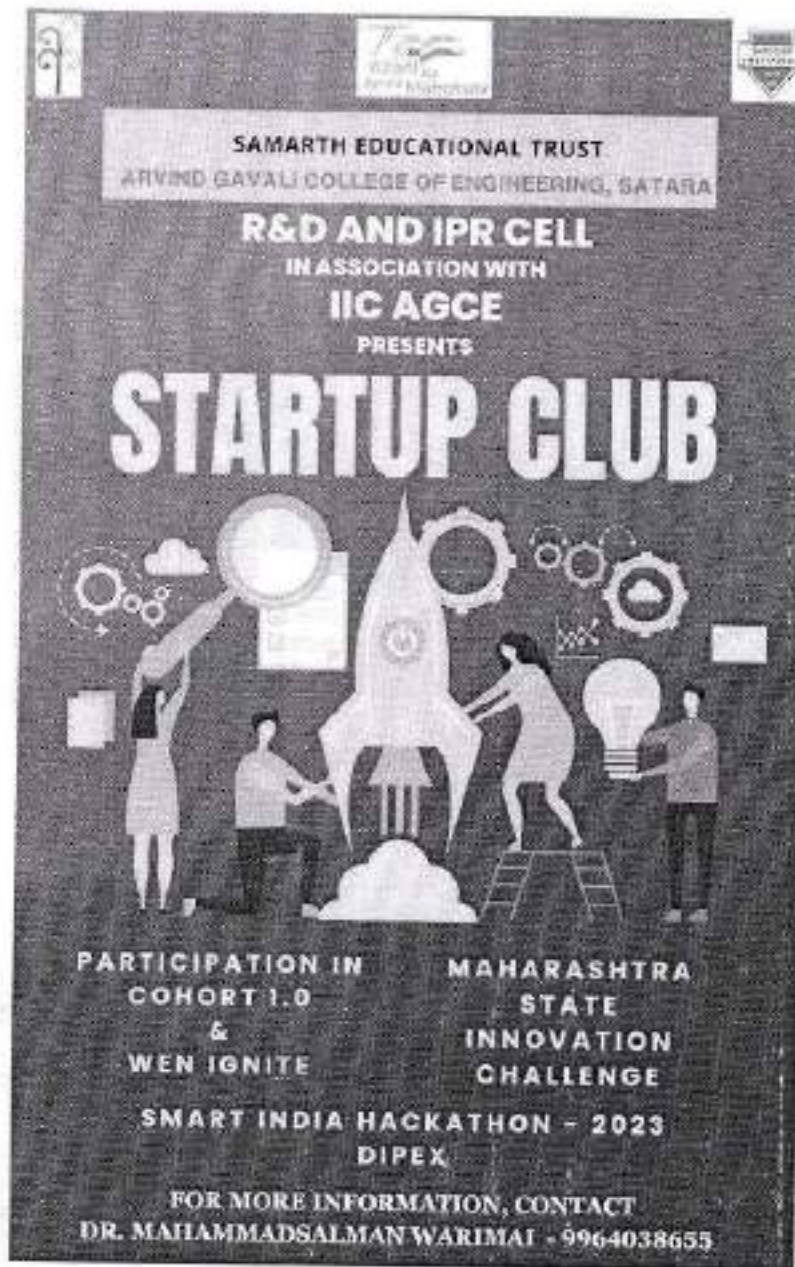
- **Work Place**
Ready-to-use furniture, internet connectivity, networking, meeting room, copier, printer, etc.
- **Library**
Access to the institution library
- **Technical Support**
Faculties of AGCE will provide the necessary technical support
- **Laboratory, Workshop and Testing Facilities**
The incubatees will have access to laboratories, workshops, and testing facilities available on campus

2. Student Bodies:

Startup Club:

Coordinator: **Dr. Gayatri Mirajkar**
Dean (Research & Development)
Arvind Gavali College of Engineering, Satara





SAMARTH EDUCATIONAL TRUST
 ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

R&D AND IPR CELL
 IN ASSOCIATION WITH
IIC AGCE
 PRESENTS

STARTUP CLUB



PARTICIPATION IN
 COHORT 1.0
 &
 WEN IGNITE

MAHARASHTRA
 STATE
 INNOVATION
 CHALLENGE

SMART INDIA HACKATHON - 2023
 DIPEX

FOR MORE INFORMATION, CONTACT
 DR. MAHAMMADSALMAN WARIMAI - 9964038655

Pamphlet of the Startup Club

The "Startup club" has been initiated with an aim to create an integrated college and university-based innovation ecosystem to support innovations and ideas of faculty members and students and provide a conducive environment for an optimum output of their thoughts and creative ideas. The club is under the aegis of the R&D and IPR Cell of the institute.

The club has been established with the aim of promoting the vision of "Aatmanirbhar Bharat Abhiyaan" or self-reliant India campaign envisaged by the Hon'able Prime Minister Shri Narendra Modi. The students interested in the startup activities are encouraged to join the club. The faculty members involved provide guidance to the students for drafting and submitting proposals for their innovative ideas.



Notable Ideas under the Flagship of the Startup Club:

1. DP Transformer Theft Protection and Monitoring Device:

[Indian Patent Application No. 202221065599, Patent Hearing on 03 October 2024]

The Indian Power sector is experiencing huge technical, non-technical and commercial losses, in which the vandalism or theft of transformer parts, such as core (copper winding) and oil are creating enormous financial losses for both power generation companies and indirectly for farmers as the transformers supplying agricultural load are more prone to thefts. Distribution transformers of sub-stations in rural and tribal areas experience lack of supervision and maintenance once erected for operation. Hence, it is a challenging task to stop and prevent such unlawful activity by using available technology compatible with the robust working conditions.

This invention proposes design of circuitry and control by coordinating devices which are used to monitor and protect the transformer.

2. Retro-fitment Kit for Three-Wheeler Auto Rickshaw to Convert IC Engine into Electrical Drive Using Gear Box:

[Indian Patent Application No. 202121024842, Patent Under Examination]

Hybrid vehicles have distinct advantage of allowing long travel, as at least one source is always available to drive the vehicle. There is no risk of running out of fuel as it frequently happens with a traditional internal combustion powered vehicle.

The invention proposes to provide a solution to the ongoing fuel crises by using a less power BLDC (Brushless Direct Current) motor which can consume less electric power to drive the vehicle which has an added advantage in increasing the range of the vehicle. The mechanical part is designed so as to minimize power loss. A retro-fitment solution is the best option to convert an IC engine into an E-vehicle.

3. A Machine Learning Model for Venue Exploration and Recommendation []

[Indian Patent Application No. 202121049749]

The current travel scenario contains a rising demand for a scalable, standalone system for venue exploration and recommendation. The proposed system provides accurate and fast venue exploration, recommendation, and analysis.

The proposed system uses current tools namely data mining, collaborative filtering, and K-means methods for extracting hidden knowledge from massive datasets in order to improve the accuracy and efficiency of their recommendation.

4. Development of Additive Material to Enhance Biogas Production from Biowaste

There is a huge demand for energy which is renewable and environment friendly.

To overcome the combustion issue in a standard portable or stationary biowaste digester, additive material that acts like a catalyst to the combustion process has been proposed. The advantages include improved production of Methane, elimination of hydrogen sulphide and increase the degradation of phytotoxic compounds such as polyphenols.



5. Development of Automobile Piston by Using Aluminium Based Metal Matrix Composites

Metal Matrix Composites (MMCs) are attracting automobile and aeronautical sector because of their superior mechanical and physical characteristics which ultimately reduce the weight of compounds and hence the weight of components and hence the energy requirements.

Efficient engine performance is a cornerstone of modern two-wheeler design. Conventional piston materials often fall short in handling the demanding condition of high-speed, high-temperature engines.

The project proposes to introduce a new standard of piston performance.

6. E-Plastic Management System

The concept is to use excessive plastic waste generated by industries to fill landfills.



Highlight of the Activities

Number and Different Types of I&E and IPR Activities Conducted:

1. Induction Program 2023 – 24

The Induction Programme for the first-year students conducted from 22nd August 2022 to 30th September 2022 hosted sessions on entrepreneurship by successful entrepreneurs and industry personnel.

Program Theme: Entrepreneurship

Objectives:

1. Benefit in terms of learning/skill/knowledge obtained.
2. Motivate students for entrepreneurship and obstacles in it.

Duration: 17th July 2023 to 14th August 2023 (1 Month)

Participants:

- Faculty Members: 06
- Students: 147

Sr. No.	Name of the Expert	Position	Date of the Session
1	Mr. Omkar H. Nalawade	Director, Greenspace Ltd. Satara	21 st July 2023
3	Mr. Salimmalik Shaikh	Founder and Director Seer Maps Technologies, Pune	24 th July 2023
4	Mr. Pravin R. Patil	Founder/Proprietor Ramchaya Constructions, Satara	27 th July 2023
5	Mr. Tushar J. Inamdar	Managing Director Squarewave Automation Technologies Pvt. Ltd. Satara	28 th July 2023
6	Mr. Amar Shinde	CEO and Founder AB Software Solutions, Satara	31 st July 2023
7	Mr. Amey S. Agate	Owner	31 st July 2023



		Niketan Constructions, Satara	
8	Mr. Pankaj K. Gandhi	Owner Pankaj Engineering, Satara	8 th August 2023

2. Impact Lecture Sessions Sponsored by MoE's Innovation Cell (MIC), AICTE, New Delhi:

Impact Lecture Sessions were organized by the Institution's Innovation Council of Arvind Gavali College of Engineering, Satara on the 28th of March, 2024 and 25th of April, 2024 under the Impact Lecture Scheme sponsored by the MoE's Innovation Cell (MIC), AICTE, New Delhi. The lectures were attended by the faculty members of AGCE and the students also actively participated in the lecture. The mode of conduction was offline. The invitation and registration link were circulated well in advance among the students, faculty members of the institute, all the neighboring institutes affiliated to Dr. Babasaheb Ambedkar Technological University and IICs.

The Session I was conducted on the 28th of March, 2024. The speaker details are as follows:

Speaker 1: Mr. Sushant Kulkarni, Partner, ARKS & ASSOCIATES, Company Secretaries, Pune, Maharashtra, India

Speaker 2: Mr. H. B. Keshava, Founder and Managing Partner, Baskaran Associates LLP., Pune, Maharashtra, India

The Session II was conducted on the 25th of April, 2024. The speaker details are as follows:

Speaker 1: Mr. Suryakant Dodmise, CEO, SIBIC Business Incubator, Kolhapur, Maharashtra, India

Speaker 2: Er. Shubhada Jagtap, Proprietor, MRUDA Geotech Consultants, Satara, Maharashtra, India

The Statement of Expenditure and the Utilization Certificate are submitted to the MoE's Innovation Cell, AICTE, New Delhi.



SAMARTH EDUCATIONAL TRUST Session 1
ARVIND GAVALI COLLEGE OF ENGINEERING
SATARA
Impact Lecture Sessions
 Sponsored by
 MoE's Innovation Cell (MIC), AICTE, New Delhi
 28th March 2024

Startup Ecosystem Success Roadmap
 11.00 am to 12.30 pm
 By
 Mr. Sushant Kulkarni
 Partner, ARKS & ASSOCIATES, Company Secretaries

Need for Intellectual Property for Businesses and Dynamic Growth
 3.00 pm to 4.30 pm
 By
 Mr. H. B. Keshava
 Founder and Managing Partner, Baskaran Associates LLP

Whatsapp Group Link:
<https://chat.whatsapp.com/0291241386714409578143>
 E-certificate will be provided to all participants

@sawkar @sawkarinstitutes <https://sawkar.edu.in>
 Address: 427, Shankar Path, Behind Sawkar Transport, Satara
 9937100100 9867700100

SAMARTH EDUCATIONAL TRUST Session 2
ARVIND GAVALI COLLEGE OF ENGINEERING
SATARA
Impact Lecture Sessions
 Sponsored by
 MoE's Innovation Cell (MIC), AICTE, New Delhi
 25th April 2024

Converting Ideas to Startup and Role of Incubation Centre
 11.00 am to 12.30 pm
 By
 Mr. Suryakant Dodmise
 CEO, SIBC Business Incubator

Entrepreneurship - Why, When, and How
 3.00 pm to 4.30 pm
 By
 Dr. Shubhoda Jagtap
 Proprietor - MAJDA Gestech Consultants

Whatsapp Group Link:
<https://chat.whatsapp.com/0291241386714409578143>
 E-certificate will be provided to all participants

@sawkar @sawkarinstitutes <https://sawkar.edu.in>
 Address: 427, Shankar Path, Behind Sawkar Transport, Satara
 9937100100 9867700100

Flyers of the Impact Lecture Sessions

3. Participation in Maharashtra Student Innovation Challenge:

The Maharashtra State Innovation Society is a nodal government agency to boost innovation-driven entrepreneurial ecosystem in the state of Maharashtra. Established under Skills, Employment, Entrepreneurship and Innovation Department, Government of Maharashtra. Maharashtra Student Innovation Challenge (MSIC) is the flagship initiative of the Maharashtra State Innovation Society, Government of Maharashtra. MSIC aims to foster innovative approaches and create conducive environment for innovative businesses to operate in Maharashtra.

The phases of the Maharashtra Student Innovation Challenge 2023 were as follows:

- Phase 1: Institute registration and selection of best ideas at Institute level.
- Phase 2: District level presentations and selection of best ideas.
- Phase 3: Special incubation program

Participants:

1. Mr. Vikrant Subhash Pawar
2. Mr. Chinmay Mane

Winner: Mr. Vikrant Subhash Pawar, Winner District Level plus Cash Prize of Rs. 1 Lakh





Maharashtra State Innovation Society

Department of skills, Employment, Entrepreneurship & Innovation
Government of Maharashtra
Maharashtra State Innovation Society

MAHARASHTRA STUDENT INNOVATION CHALLENGE

A PLATFORM TO PROMOTE STUDENT INNOVATIONS.

ATTENTION!

Higher Educational Institutes & ITI's

Do you wish to support innovative minds from your institutes to pursue their startup dreams?
If yes, then this opportunity is for you!!

Register your institute today

Last Date to Apply
15 Aug 2023



DREAM, INNOVATE & TRANSFORM

REGISTER www.msins.in OR scan the QR code



Flyer of the MSIC



Congratulations to Mr. Vikrant Subhash Pawar for securing first position from district Satara in the Maharashtra Student Innovation Challenge. He has received seed funding of Rs. 1 Lakh. He has been felicitated by the Guardian Minister of Satara district on the 26th of January 2024.

Mr. Vikrant Pawar receiving the award



Participation in Avishkar – 2023:

Participation in Zonal Level of Avishkar 2023:

The institute participated in the zonal level of Avishkar-2023 held at YSPM's Yashoda Technical Campus on the 26th of November, 2024.

Participants: 11

Winners: 03

Sr. No.	Name of the Student	Category	Gold/Silver
1	Ajinkya Mahesh Safai	Agriculture and Animal Husbandry (UG)	Gold
2	Vikrant Pawar	Engineering and Technology (UG)	Gold
3	Aniket Chandrashekhar Shinde	Engineering and Technology (PG)	Gold

Participation in University Level of AVISHKAR 2023

The institute participated in the University level round of AVISHAKR 2023 held at Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad.

Participants: 03

Winners: 02

Sr. No.	Name of the Student	Category	Gold/Silver
1	Ajinkya Mahesh Safai	Agriculture and Animal Husbandry (UG)	Gold
2	Vikrant Pawar	Engineering and Technology (UG)	Silver



अरविंद गवळी कॉलेजचे यश

सातारा : डॉ. बाबासाहेब आंबेडकर तंत्रशास्त्र विद्यापीठांतर्गत विभागीय आविष्कार २०२४, संशोधन स्पर्धा येथील यशोदा टेक्निकल कॉम्पसमध्ये पार पडली. या स्पर्धेत अरविंद गवळी कॉलेज ऑफ इंजिनिअरिंगला इंजिनिअरिंग अँड टेक्नॉलॉजी या विभागात दोन सुवर्णपदके, अनिकेत चंद्रशेखर शिंदे व विक्रान्त पवार यांना कृपा विभागात एक सुवर्णपदक, अजिंक्य सफई यानेही पदक पटकावले. त्यांना प्रा. अर्जुन कदम, डॉ. गायत्री मिरजकर, सहायक प्रा. पोळ यांचे मार्गदर्शन लाभले. यशाबद्दल विद्यार्थ्यांचे समर्थ एज्युकेशनल ट्रस्टचे अध्यक्ष अरविंद गवळी, निशांत गवळी, प्राचार्य डॉ. विलास फरादे, नितान कणसे यांनी अभिनंदन केले.



सातारा : यशस्वी विद्यार्थ्यांसोबत शिक्षक.

Newspaper news of the Zonal Level Event held on the 26th of November 2024



5. Celebration Activity for National Science Day:

Guest Lecture on "Superstition – A Myth"

A one-day guest lecture was conducted on 1st of March, 2024 on the topic, "Superstition – A Myth" by IIC – AGCE. The activity was conducted as a celebration activity on the occasion of National Science Day. The speaker, Mr. Prashant Potdar is a State Executive Committee Member, MANAS, Satara, emphasized on the harmful effects of harboring superstitions on the society.

The speaker, Mr. Potdar along with his colleagues also gave demonstrations of certain occult practices and the scientific explanation on how these practices are carried out to fool the society.

Objectives:

- To contribute in the eradication of blind faith.
- To highlight the scientific facts that help to evaluate superstitions in the society.

Duration: 1st March 2024 to 1st March 2024

Participants: 180

The flyer is a rectangular poster with a white background and black text. At the top left, there is a logo for 'Sawkar Institutes' with the number '1957100718'. At the top right, there is a logo for 'Institutions Innovation Council'. The main text in the center reads: 'SAMARTH EDUCATIONAL TRUST ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA IIC AGCE Presents On the occasion of National Science Day SUPERSTITION - A MYTH'. Below this text is a portrait of Mr. Prashant Potdar. To the right of the portrait, the event details are listed: 'Session Date: 01 March 2024', 'Session Time: 3.00 pm to 5.00 pm', 'Mode: Offline', and 'Venue: Visvesvaraya Hall'. Below the portrait, the speaker's name and title are given: 'Speaker: Mr. Prashant Potdar, State Executive Committee Member, MANAS, Satara'. At the bottom, the contact information for 'Sawkar Institutes' is provided: 'Address: 427, Shanivar Peth, Behind Sawkar Transport, Satara', '9957100100', '9069700100', and the website 'https://agce.edu.in'. Social media icons for Facebook and Instagram are also present, with the handle '@agcesatara6345'.

Session Date: 01 March 2024
Session Time: 3.00 pm to 5.00 pm
Mode: Offline
Venue: Visvesvaraya Hall

Speaker: Mr. Prashant Potdar
State Executive Committee Member, MANAS, Satara

Sawkar Institutes
Address: 427, Shanivar Peth, Behind Sawkar Transport, Satara
9957100100 9069700100
<https://agce.edu.in>

@agcesatara6345

Flyer of the event





Session being conducted



Session being conducted



Demonstration



6. Celebration Activity for International Women's Day:

The celebration activity for International Women's Day was held on the 14th of March, 2024. The speaker for the occasion was Adv. Manisha Vikas Barge. The students got knowledge about the rights of women in the Constitution of India and the immense achievements of women in the world today.

Objectives:

- To celebrate women's rights and call for change, fight against discrimination.
- To honor achievements across the political, economic, social, and cultural spheres throughout history.
- To give them an opportunity to reconsider the position of women in the world today.
- To become aware about women's rights in the constitution of India.

Duration: 14th March 2024 to 14th March 2024

Participants: 120



Welcoming of the guests for the celebration of International Women's Day





Session being conducted

7. MIC Driven Activity - Guiding Framework for Creating and Engaging Trained Faculty and Student IIC Members Innovation Ambassadors (IA) in IIC Institutions and Rewarding Mechanisms for IAs

Session by Mr. Dipan Kumar Sahu on 29th July 2024

The IIC Members and the students of Arvind Gavali College of Engineering, Satara, successfully participated in the MIC-Driven sessions held from July 29, 2024. As the institute academics commenced from 5th of August 2024, the recording of the session on YouTube was used.

During these sessions, Mr. Depan Kumar Sahu, Assistant Innovation Director at the Ministry of Education's Innovation Cell (MoE's Innovation Cell), provided in-depth discussions on several key topics:

- The Guiding Framework for Creating and Engaging Trained Faculty and Student IIC Members, Innovation Ambassadors (IA) in IIC Institutions, and Rewarding Mechanisms for IAs.
- Strengthening IIC Linkage with ATLS (Atal Tinkering Labs) and SICs (School Innovation Councils) in Schools and the Framework for Providing Mentorship Guidance.
- An Orientation cum Refresher Session on the Objectives, Structure, and Operations of the Institution's Innovation Council for IIC Institutions.
- The speaker emphasized the importance of research, innovation, and entrepreneurship in India's education system and the challenges faced by institutions in promoting these areas.
- The council focuses on six pillars: system development, leadership, structure, cultural development, and strategy.
- The IIC is a crucial component in measuring institutional performance and provides opportunities for students and faculty to engage with industry partners and resources. The council also offers incentives, rewards, and recognition for selected innovators.

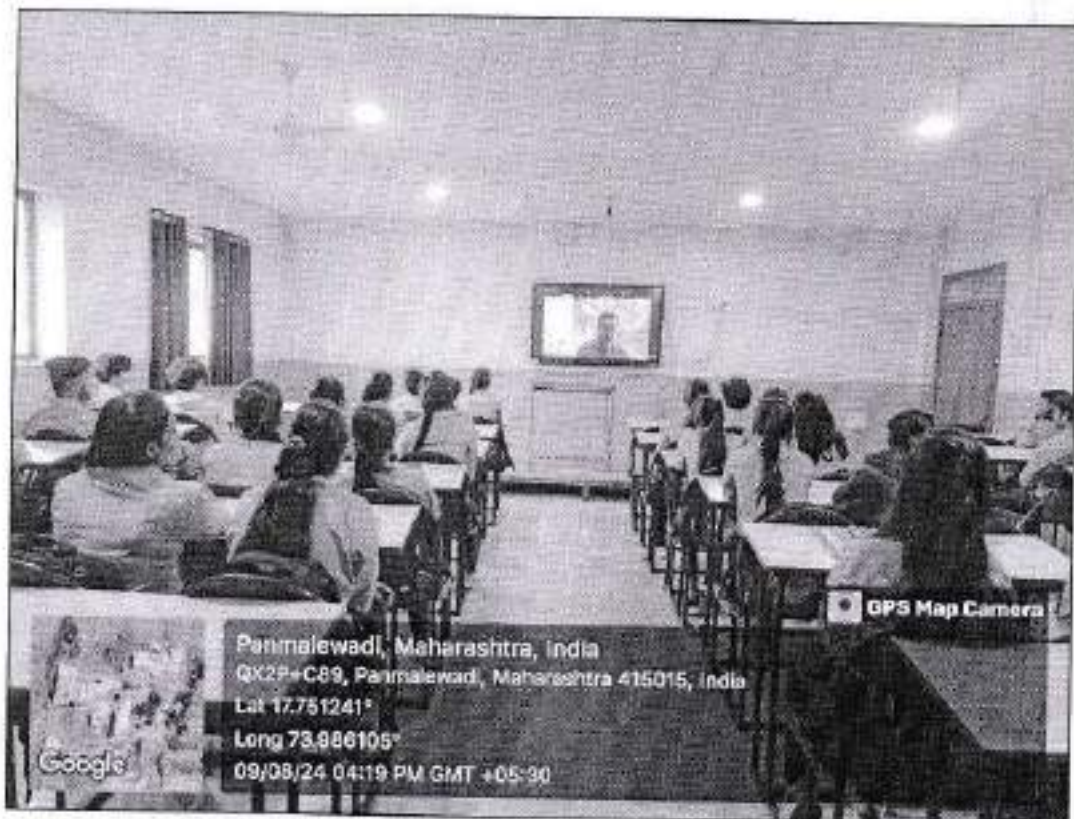


The IIC portal offers various subprograms, such as Mentor Mentee Impact Lecture, and innovation entrepreneurship-related learning courses.

Duration: 9th August 2024 to 9th August 2024



Flyer of the session on Youtube



Students and faculty members attending the session



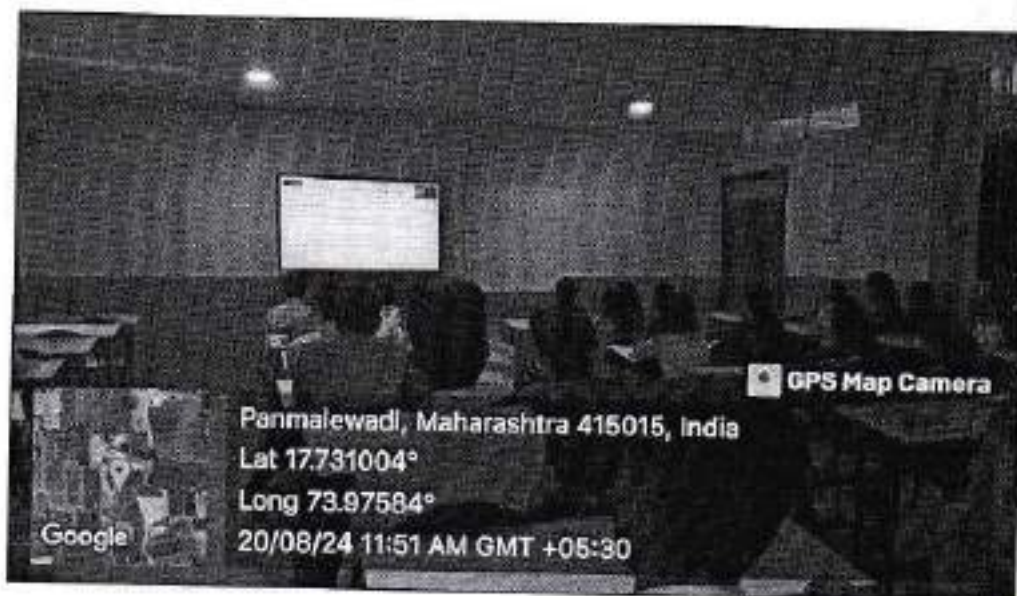
8. MIC Driven Activity - Strengthening IIC Linkages with ATLs and SICs in Schools and Framework for Providing Mentorship Guidance
Session by Mr. Dipan Kumar Sahu on 31st July 2024

The IIC Members and the students of Arvind Gavali College of Engineering, Satara, successfully participated in the MIC-Driven sessions held from July 29, 2024. As the institute academics commenced from 5th of August 2024, the recording of the session on YouTube was delivered on the 20th of August 2024.

During these sessions, Mr. Depan Kumar Sahu, Assistant Innovation Director at the Ministry of Education's Innovation Cell (MoE's Innovation Cell) made colleges aware about startups, entrepreneurship programs for their self-employment and also informed about the working of ATLs and SICs.

- The objective of the session was accelerating R&D, Innovation and Entrepreneurship in the country.
- The primary objective of strengthening institutions Innovation Council (IIC) linkages with Atal Tinkering Labs (ATLs) and School Innovation Councils (SICs) in schools is to foster a culture of innovation and entrepreneurship among students from a young age.
- This initiative aims to bridge the gap between academic knowledge and practical application by providing mentorship, resources, and a conducive environment of nurturing creative ideas and projects.
- The session also highlighted the importance of fostering collaboration between schools, higher education institutions and industry to create a supportive ecosystem for student motivation.

Duration: 20th August 2024 to 20th August 2024



Students and the Faculty Members Attending the Session





Students and the Faculty Members Attending the Session

9. MIC Driven Activity - Building the Pipeline of Quality Innovations and Start-ups in HEIs with Ecosystem Enablers by Creating and Managing Yukti Innovation and IPR Repository (YHIR)

Session by Mr. Dipan Kumar Sahu on 2nd August 2024

The IIC Members and the students of Arvind Gavali College of Engineering, Satara, successfully participated in the MIC-Driven sessions held from July 29, 2024. As the institute academics commenced from 5th of August 2024, the recording of the session on YouTube was delivered on the 20th of August 2024.

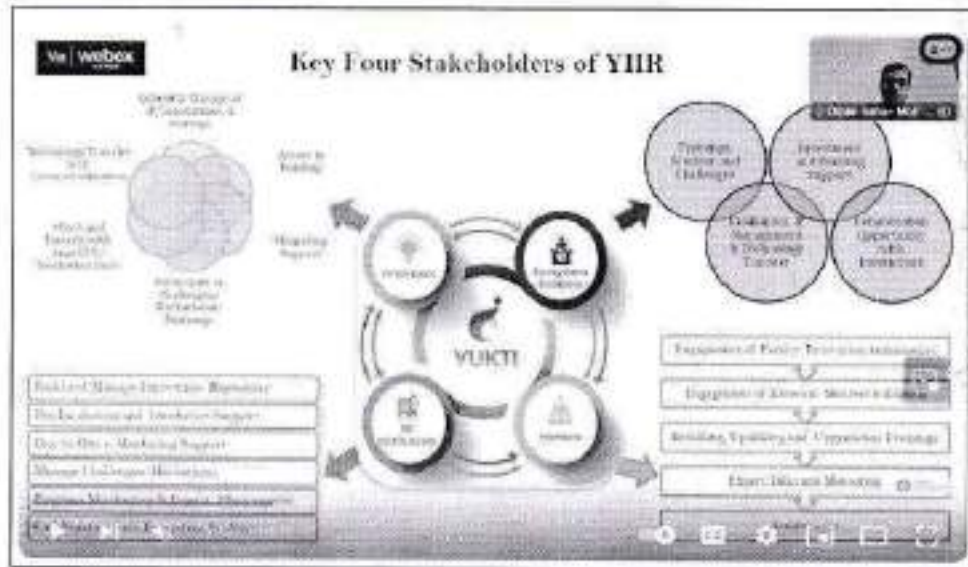
The main features of the session are as follows:

- YUKTI – National Innovation Repository (NIR) is an initiative of the Ministry of Education (MoE), Government of India and it is implemented by MoE's Innovation Cell and AICTE to build a system of repository of ideas, innovations and startups developed in academic institutions.
- Enabling institutions to systematically foster the I&E culture by managing and nurturing these innovations by offering continuous support in terms of one-to-one mentorship, grant assistance, referral and linkage with incubation units, connecting with Angel/Venture Capital (VC) investors network, knowledge agencies, etc.
- The verification process ensures the quality and validity of innovations, and innovators can edit and upgrade the submissions.
- The speaker discussed the features and functions of the YUKTI innovation and IPR repository system.
- The speaker also discussed the benefits of having an Innovation and Intellectual Property (IP) repository in institutions and the eligibility criteria for individuals to become innovators and register in the repository. Eligible individuals include

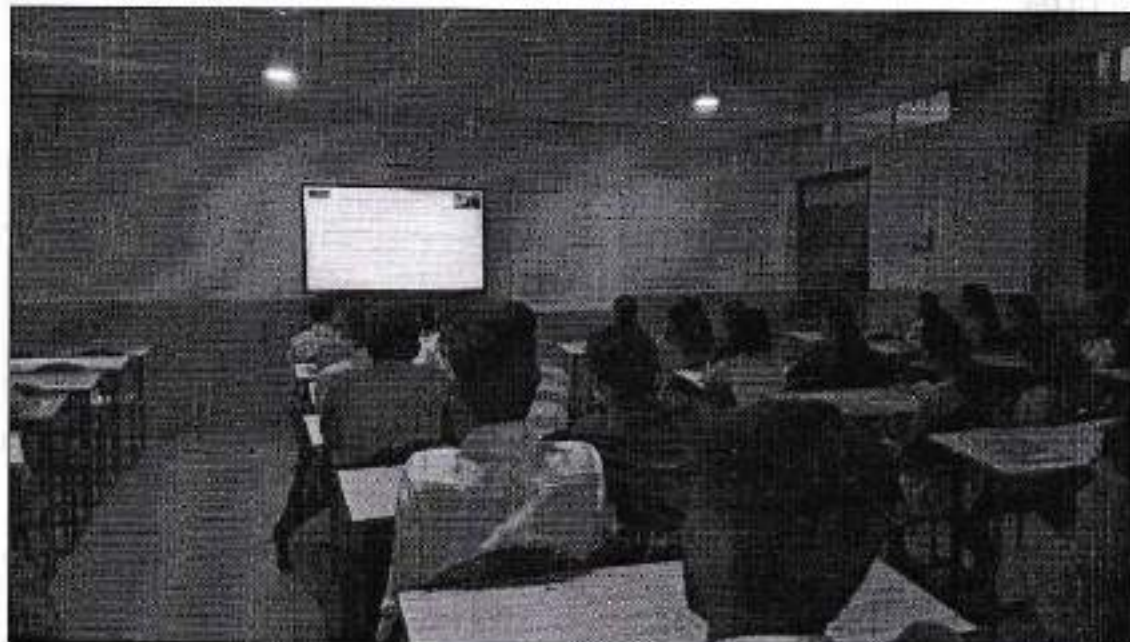


academicians, faculty members, non-teaching staff, teaching staff, current students, recent graduates, alumni, entrepreneurs at incubation units, and any individual associated with the Institute.

Duration: 20th August 2024 to 20th August 2024



Screenshot of the presentation



Students and faculty members attending the session



10. MIC Driven Activity - Orientation cum Refreshers' Session on Institution's Innovation Council Objectives, Structure, Operation for IIC Institutions
Session conducted by Mr. Dipan Kumar Sahu on 5th August 2024

The IIC Members and the students of Arvind Gavali College of Engineering, Satara, successfully participated in the MIC-Driven sessions held from July 29, 2024. As the institute academics commenced from 5th of August 2024, the recording of the session on YouTube was delivered on the 30th of August 2024.

The main features of the session are as follows:

- The speaker discussed the Institutional Innovation Council (IIC), which was initiated by the Ministry of Education in 2018 to help educational institutions streamline and strengthen their innovation and startup ecosystems. The IIC aims to have at least 50% of total institutions in India function effectively by 2027, making them central to the national innovation ecosystem.
- The speaker also discussed various features and functionalities of the IIC portal including checking institution status, accessing additional menus, submitting innovations, and updating council member information. Council members are responsible for conducting meetings, planning activities, and collaborating with external organizations.
- The speaker encouraged institutions to be active on the platform, upload activities and act as Innovation Ambassadors to help establish IICs in other institutions.

Duration: 30th August 2024 to 30th August 2024



Students and faculty members attending the session





Students and faculty members attending the session



Number of Student and Faculty Ideas Generated:

Students are encouraged to develop their own ideas and implement them in the form of projects. Support is provided to them in the form of laboratories, laboratory equipment, faculty guidance, and discussions.

The following ideas were generated by faculty members and students and submitted for Patent filing.

Sr. No.	Title of the Idea	Startup Ideas
1	Self-Heating Tiffin Box	Manufacturing of Product
2	Design on Innovative High Strength Pervious Concrete Paver Blocks Incorporating Thermocol Pieces	Manufacturing of Product
3	Vertical Autoclave	Manufacturing of Product
4	Productivity-Based Incentive Device	Manufacturing of Product
5	Device to Analyse the Software Code	Manufacturing of Product
6	Emergency Ambient Noise Reactive VR System	Manufacturing of Product
7	DP Transformer Theft Protection and Monitoring System	Manufacturing of Product
8	Hydrogen-Ethanol-EV Bike and Fuel. (H.E.EV)/ Shivendra Raje EV Bike	Manufacturing of Product

Number of Students and Faculty Innovations/Prototypes Developed

The following innovative ideas have been implemented as prototypes:

Sr. No.	Title of the Innovation	Faculty Name	Student Branch and Year
1	Device to Analyse the Software Code	Dr. Manali Shah	
2	Emergency Ambient Noise Reactive VR System	Dr. Manali Shah	
3	DP Transformer Theft Protection and Monitoring System	Dr. Vilas Pharande	Final Year B. Tech Students (Electrical)
4	Hydrogen-Ethanol-EV Bike and Fuel. (H.E.EV)/ Shivendra Raje EV Bike	-	Final Year B. Tech Student (Mechanical)



Number of IP's Generated, Published, and Granted

Sr. No.	Title of the Patent	Application Number	Status
1	DP Transformer Theft Protection and Monitoring	202221065599	Patent under examination
2	Productivity-Based Incentive Device	383213-001	Indian Design Patent Granted
3	Vertical Autoclave	6304585	UK Design Patent Granted
4	Design on Innovative High Strength Pervious Concrete Paver Blocks Incorporating Thermocol Pieces	411014-001	Indian Design Patent Granted
5	Self-Heating Tiffin Box	411780-001	Indian Design Patent Granted

Amount Grant or Fund Supported to Student and Faculty Lead Innovations, Start-ups, and IPR

IPR Filing – According to the institute policy, 20% of the patent filing charges are borne by the institute.

Best IIC Faculty/Student Members and Their Achievements

Sr. No.	Name of the Student	Member of AGCE – IIC	Participation Details
1	Mr. Vikrant Pawar	No	District Level Winner of MSIC Including Cash Prize of Rs. 1 Lakh Idea Showcased in Shark Tank, India Edition

Participation of IIC – AGCE in Various Programs of Central and State Govt.

Participation in Smart India Hackathon, DIPEX, MSIC as mentioned above.



Break Through Innovations/Technology Developed at the Institute

1. Hydrogen – Ethanol Fuel

The Hydrogen-Ethanol fuel was developed by Mr. Vikrant Pawar, student of SY B.Tech, Mechanical Engineering, AGCE, Satara. The invention provides a low-cost alternative to petrol by creating the Hydrogen-Ethanol fuel from the sugarcane plant. Along with this, he has also invented a model of motorcycle that can run on this fuel.

2. DP Transformer Theft Protection and Monitoring Device:

The Indian Power sector is experiencing huge technical, non-technical and commercial losses, in which the vandalism or theft of transformer parts, such as core (copper winding) and oil are creating enormous financial losses for both power generation companies and indirectly for farmers as the transformers supplying agricultural load are more prone to thefts. Distribution transformers of sub-stations in rural and tribal areas experience lack of supervision and maintenance once erected for operation. Hence, it is a challenging task to stop and prevent such unlawful activity by using available technology compatible with the robust working conditions.

Details of Social Media:

Facebook Page for IIC AGCE: <https://www.facebook.com/IIC-AGCE-102528492184979>

Connections of IIC AGCE:

IIC AGCE has established connections with the following:

1. Dr. Sagar B. Shinde as Patent Expert
2. Mr. Omkar Waikar, Managing Director, Supreme Silicones Pvt. Ltd., Pune as Expert from Nearby Industry
3. Mr. Sushant Kulkarni, Partner, ARKS & ASSOCIATES, Company Secretaries as Expert from Nearby Industry



Testimonials from IIC Members

Dr. Vilas A. Pharande
IIC – AGCE President

“IIC is one of the best programs and also a fantastic platform for students as well as faculty members to showcase their innovations and contribute in the Make in India campaign. It is indeed a honor to be associated with AGCE – IIC.”

Dr. Gayatri S Mirajkar
IIC – AGCE Convener

“Our IIC is moving in the right direction in line with the National Innovation & Startup Policy. Our IIC is continuously striving to improve the ecosystem created for innovation and entrepreneurship”

Mr. Arjun A. Kadam
Startup Activity Coordinator

“Our IIC offers a wide range of activities to help students and faculty members in the implementation of their ideas. We are striving to create startups that will facilitate the local community also”

Mr. Suhas Patil
Innovation Activity Coordinator

“Our IIC encourages students to nurture ideas that are useful for solving societal problems”

Mrs. Bhagyashri Pol
Social Media Coordinator

“Our IIC has achieved the target of enrolling students in incubation centers.”

Contact:

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IIC – AGCE President
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Panmalewadi, Satara

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