



Annual Report 2021-22

A. About IIC Institute

Vision:

SVCE-IIC is systematically foster the culture of innovation and entrepreneurship activities amongst all faculty, students and staff of SVCE and to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes, to organize Ideathons and Hackathon, etc.

Mission:

- The SVCE-IIC members have regularly been the active participants of IIC-MoE conducted activities sessions on Entrepreneurship, Startups and IPR literacy & awareness varying from a day to a month.
- STP on new technical concepts like Electric vehicles, ML, AI, PCB Design and Embedded Systems.
- Conduction of Hackathon and Ideathons by SVCE-IIC Cell.
- Conducted motivational sessions by the successful innovators and entrepreneurs
- SVCE-IIC is leading towards creating an innovation promotion eco-system in the campus.

Journey of IIC established at the Institute

SVCE has established **Institute Innovation Council (IIC)** in collaboration with the Ministry of Education (MoE), Govt. of India at the college level in 2018.

Diversified representation in the SVCE-IIC established at the institute from industry, interdisciplinary & Departments/ Units etc.

SVCE established IIC in the 2018-2019 Academic year. IIC helps to improve the students/faculty knowledge in many ways such as,

- Students/Faculty associated with IIC will get exclusive opportunities to participate in various Innovation related initiatives and competitions organized by MHRD.
- Interact with Business Leaders and top-notch academicians.
- Mentoring by Industry Professionals.
- Experimentation with new/latest technologies.
- Opportunity to nurture and prototype new ideas.
- Win exciting Prizes/Certificates every month.

B. Brief mention of key functionaries at the IIC Institute

- President – Dr. N. Sudhakar Reddy
- Vice President – Dr. K. Sekhar
- Convener – Dr. D. Srinivasulu Reddy
- Social Media Coordinator – Dr. S. Murali Krishna



- Startup Coordinator – Dr. P. Subramanyachary
- IPR Coordinator – Dr. K. Sree Divya
- NIRF Coordinator – Dr. Kasa Sudheer
- Innovation Activity coordinator – Dr. K. Lokesh Krishna
- Internship Activity Coordinator – Dr. R. Swathi
- ARIIA Coordinator – Dr. Kasa Sudheer

Roles and Responsibilities of President

1. He/ She will lead the IIC Council.
2. He/ She will have the IIC portal Login ID and will be the custodian of IIC portal login and data/ reports uploaded therein.
3. He/ She will call the meetings, set meeting agenda and will monitor the deliverable.
4. He/ She will be the main point of contact with the MHRD Innovation Cell.
5. He/ She will respond to all communication from the IIC National Coordination team (MHRD Innovation Cell) and will be responsible to ensure decent performance of IIC.
6. He/ She will coordinate with the MHRD innovation cell and be responsible for all the IIC activities in the institute.

Roles and Responsibilities of Vice-President

1. To build and strengthen the in-house mentor pool and human resource capacity to drive campus Innovation & Entrepreneurship activities.
2. Identifying, handholding and guiding potential/early-stage entrepreneurs, student innovators at the Institute on regular basis.
3. To develop a critical mass of motivated students & faculties with creative potential, and Entrepreneurial orientation & skill set.
4. Commercialization of innovations through technology transfer, technology licensing and Startups, etc.
5. To build infrastructure support and facilities to promote innovation and enabling an environment of easy access to resources within and outside the institute.
6. To strengthen the intra and inter institutional partnership and collaboration with the ecosystem at a different levels and co-creation of new program interventions

Roles and Responsibilities of Convener

1. The Convener will work in close coordination with the IIC president and will provide help wherever required for smooth conduct of activities.
2. He/ She will ensure participation in the meeting and will prepare the meeting agenda at least 10 days before meeting with the inputs from all valuable council members and President.
3. Maintain documentation of the proceedings like meeting photos, Minutes of Meetings, Meeting Video has to upload to Institution YouTube Channel and the link has to be shared with competent authorities and any other proof.



4. He/ She will ensure that the internal examination dates would not interfere with the IIC activities and coordinate with all departments to ensure the same.
5. He/ She will collect the inputs from all the members of the council at regular intervals, especially external members for better planning of IIC activities and effective delivery of results.

Roles and Responsibilities of Social Media Coordinator

1. Will create and manage IIC page/account on Facebook, Twitter and YouTube and other relevant social media platforms.
2. He / She will be responsible for posting all the relevant information about council meeting resolution and action plan, IIC activities and follow/tag MIC/IIC page and posts on these platforms.
3. He/ She will also ensure that all students follow the MIC/IIC page/account on social media to get first-hand information.

Roles and Responsibilities of Members

1. Ensure the Institution's Innovation Council's logo and the words "in association with Institution's Innovation Council, Ministry of Education (MoE), Govt. of India", is included in the brochure compulsorily for all the academic activities of their respective departments like webinars, seminars and workshops related to Industry Interaction, Startup, Entrepreneurship, Research and Innovation / Intellectual Property Rights (IPRs).
2. Establish Innovation Clubs for students with facilities and equipment needed for Innovation and Entrepreneurship (I & E) activities in their respective departments.
3. Developing an Innovative and Entrepreneurial mindset through a series of activities like workshops, awareness, market outreach events, orientation, advocacy meetings, campus hackathons, networking events (Intra and Interinstitutional, enablers, stakeholders).
4. Encourage faculty and students to pursue research studies related to Entrepreneurship.
5. Develop short-term certificate courses on Innovation and Entrepreneurship.
6. Convince departments to offer Major or Minor Specializations or credit courses related to Innovation and Entrepreneurship (I & E) and IPR
7. Organize Employment Generation skill development programs of minimum of 30 contact hours of duration.
8. Organize entrepreneurial skill development/employment generating programs for external participants (local residents, community members, alumni etc.)
9. Coordinate with IPR Cell to generate revenue from patents, copyrights, trade secrets and others.
10. Obtain grants from Government, Non-Govt, CSR Bodies towards promoting and supporting innovations.

C. Portfolio/graphical/Tabular representation of Resource strength (human capital and Physical capital) of the IIC institution

- Total No. of IIC Members - 30
- Total No. of IAs - 11



- Total No. of faculty Mentors from Portal - 10
- Pre-Incubation Units, If any - No
- Incubation Units, If any - No
- IP Facilitation Unit, If any - No

In the academic years 2018-19, 2019-20 our institute has only 15 members in my council faculty list. Later in the academic year 2020-2021, 2021-2022, we have total of 30 members IIC list with various coordinators as listed above. In the 2019-2020 academic year 3 faculty members are undergone basic innovation ambassador training and in the 2020-2021 academic year we nominated 11 members for IIC IA basic level training and in the 2021-2022 academic year Advanced level training is taken by those 11 members.

D. Highlight Facilities, Infrastructure of Pre-Incubation & Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus.

Student club would help to engage students in innovative and creative activities apart from providing opportunities for hands-on activities. The student club creates awareness, educate, nurture and inculcate a culture of innovation amongst students and to enable them to generate new ideas and become more innovative.

Student bodies/clubs engaged in the promotion of Innovation and Entrepreneurship in campus.

1. SHILANYAS Civil Engineering Association at Sri Venkateswara College of Engineering has been formed.
2. IEEE PES society has been formed in 2021. Students clubs related to innovation and research have been started.
3. ISTE student chapter was established in 2012.
4. The IEEE Communications Society Student Branch Chapter at the Sri Venkateswara College of Engineering has been formed.
5. IEEE SVCE ComSoc Society is a student association is established by the Department of CSE
6. The IEEE Computer Society Student Branch Chapter at the Sri Venkateswara College of Engineering has been formed.
7. IEEE WiE society is a student association, established by the Department of CSE
8. IEEE Photonics Society is a faculty association
9. ACSA- Agile Computer Science Associates Club exist to conduct various activities for student career development and innovational ideas for CSE department.
10. CMAT - Department Technical Association/Club exist to conduct various activities for student career development and innovational ideas.

These student clubs will help the students to turn into good entrepreneurs. Our institute provides 4500 sqfts in a well corporate style exclusively for experimenting their ideas and official meetings, interactions and exchanging thoughts etc., Students who wanted to turn as entrepreneurs will be part of below mentioned students clubs. Where they can interact with each other and having discussions with corporate officials. In case of getting assistance as a part of the field visit, students are allowed to visit near incubation centers like AIC (Atal Incubation centres), SK university Ananthapuram and Entrepreneurship Cell, Sri Padmavati Mahila Viswavidyalaya(SPMVV), Tirupati.

E. Highlight Achievements (Narrative/Graphical/tabular representation)

Field description	Data
Number and Different types of Innovation & Entrepreneurship and IPR activities Conducted	24
No. of student's & faculty ideas generated	19
No. of student's & faculty Innovation/prototypes developed	19
No. of IPs generated, published and granted develop	27
No. of Student & Faculty Start-ups/Ventures established.	2
Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus	Rs. 45,000/-
Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR	Rs. 60,000/-
No. of Technology Transfer and Commercialization happened	2

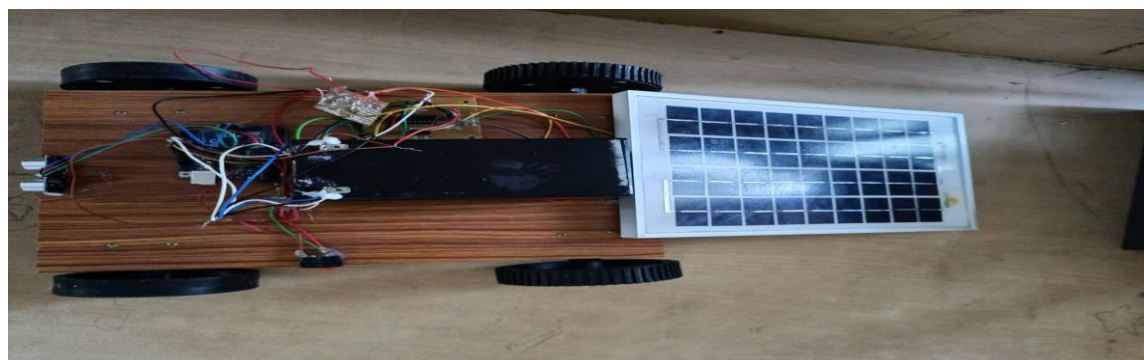
E. Highlight few best IIC Faculty/Student members and their achievements/Rewarded for the innovations at different forum

- Dr. N. Sudhakar Reddy, Principal received ISTE- Bharatiya Vidya Bhavan National Award for Best Engineering College Principal for the year 2021.
- Dr. N. Sudhakar Reddy, Principal received Best Engineering College Principal from JNTU Ananthapuram for the year 2021.
- Dr. M. Chittaranjan Professor & Head of Civil Engineering Department received “Excellent Professional Achievement Award” from The Society of Educationalist & Scientific Research Professional, Chennai on 26-06-2022.
- Dr. M. Chittaranjan Professor & Head of Civil Engineering Department received certificate of Appreciation from Chairmen, Centre for continuing Education, IIT Madras for being recognized as “NPTEL BELIVER” for the Time line of JANUARY – APRIL, 2022.
- K Renugadevi, Assistant Professor, Department of Mechanical Engineering received Next Gen Leader award from Women Icons Network (Women Icons Asia Technology Award, 2022)

G. Highlight selected best Innovations & images with mention of inventor/innovation name

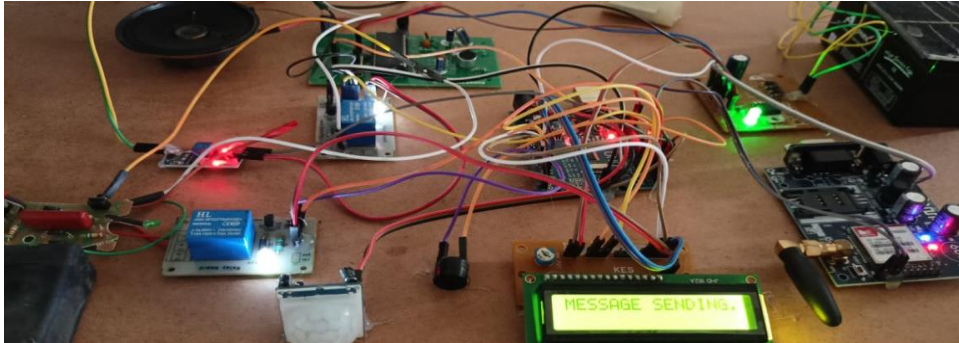
1. Designed a Smart Solar Grass Cutter by Mr. C. Sandeep Kumar Reddy.

The smart solar grass cutter system puts forth a completely automated lawnmower mechanism. The robotic vehicle is equipped with a grass cutter blade that allows for grass cutting at high RPM.



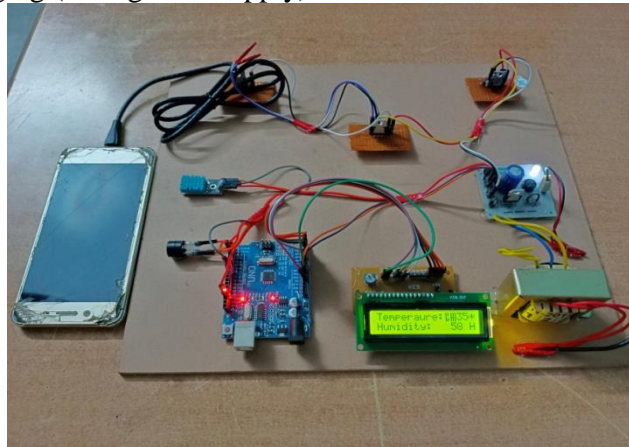
2. Automatic Farming For Minimum Water Usage And Animal Protection Using Solar Fencing With GSM by D. GANESH

In this project model considering alternate source of electric power, automatic control, reliability and low cost. As the system is totally automatic, it will help the operator to properly irrigate their fields



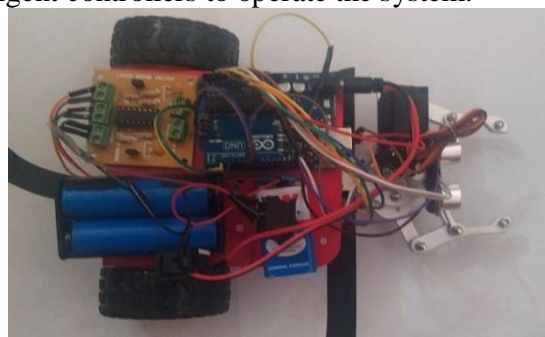
3. SINGLE PHASE AC TO DC FOR EV CHARGING by BandiJyotheeswar Reddy

Greener transportation is the motivation to shift from conventional vehicles to electrical vehicles (EV). EV's being the present technology, charging of the EV's battery with best charger in secured environment is the challenge. The EV's fast charging DC has advantages in reducing charge time, but maintaining the optimal temperature for the battery and availability of charging stations have benefited on-board charging (through AC supply).



4. AUTOMATED GUIDE VEHICLE FOR MATERIAL TRANSPORTATION IN INDUSTRIES by KAKARLA VEMSAGAR

The supply system has intelligent controllers to operate the system.





H. Highlight selected start-ups established by students/faculties with mention of founder/cofounder name

- "Volt E-Bike" startup- S.Afzal-year of establishment-2021
- "Bright Geeks" startup- \ .Yashwanth year of establishment 2021
- "Pick-Up smart" startup-Mr.C.Saketh-year of establishment 2021

I. List if any break through Innovations / Technology Developed at the institute about technology and innovation

1. Dr. K.Sree Divya filed a patent on Automatic Detection of Shoulder with patent number 202141060116 and achieved a grant for it.
2. Dr. P. Dileep Kumar Reddy filed a patent on "A Block chain Based Approach to Secure the Human Ethical Data from Diagnostic Centers", ISSUE NO: 08/2022, The Patent Office Journal No. 08/2022 Dated, 25/02/2022, PP. 10921 Application No.202241007014 A
3. Mr. R.Venkata Ramana filed a patent on Automatic Planting Model Based on IOT and Image Processing, with patent number 202141025517A and achieved a grant.

J. Participation of IIC-institute in various programs of Central and Stage Govt. Highlighting specially for the schemes or programs

Primarily, the IICs' role is to engage a large number of faculty and encourage, inspire, and nurture young students in various innovation and entrepreneurship-related activities such as ideation, problem-solving, proof of concept development, design thinking, IPR, project handling and management at pre-incubating/incubation stage, etc., so that innovation and entrepreneurship ecosystem gets established and stabilized in our institute. IIC helped our students to turn up entrepreneurs and to convert ideas into prototypes towards commercialized products, services and processes. Activities and steps were taken by our IIC improved institute over all performance in ARIIA for the Academic year 2021-2022, along with that IIC supporting successful NISP policy making and its fruitful implementation. In the 2021-2022 Academic year we submitted data in ARIIA and we formed the NISP policy. IIC-NISP made us to improve the quality of innovations and will try to measure the real impact created by these innovations nationally. In 2021-2022 we nominated 19 teams for participation in the Smart India Hackathon and Five teams were promoted for the next level of participation. In addition to that our student teams continuously from the past three years selecting for AICTE Chhatra Vishvakarma awards in multiples and also selected for state-level university innovation competitions and national level competitions like TCS EngiNX, HumAIn & Inframind.



K. Detail of Social Media & Connections of IIC institute

Our Institute has almost all social media communities to promote the innovation, entrepreneurship and startup activities of IIC and AICTE programs that are as follows

1. https://instagram.com/svcolleges_official?utm_medium=copy_link
2. <https://www.facebook.com/SVCETPT/>
3. https://twitter.com/svce_tirupati?lang=en

L. Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation Cell

“IIC improves the processes of discovery, evaluation and exploitation of opportunities”

-Dr. N. Sudhakar Reddy, President IIC-SVCE.

“IIC converts the students into entrepreneurs and prototypes into products”

- Dr. D. Srinivasulu Reddy, Convener, IIC-SVCE.

“IIC is the specific tool of innovation, Startups and Entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service”

- C. Tenny Priya, IIC- SVCE- Student Member.

M. Images



IIC Council Meeting



IIC MIC Activity participation poster

N. Contact

Sri Venkateswara College of Engineering,
Opp. To LIC Training Center
Karakambadi Road, Tirupati-517 507
Chittoor-Dist, Andhra Pradesh
Contact- 08772285992, 08772285993
Email- svce@svcolleges.edu.in
Website – www.svcolleges.edu.in