



**ACS College of Engineering
ACS Institutions Innovation Council
Annual Report 2020-21
ACS IIC ID: IC201912654**



A. About IIC Institute

Institution's Innovation Council (IIC) at ACS College of Engineering established in the academic year 2019-20 under the guidance of AICTE and Ministry of Education to systematically foster the culture of Innovation. The primary objective of Innovation Council is to encourage, inspire and take care of young students by supporting them to work with new ideas and transform them into prototypes while they are informative years. The motto of ACS IIC is to create a vibrant local innovation ecosystem and prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework. Establish function ecosystem for scouting ideas and pre-incubation of ideas. Develop better cognitive ability for technology students.

Vision

To provide the needs of students as well as faculty entrepreneurs with innovative ideas of social significance and there by disseminating a culture of entrepreneurship in campus which will boost our education system and there by growing the national economic and social development.

Mission

To develop a system with required infrastructure that can enable students, faculty to innovate, and prototype their ideas with industrial standards, support from Government, industry and reputed academic institutions around the world, and help them to realize their potentials

Objectives of IIC

- Students/Faculty associated with ICs will have exclusive opportunity to participate in various Innovation related initiatives and competitions organized from institution level to international level.
- Win exciting prizes/Certificates for Innovations.
- Meet/Interact renowned Business Leaders and lead academicians.
- Opportunity to build and prototype new ideas
- Mentoring by industry experts
- Experiment with new technologies
- Visit new places and see new culture

B. Brief mention of key functionaries at the IIC Institute

Sl. No.	Name of the Member	Key Role/Position assigned in IIC
1	Dr.M.S.Murali	Head of the Institution
2	Dr.G.Ramanan	President
3	Dr.P.Theerthamalai	Vice-President
4	Mr.A.Krishna Kumar	Convener
5	Dr.G.Vinoth	External Member
6	Dr.Mareeswari V	ARIIA Coordinator
7	Dr.S.Kavitha	IPR activity coordinator
8	Dr.T.Senthil Kumaran	NIRF Coordinator
9	Dr.R.Mukesh	Startup policy coordinator
10	Dr.S.Anitha	Internship activity coordinator
11	Mr.Inamul Hasan	Innovation activity coordinator
12	Mrs.Sunita Chalgeri	Social media coordinator
13	Mr.B.A.Sunil Raj	Faculty Member
14	Mrs.Vijaya Dalwai	Faculty Member
15	Mr.B.V.Vishal	Faculty Member
16	Mrs.G.Kavya	Faculty Member
17	Mr.Siva J	Faculty Member
18	Mr.Ganesh	Faculty Member
19	Mr.Hemanth	Faculty Member
20	Mr.Hari	Faculty Member
21	Mr.Syed Shabbaz	Student Member
22	Mr.Amogh Raj	Student Member
23	Mr.Vinay Kumar Pattar	Student Member
24	Ms.Sharon V	Student Member
25	Ms.Nivethidha R	Student Member
26	Mr.Chandan	Student Member
27	Mr.Nandan	Student Member
28	Mr.Mohd. Shoaib	Student Member
29	Mr.Sumit V Sawkar	Student Member
30	Ms.Veethasmi	Student Member

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



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



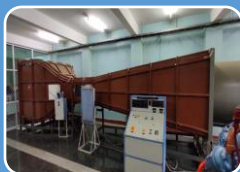
Lathe Shop: A **lathe** is a tool that rotates the workpiece on its axis to perform various operations such as cutting, sanding, knurling, or drilling.



Hardness testing machines perform three common kinds of scientific hardness tests: the Brinell, the Rockwell and the Vickers hardness test. The Rockwell hardness test is the most widely used technique, easy to carry out and more precise than other kinds of evaluations.



Hands on experience with Flight simulator on the campus. This helps students artificially re-create aircraft flight and the environment in which it flies for pilot training, design or other purposes. Students understand how aircraft fly, how they react to applications of flight controls, the effects of other aircraft systems.



Wind tunnels facility are large tubes with air blowing through them which are used to replicate the interaction between air and an object flying through the air or moving along the ground.



Multi Cylinder engine test RIG: When the engine is initially mounted onto the test bed or exchanged with an alternative engine, dowels and slots locate the engine quickly, accurately



Propeller test rigs: The test rig uses a combination of off-the-shelf **and custom**-made components. Power dissipators are available to enable control of the propellers also in controlled windmilling conditions.



Multi Tube Nanometer RIG: A multi-tube manometer with a common reservoir that may be used to give a graphic display of pressure distribution on multi-point pressure tapings.

E. Highlight Achievements

27

- Number of I&E and IPR activities Conducted

18

- No. of students & faculty ideas generated

14

- No. of students/faculty Innovation/prototypes developed

5

- No. of Student/faculty Start-ups/Ventures established

19.89L

- Amount spent on promotion and awareness on Innovation Entrepreneurship in the campus

1.15L

- Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR

F. IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum

SI No	Name of the Students	Title of Innovation	Title of Award	Awarded by
1	Syed shabbaz and Amulya gowda	Electro pot device	Won the best Prototype award with cash prize of Rs.40,000/-	NEC business Incubator
2	Sudhanva R Gowda and Harish R Gowda	Eco friendly fiber reinforced geopolymer concrete	won the Best Innovative award with Rs.20000/- case prize	NEC business Incubator
3	Raghavendra L	Crop Analysis Using UAV	Best Innovation award	VTU cell
3	Tejas Chandra Tejaswini B M Narendra N	Solar Integrated Bio Composite Helmet	Co-Incubatee Award & Rs. 1500/ Cash Prize	NEC business Incubator
4	Bharath B Vishnu	Green tech power generator	Co-Incubatee Award & Rs. 1500/ Cash Prize	NEC business Incubator

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



Developed Solar Integrated Bio Composite Helmet



Presented Green tech power generator



Fabricated Eco friendly fiber reinforced geopolymer concrete



Developed Eco-friendly bricks using aluminium dross

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



**Mr. Rudresh H M, CEO,
Trividrans Pvt Ltd, Bangalore**



**Ms. Rajeswari, Founder, ASIUS
Technologies, Bangalore**





**Mr. Keshav, Co-Founder, ASIUS
Technologies, Bangalore**


I. List if any break through Innovations / Technology Developed at the institute


SI No	Name of the Student/Faculty	Title of the Invention	Description
1	Sudhanva R Gowda and Harish R Gowda	Eco Friendly Natural Fibre Reinforced Geopolymer Concrete	In order to reduce the greenhouse gas emission. Geopolymer is ecofriendly material alternative to ordinary Portland cement. This idea done with red mud, a by-product of the bauxite industry is used, along with foundry sand, dross and natural fibers
2	Syed Shabaaz and Amulya C Gowda	Electro pot device: to produce electricity and as electric water heater	Avoid lack of electricity in rural area during night and Lack of electricity in rural area during night. To produce low cost electricity and also use it to heat water. By providing this electro pot device, consumer can cook and simultaneously generate electricity.

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


 Registered and Submitted details to ARIIA Ranking 2020-21

 Conducted National Innovation and Startup policy activities as per MIC guidelines


 Participated in Smart India Hackathon 2020. After Internal evaluation 31 best Innovative ideas were submitted.

 Submitted Innovative project ideas to Karnataka State Council Science and Technology . Six best Innovative topics was selcted for funding for 2020-21

K. Detail of Social Media & Connections of IIC institute

 <https://www.facebook.com/acs.innovationcell.7/>

 https://twitter.com/cell_acs

 https://www.instagram.com/acs_iic/

 <https://www.facebook.com/ACS.College.of.Engineering>

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



Thank you for your great guidance and support on IIC activities. The programs was very well coordianted and executed: bringing different elements of MIC's innovation culture activities and startup events. Particiation in Smart India Hachathon and NEC Entrepreneurship summit has given good experience for future endeavors.

Mr. Syed Shabaaz, Aeronautical Engineering, ACSCE



At this moment I was approached by our college IIC council where they conducted programs to develop entrepreneurship in us. By the humble support from IIC members enabled us to take our idea into its further stage to give it a form and to develop it into a full-fledged prototype. Because of this me and team have been successfully testing and developing our product and hopefully have our startup launched pretty soon. And we also able to competing well in Entrepreneurship competitions.

Mr. Chandan, Aerospace Engineering, ACSCE



Happy to share what we came across IIC activities from ACS IIC. I was not sure what I was going to get through the program, but I intended to learn more about IIC activities. We are on the end of the program, and I am completely enjoying it. Lots of takeaways that I will use and can apply for my company.

Ms.Meghana S, Computer Science Engineering, ACSCE

Convener
Mr.Krishnakumar

President
Dr.G.Ramanan

Principal
Dr.M.S.Murali