



<b>CRITERION 3</b> <b>Research, Innovations and Extension</b>	<b>3.2 Resource Mobilization for Research</b>
<b>3.2.4 Average percentage of departments having research projects funded by government and nongovernment agencies during the last five years</b>	

<b>Research Projects Sanction letters (2021-2022)</b>				
<b>Sl.No</b>	<b>Name of the Department</b>	<b>Name of the Principal Investigator/ Co Investigator</b>	<b>Name of the Funding Agency</b>	<b>Title of the Project</b>
<b>1</b>	Information Technology	<b>Dr.S Siva Ranjani</b>	Ministry of Micro, Small & Medium Enterprises	Automated Bagging Machine for the Oyster Mushroom Cultivation
		<b>Dr.V.Akilandeswari</b>	Ministry of Micro, Small & Medium Enterprises	Smart Assistive Robot for Hearing Impaired Children
<b>2</b>	Electronics and Communication Engineering	<b>Dr.A.Senthil Kumar Dr.R.Tamilselvi Dr.M.Parisa Behum</b>	Ministry of Micro, Small & Medium Enterprises	Bionic Arm for Amputees
		<b>J. Vairamuthu Dr.R. Tamilselvi</b>	Ministry of Micro, Small & Medium Enterprises	Tyre Pressure Regulator
		<b>Dr.R.Tamilselvi Dr.M.Parisa Behum</b>	Ministry of Micro, Small & Medium Enterprises	Improved Odourless Napkin Disposal Machine
		<b>Dr.R.Tamilselvi Dr.M.Parisa Behum Mrs.M.Uma Maheshwari</b>	Ministry of Micro, Small & Medium Enterprises	Accurate classification and detection of Osteoarthritis in Knees using thermal images
		<b>Dr.M.Sheik Dawood Ms.Devika</b>	Ministry of Micro, Small & Medium Enterprises	Biopolymer for Eco friendly Bags
<b>3</b>	Mechanical Engineering	<b>J. Vairamuthu Dr.R. Tamilselvi</b>	Ministry of Micro, Small & Medium Enterprises	Tyre Pressure Regulator
		<b>Dr.A.Senthil Kumar Dr.R.Tamilselvi Dr.M.Parisa Behum</b>	Ministry of Micro, Small & Medium Enterprises	Bionic Arm for Amputees



<b>4</b>	Electrical and Electronics Engineering	<b>Mrs.P.Meenalochini</b> <b>Mrs.V.S.Chitra</b>	Ministry of Micro, Small & Medium Enterprises	Live wire current detector from 2-5 meters(LTLC Detector)
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Dr. Sivarajani  
Dean CS/IT

Principal SIT <principal@sethu.ac.in>

**Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg.**

MSME Innovative Scheme <helpline-msme@gov.in>  
To: principal@sethu.ac.in

23 July 2022 at 15:08

विकास आयुक्त का कार्यालय  
(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)

निर्माण भवन, सातवीं मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108



OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIA

Nirman Bhawan, 7<sup>th</sup> Floor, Maulana Azad Road,  
New Delhi-110 108

Ph. EPAX-23063800. 23063802. 23063803. 23063804. 23063805 & 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-2022

To,

SETHU INSTITUTE OF TECHNOLOGY

Subject: Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg..

Sir,

I am directed to inform you that the idea(s) / proposals received from your Institute under the above scheme were considered by the PMAC meeting held on 22/06/2022. The committee has approved this idea(s). The details of approved idea / proposal are as under.

Sl. No.	Name of Incubatee and proposed idea of innovation	Project cost	Amount Sanctioned as GOI Share (Rs. In lakhs)	Incubatee Share (Rs. In lakhs)
1	S Siva Ranjani Sankar Ganesh, &nbsp;Automated Bagging Machine for the Oyster Mushroom Cultivation	15.000	12.750	2.250

Further, in order to release Gol grant, it is requested to go through instructions/ guidelines on Revised procedure for flow of funds under Central Sector Schemes O.M from M/o Finance, D/o Exp. vide no. 1(18)/PFMS/FCD/2022 dated 9.03.2022 carefully and nomination of CTTC Bhubaneswar as CNA vide letter dated No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Model -2 for release of funds to HIs (For details Click here )

1. CTTC Bhubaneswar has opened Saving A/c in SBI for release of fund to HIs as CNA Account. The contact officer of CTTC, Bhubaneswar is Shri Skrout, 9437965670, skrout@cttc.gov.in

2. All HIs have to inform CTTC, Bhubaneswar about the name of SBI Branch and code, where the Sub Agency (SA) account of HI is to be opened.

7/26/2022, 1:28 PM



3. CTTC, Bhubaneswar will integrate it with CNA account through SBI Banks help
4. HI will open new Zero Balance Current A/c in SBI in the branch shared with CTTC, Bhubaneswar and link with the CNA account.
5. HI shall share the mandate form with CTTC, Bhubaneswar and O/o DC (MSME) through email- schand@dcmsme.gov.in with a copy to ramakrishnan.v@gov.in

Yours faithfully,  
(V. Ramakrishnan  
Dy. Director

This is an automated message, Do not reply.



Reference No. :- **IDEATN003660****1. Details of Incubatee:**

<b>1.1 Details of the Host Institute (HI)</b>	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	<b>1.2 Name of the Business Incubator (BI)</b>	Dr.R.Tamilselvi , PG Head & Professor, ECE , sittbi@sethu.ac.in , 9944551673
<b>1.3 Category of the Incubatee</b>	Others	<b>1.4 Incubatee Name</b>	S Siva Ranjani Sankar Ganesh
<b>1.5 State</b>	TAMIL NADU	<b>1.6 District</b>	VIRUDHUNAGAR
<b>1.7 Email Id</b>	sivaranjani222@gmail.com	<b>1.8 Mobile Number</b>	9150725908
<b>1.9 Category</b>	OBC	<b>1.10 Gender</b>	Female
<b>1.11 Address</b>	2, Jawahar Nagar Ist Street, Thirumangalam - 625706		

**2. Details of Idea:**

<b>2.1 Title of proposed idea/innovation</b>	Automated Bagging Machine for the Oyster Mushroom Cultivation	<b>2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of</b>	No. The new machine can be designed for automatically collect the drained paddy straw and the machine should spread the paddystraw in a fixed sized polythene bag and it should spread the seeds and the machine should do the same process continuously until the bag is full. The tied bag should be pinned randomly at outside of the bag. The final bag is the output of the machine. Through which we can reduce the preparation time and the needed manpower. Also the yield of oyster mushroom can be maximized in short time.
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<b>2.3 Briefly explain newness/uniqueness of the innovation</b>	Automated machine for bagging process in oyster mushroom cultivation. Bagging process in oyster mushroom cultivation requires manpower and consumes more time. It can be solved with the help of an automated machine.	<b>2.4 Concept &amp; Objective</b>	Concept : The Shed should be in appropriate temperature for the growth of Oyster Mushroom, if the temperature exceeds, it should get rotten. The temperature should be between 20°c to 25°c. The paddy straw should be soaked well with hot water and drain off excess water. Then the bed is prepared with paddy straw and the seeds are sowed in each layer of the paddy straw bed. After layering the seeds, the cover is pinned randomly for the growth of mushroom. All the packed seeds are tied in the shed and proper temperature is maintained to grow the seed which is monitored manually by the person. In the hanging, the initial growth is monitored and the watering is made on each hanging of paddy straw bed. Then the mushrooms are headed through the pin point of the cover and it gets matured after 50 days. Each and every day the shed is monitored and maintained properly. The major problem in the existing method is the manpower requirement for bagging. Bagging process in oyster mushroom cultivation requires manpower and consumes more time. It can be solved with the help of automated machine. Objective: The main objective of this project is to design an automated machine for the bagging process for Oyster Mushroom cultivation.
<b>2.5 Specify the potential areas of application in industry/market in brief</b>	This automated machine provides motivations to the unemployed women / farmers for product development and provides skills for become an entrepreneur by utilizing the Automated Bagging Machine for the Oyster Mushroom Cultivation and also create employment opportunities in rural areas.	<b>2.6 Briefly provide the market data for the potential idea/ innovation</b>	Commercial Viability: The demand for oyster mushroom is huge in protein related value added product manufacturing units. Mushroom production are important in human nutrition, it contains high level of protein, rich in vitamins, minerals. Oyster mushrooms are recently domesticated in world production. Nowadays, Most of the farms supply mushrooms continuously. The major part in the mushroom cultivation lies in bagging process. So this machine support to reduce the preparation time and maximize the yield. Technical Viability: It is one of the lucrative agribusiness. Mushroom entrepreneurship being technologically intensive agribusiness for bringing the mushroom industry to health and vibrancy. Financial Viability: Total Income in 50 days(700 Kg * Rs. 120) Rs.84000 Total Expenses for 700Kg in 50 days Rs.24300 Expected Profit for 700 bags Rs.59,700 When we use automated machine, Man power expenses will be the benefit to the farmers.
<b>2.7 Name and details of Mentors</b>	Dr. V. Akilandeswari Associate Professor, Department of Information Technology, Sethu Institute of Technology, Pulloor, Kariapatti - 626115	<b>2.8 Experience and Qualification of Mentors</b>	12 Years and Ph.D
<b>2.9 Contact Details of Mentors</b>	9944856221	<b>2.10 Current Development Status of innovation</b>	Cultivation is going on through manual process. Design and develop of an automatic machine is needed.
<b>2.11 Expected time of completion of idea</b>	1 Year	<b>2.12 Idea Sector</b>	Agriculture, Rivers & Ocean Produce based industries, fertilizers, Agricultural Implements & Agro processing and any related sub-sector



**3. Financial requirements:****3.1 Activity-wise break**

Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	10.000	8.500	1.500
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	3.000	2.550	0.450
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	2.000	1.700	0.300
<b>Total</b>	15.000	12.750	2.250

**Approved Activity-wise break**

Approved By	Approved Date
PMAC	23/07/2022

Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
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Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	3.000	2.550	0.450
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	2.000	1.700	0.300
<b>Total</b>	15.000	12.750	2.250

#### 4. Other students/Entrepreneurs associated with this project/idea

Name	Aadhar No/Udhyog Aadhar No/Udyam Registration
Ms.K.Krishnaveni Assistant Professor Sethu Institute of Technology	715631068713
Mr. Muthupandi Agriculture Officer SMJ Farms	677035699124
<b>Uploaded Proposal</b>	View/Download
<b>Uploaded Minutes of the Selection Committee</b>	View/Download
<b>Uploaded Name and signature of the BI incharge</b>	View/Download

#### Application Remarks

Action	Date	Status	Remark
PMAC	23/Jul/2022 03:08:6 PM	Approved By PMAC	The financial sanction is as approved by the committee in the 2nd PMAC meeting. Check your mail and do the needful as instructed on priority basis. This maybe treated as most urgent. View/Download



**I declare that:**

1. I have read the entire scheme guidelines and shall abide by all the requirements stipulated therein for seeking financial assistance.
2. I hereby declare that information given above is true to the best of my Knowledge and that I have not withheld/distorted any material fact.
3. Any information/ documents that may be required to be verified shall be provided immediately before the concerned authority.
4. I hereby declare that I have not availed any financial assistance for this purpose from any other scheme from any Central/ State govt. agency.
5. In case the Idea is approved, Host Institute would undertake to make facilities available to carry out the development arrange for the submission of periodic progress reports and other information that may be required by the Ministry.
6. I certify that the accounts of the funds received and spent will be kept and made available on demand, as per scheme guidelines
7. I certify that the funds will be used only for Idea development as per activities defined in Scheme Guidelines & no funds out of this grant will be utilized for any other activity/production purposes.



Dr. Srivastava  
Deans/IT

Principal SIT &lt;principal@sethu.ac.in&gt;

## Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg.

MSME Innovative Scheme <helpline-msme@gov.in>  
To: principal@sethu.ac.in

23 July 2022 at 21:08

विकास आयुक्त का कार्यालय  
(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)

निर्माण भवन, सारस्वती मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108



OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIA

Nirman Bhawan, 7<sup>th</sup> Floor, Maulana Azad Road,  
New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 & 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-2022

To,

SETHU INSTITUTE OF TECHNOLOGY

Subject: Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg..

Sir,

I am directed to inform you that the idea(s) / proposals received from your Institute under the above scheme were considered by the PMAC meeting held on 22/06/2022. The committee has approved this idea(s). The details of approved idea / proposal are as under.

Sl. No.	Name of Incubatee and proposed idea of Innovation	Project cost	Amount Sanctioned as GOI Share (Rs. In lakhs)	Incubatee Share (Rs. In lakhs)
1	Akilandeswari V , &nbsp; SMART ASSISTIVE ROBOT FOR HEARING IMPAIRED CHILDREN	15.000	12.750	2.250

Further, in order to release GoI grant, it is requested to go through instructions/ guidelines on Revised procedure for flow of funds under Central Sector Schemes O.M from M/o Finance, D/o Exp. vide no. 1(18)/PFMS/FCD/2022 dated 9.03.2022 carefully and nomination of CTTC Bhubaneswar as CNA vide letter dated No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Model -2 for release of funds to HIs (For details Click here )

1. CTTC Bhubaneswar has opened Saving A/c in SBI for release of fund to HIs as CNA Account. The contact officer of CTTC, Bhubaneswar is Shri Skrout, 9437965670, skrout@cttc.gov.in

2. All HIs have to inform CTTC, Bhubaneswar about the name of SBI Branch and code, where the Sub Agency (SA) account of HI is to be opened.

7/26/2022, 1:37 PM



3. CTTC, Bhubaneswar will integrate it with CNA account through SBI Banks help
4. HI will open new Zero Balance Current A/c in SBI in the branch shared with CTTC, Bhubaneswar and link with the CNA account.
5. HI shall share the mandate form with CTTC, Bhubaneswar and O/o DC (MSME) through email- schand@dcmsme.gov.in with a copy to ramakrishnan.v@gov.in

Yours faithfully,  
(V. Ramakrishnan  
Dy. Director

This is an automated message, Do not reply.

Reference No. :- **IDEATN003555****1. Details of Incubatee:**

1.1 Details of the Host Institute (HI)	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	1.2 Name of the Business Incubator (BI)	Dr.R.Tamilselvi , PG Head & Professor, ECE , sittbi@sethu.ac.in , 9944551673
1.3 Category of the Incubatee	Others	1.4 Incubatee Name	Akilandeswari V
1.5 State	TAMIL NADU	1.6 District	MADURAI
1.7 Email Id	akilandeswari.v2021@gmail.com	1.8 Mobile Number	9944856221
1.9 Category	OBC	1.10 Gender	Female
1.11 Address	M.523, Ellis Nagar, T.N.H.B Colony, Madurai-625016		
2. Details of Idea:			
2.1 Title of proposed idea/innovation	SMART ASSISTIVE ROBOT FOR HEARING IMPAIRED CHILDREN	2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of	No. It helps to reduce the stress for hearing-impaired while interacting with normal people, the proposed robot recognizes and generates accurate sign language for every audio and video input.

<b>2.3 Briefly explain newness/uniqueness of the innovation</b>	The main objective of this system is to design an intelligent robot that will capture the sign language and surrounding voice for interacting with the hearing-impaired system. The Intelligent robot is trained with sign language using Artificial intelligence and machine algorithms. The proposed smart assistive robot for hearing impaired children deals with the development of auditory and verbal skills for the preliminary stage of learning, i.e kindergarten hearing impaired children. Most of the hearing-impaired methods focus on lipreading which makes it very difficult for hearing impaired children. With kind smart assistive tools, easily enhance the social interaction and human-human interaction skills.	<b>2.4 Concept &amp; Objective</b>	The main objective of this system is to design an intelligent robot that will capture the sign language and surrounding voice for interacting with the hearing-impaired system. The Intelligent robot is trained with sign language using Artificial intelligence and machine algorithms. First, the proposed smart assistive robot for hearing impaired Children is created for the focus of observing the mood of the learners. Then, in order to maintain consistency in auditory, visual or combined approaches compatible is must for the hearing-impaired child. Finally, it helps to reduce the stress for hearing-impaired while interacting with normal people, the proposed robot recognizes and generates accurate sign language for every audio and video input.
<b>2.5 Specify the potential areas of application in industry/market in brief</b>	Hearing impaired children have the risk of cognitive, language and social deficits. Nowadays, the use of robot is extended in clinical and rehabilitation, nursing and elderly care, search and rescue operations. However, for robotics technology to be successful in such environments it is necessary to gain new levels of strength, robustness, physical skills, and improved cognitive ability and intelligence.	<b>2.6 Briefly provide the market data for the potential idea/ innovation</b>	The proposed system is designed like a human which is planned to handle every signal. The main focuses of this system is to recognize the human participant's signing during the interaction. The proposed smart robot system is based on two different technologies, namely, artificial neural network and deep learning-based learning algorithm. Additionally, this robot contains two different memory models for handling both on offline and real-time process. The robot is perceived as likable and intelligent by the children, based on the questionnaires and the proposed sign recognition system enables robust real-time interaction and communication of the assistive robot with children in sign language.
<b>2.7 Name and details of Mentors</b>	Dr.S.Siva Ranjani, Professor and Head Department of Information Technology, Sethu Institute of Technology,Pullor-626115	<b>2.8 Experience and Qualification of Mentors</b>	15 years and Ph.D,
<b>2.9 Contact Details of Mentors</b>	9150725908	<b>2.10 Current Development Status of innovation</b>	Designing of Prototype.
<b>2.11 Expected time of completion of idea</b>	1 year	<b>2.12 Idea Sector</b>	Services, Education, Hospitality, Media, Publishing, Entertainment, Design, Wellness, Logistics, Sports and any related sub-sector



**3. Financial requirements:****3.1 Activity-wise break**

Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	10.000	8.500	1.500
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	3.000	2.550	0.450
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	2.000	1.700	0.300
<b>Total</b>	15.000	12.750	2.250

**Approved Activity-wise break**

Approved By	Approved Date
PMAC	23/07/2022

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Uploaded Proposal	View/Download
Uploaded Minutes of the Selection Committee	View/Download
Uploaded Name and signature of the BI incharge	View/Download

Application Remarks			
Action	Date	Status	Remark
PMAC	23/Jul/2022 09:08:22 PM	Approved By PMAC	The financial sanction is as approved by the committee in the 2nd PMAC meeting. Check your mail and do the needful as instructed on priority basis. This maybe treated as most urgent. View/Download



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2. I hereby declare that information given above is true to the best of my Knowledge and that I have not withheld/distorted any material fact.
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23 July 2022 at 20:08

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(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)

निर्माण भवन, सातवीं मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108



OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
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New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 & 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-2022

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7/26/2022, 1:32 PM



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Yours faithfully,  
(V. Ramakrishnan  
Dy. Director

This is an automated message, Do not reply.

Government of India  
Ministry of Micro, Small & Medium Enterprises

Incubation

[Back](#)

Reference No. :- **IDEATN003097**

**1. Details of Incubatee:**

<b>1.1 Details of the Host Institute (HI)</b>	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	<b>1.2 Name of the Business Incubator (BI)</b>	Y.Arockia Jesuraj , Associate Professor, CSE , sittbi@sethu.ac.in , 9944551673
<b>1.3 Category of the Incubatee</b>	Start Up /Employed/Others	<b>1.4 Incubatee Name</b>	Seeni Mohamed Aliar Maraikkayar S M
<b>1.5 State</b>	TAMIL NADU	<b>1.6 District</b>	VIRUDHUNAGAR
<b>1.7 Email Id</b>	seenimohamedali1@gmail.com	<b>1.8 Mobile Number</b>	9865859767
<b>1.9 Category</b>	OBC	<b>1.10 Gender</b>	Male
<b>1.11 Address</b>	Seeni Mohamed Aliar Maraikkayar S M Sethu Institute of Technology, Pulloor,Kariapatti-626115 Virudunagar		

**2. Details of Idea:**

<b>2.1 Title of proposed idea/innovation</b>	Bionic Arm for Amputees	<b>2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of</b>	No
--	-------------------------	---	----

<b>2.5 Specify the potential areas of application in industry/market in brief</b>	Our research findings are cost effective and accurate. So the system can be used in, .Medical institutions and research centers .Hospitals and etc. .Homecare	<b>2.6 Briefly provide the market data for the potential idea/ innovation</b>	Many bionic arms have been developed for amputees to keep free from loneliness, to take care of their basic need and sensational feel while touching the objects. Number of bionic arm is found in many applications especially to help amputees. As the population of amputees increases there is a need for persons to take care for them is huge. Even though bionic arm research is booming but the survey says there is no bionic arm to serve amputees on time. The aim of our project is to make bionic arm for amputees with sensational touch at low cost. Economic sustainability The proposed prototype is for amputees. In general, 90 of amputees facing the problem in the society. As the target customers are amputees those who need bionic arm to overcome their regular activities . Prosthesis is a significant investment, patients naturally want theirs to last as long as possible. So this product is a profitable one in the market. Environment Sustainability As the prototype is user friendly with a simple 3D printing method, it doesn't have any environmental impacts. Also the prototype model is a device with a simple building model and a processor. So, it is environment friendly device
<b>2.7 Name and details of Mentors</b>	1.Dr.R.Tamilselvi, Professor PG program Head, CoS Sethu Institute of Technology, 2.Dr.M.Parisa Beham,Professor Head, ECE, Sethu Institute of Technology, 3.. Dr .A. Senthil Kumar,Principal,Sethu Institute of Technology,	<b>2.8 Experience and Qualification of Mentors</b>	Dr.R.Tamilselvi,PhD,20yrs,Dr.M.Parisa Beham,PhD,20yrs,Dr .A. Senthil Kumar,PhD,35 yrs
<b>2.9 Contact Details of Mentors</b>	8883925991,9500902886,9443564850,	<b>2.10 Current Development Status of innovation</b>	Prototype Developed , TRL 7
<b>2.11 Expected time of completion of idea</b>	12 Months	<b>2.12 Idea Sector</b>	Healthcare & Life sciences, Medical Devices, Pharmaceuticals, Biotech, AYUSH and any related sub-sector
<b>3. Financial requirements:</b>			



SITmail

Mr. Vatsanathu

Principal SIT &lt;principal@sethu.ac.in&gt;

**Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for GoI assistance-reg.**MSME Innovative Scheme <helpline-msme@gov.in>  
To: principal@sethu.ac.in

23 July 2022 at 21:57

विकास आयुक्त का कार्यालय  
(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)निर्माण भवन, सावजी मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIANirman Bhawan, 7<sup>th</sup> Floor, Maulana Azad Road,  
New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 &amp; 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-2022

To,

SETHU INSTITUTE OF TECHNOLOGY

Subject: Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design &amp; IPR) of MSME Champion Scheme for GoI assistance-reg..

Sir,

I am directed to inform you that the idea(s) / proposals received from your Institute under the above scheme were considered by the PMAC meeting held on 22/06/2022. The committee has approved this idea(s). The details of approved idea / proposal are as under.

Sl. No.	Name of Incubatee and proposed idea of Innovation	Project cost	Amount Sanctioned as GoI Share (Rs. In lakhs)	Incubatee Share (Rs. In lakhs)
1	Venkat M, &nbsp;TYRE PRESSURE REGULATOR	15.000	15.000	0.000

Further, in order to release GoI grant, it is requested to go through instructions/ guidelines on Revised procedure for flow of funds under Central Sector Schemes O.M from M/o Finance, D/o Exp. vide no. 1(18)/PFMS/FCI/2022 dated 9.03.2022 carefully and nomination of CTTC Bhubaneswar as CNA vide letter dated No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Model -2 for release of funds to HIs (For details Click here )

1. CTTC Bhubaneswar has opened Saving A/c in SBI for release of fund to HIs as CNA Account. The contact officer of CTTC, Bhubaneswar is Shri Skrout, 9437965670, skrout@cttc.gov.in

2. All HIs have to inform CTTC, Bhubaneswar about the name of SBI Branch and code, where the Sub Agency (SA) account of HI is to be opened.



Government of India  
Ministry of Micro, Small & Medium Enterprises

Incubation

[Back](#)

Reference No. :- **IDEATN003141**

**1. Details of Incubatee:**

<b>1.1 Details of the Host Institute (HI)</b>	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	<b>1.2 Name of the Business Incubator (BI)</b>	Y.Arockia Jesuraj , Associate Professor, CSE , sittbi@sethu.ac.in , 9944551673
<b>1.3 Category of the Incubatee</b>	Student	<b>1.4 Incubatee Name</b>	Venkat M
<b>1.5 State</b>	TAMIL NADU	<b>1.6 District</b>	MADURAI
<b>1.7 Email Id</b>	venkatmurugesan2001@gmail.com	<b>1.8 Mobile Number</b>	8072533316
<b>1.9 Category</b>	OBC	<b>1.10 Gender</b>	Male
<b>1.11 Address</b>	5/3-C backkiam 2nd street, Teppakulam, Anuppanadi, Madurai-625009		

**2. Details of Idea:**

<b>2.1 Title of proposed idea/innovation</b>	TYRE PRESSURE REGULATOR	<b>2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of</b>	NO
<b>2.3 Briefly explain newness/uniqueness of the innovation</b>	?9The uniqueness of the device is, it fills air in the tyre of the vehicle in both static and dynamic condition. So no need to stop vehicle in any unsafe area. ?9It monitor the tyre pressure 24 x 7, thus reduces the manual checking of tyre pressure regularly and avoid accidents due to tyre burst. ?9It maintains the tyre pressure in the event of puncture. So need to stop you vehicle in unsafe area in un time thus it avoid abuses like robbery, kidnap etc.	<b>2.4 Concept &amp; Objective</b>	To avoid human death in accidents due to tyre burst. ?9To avoid abuses in unsafe area due to puncture. ?9To increase their safety in modern automobiles.

<b>2.5 Specify the potential areas of application in industry/market in brief</b>	Automatic Air inflation system is a device used in automobiles. So automobile industries are our target industry to sale our product.	<b>2.6 Briefly provide the market data for the potential idea/innovation</b>	.Product Cost - Rs. 3,500 .Product Price - Rs. 5,000 .No. of clients - All automobile users were our clients, only when we add this system as one of the safety system in all vehicle like air bags, seat belts. .Revenue - cars, trucks etc.. .Profit - Rs. 1,500 per vehicle.
<b>2.7 Name and details of Mentors</b>	1. J. Vairamuthu,AP/Mechanical, Sethu Institute of Technology 2. Dr.R. Tamilselvi, Prof PG Prog Head,Sethu Institute of Technology	<b>2.8 Experience and Qualification of Mentors</b>	1. J. Vairamuthu,M.E(Ph.D) - 2. Dr.R. Tamilselvi, M.Tech,Ph.D - 20 Years
<b>2.9 Contact Details of Mentors</b>	1.Phone:9789789264 2. 8883925991	<b>2.10 Current Development Status of innovation</b>	TRL-5 (Project planning has been completed,Feasibility checked through simulation and prototype is in development process)
<b>2.11 Expected time of completion of idea</b>	12 Months	<b>2.12 Idea Sector</b>	Miscellaneous Sector (Environment, Forests, Water & Sanitation; Foods, Beverages, FMCG, Consumer Goods; Infrastructure, Construction, Housing; IT, ITES, Electronics, White Goods, Telecommunication; Metals, Engineering, Machinery, Automation and Transportation, Automotive, E Vehicles, Railways, Aviation, UAV and any other sub-sector)
<b>3. Financial requirements:</b>			

Dr. Tanu Delle  
DG Head (CS)

Principal SIT &lt;principal@sethu.ac.in&gt;

**Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg.**MSME Innovative Scheme <helpline-msme@gov.in>  
To: principal@sethu.ac.in

23 July 2022 at 19:51

विकास आयुक्त का कार्यालय  
(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)निर्माण भवन, सातवीं मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIANirman Bhawan, 7<sup>th</sup> Floor, Maulana Azad Road,  
New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 &amp; 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-2022

To,

SETHU INSTITUTE OF TECHNOLOGY

Subject: Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design &amp; IPR) of MSME Champion Scheme for Gol assistance-reg..

Sir,

I am directed to inform you that the idea(s) / proposals received from your Institute under the above scheme were considered by the PMAC meeting held on 22/06/2022. The committee has approved this idea(s). The details of approved idea / proposal are as under.

Sl. No.	Name of Incubatee and proposed idea of innovation	Project cost	Amount Sanctioned as GOI Share (Rs. In lakhs)	Incubatee Share (Rs In lakhs)
1	A Sabah Afroze, &nbsp; Improvised Odourless Napkin Disposal Machine	15.000	12.750	2.250

Further, in order to release Gol grant, it is requested to go through instructions/ guidelines on Revised procedure for flow of funds under Central Sector Schemes O.M from M/o Finance, D/o Exp. vide no. 1(18)/PFMS/FCD/2022 dated 9.03.2022 carefully and nomination of CTTC Bhubaneswar as CNA vide letter dated No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Model -2 for release of funds to HIs (For details Click here )

1. CTTC Bhubaneswar has opened Saving A/c in SBI for release of fund to HIs as CNA Account. The contact officer of CTTC, Bhubaneswar is Shri Skrout, 9437965670, skrout@cttc.gov.in

2. All HIs have to inform CTTC, Bhubaneswar about the name of SBI Branch and code, where the Sub Agency (SA) account of HI is to be opened.

7/26/2022, 1:29 PM



3. CTTC, Bhubaneswar will integrate it with CNA account through SBI Banks help

4. HI will open new Zero Balance Current A/c in SBI in the branch shared with CTTC, Bhubaneswar and link with the CNA account.

5. HI shall share the mandate form with CTTC, Bhubaneswar and O/o DC (MSME) through email- schand@dcmsme.gov.in with a copy to ramakrishnan.v@gov.in

Yours faithfully,  
(V. Ramakrishnan  
Dy. Director

This is an automated message, Do not reply.

Reference No. :- **IDEATN003104****1. Details of Incubatee:**

1.1 Details of the Host Institute (HI)	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	1.2 Name of the Business Incubator (BI)	Dr.R.Tamilselvi , PG Head & Professor, ECE , sittbi@sethu.ac.in , 9944551673
1.3 Category of the Incubatee	Others	1.4 Incubatee Name	A Sabah Afroze
1.5 State	TAMIL NADU	1.6 District	VIRUDHUNAGAR
1.7 Email Id	sabahmohamedali3@gmail.com	1.8 Mobile Number	9629865196
1.9 Category	OBC	1.10 Gender	Female
1.11 Address	A Sabah Afroze, Sethu Institute of Technology, Kariapatti-626115, Virudunagar		
2. Details of Idea:			
2.1 Title of proposed idea/innovation	Improvised Odourless Napkin Disposal Machine	2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of	No

<b>2.3 Briefly explain newness/uniqueness of the innovation</b>	Waste disposal has become a growing problem in India, since the plastic used in sanitary napkins are not bio-degradable and result in environmental and health dangers. Every month, 353 million women and adolescent girls across India need to immediately dispose their waste as they did not want the menstrual waste in their houses so they disposed it away without thinking much about how it will be creating impact. Taking "Swachh Bharat" slogan in mind the ultimate objective of our project is to clean India without Pollutants and plastic free. Sanitary pads are burned without any safety measures. The currently available incinerators have disadvantages like bad odour, high power consumption and high smoke. This will lead to discomfort in the concerned area as well as land pollution and unhealthy environment. As known, nearly a third of commercial pad waste had a wet weight of over 20 g, which was associated with moisture content (MC) exceeding 50 wt. High MC waste is attributed to the practice of washing pads prior to disposal. Moist waste may result in pollutant emission and incomplete processing by onsite incinerators. Motivated by these issues, here we proposed a low cost, odourless, pollution free napkin disposal machine, which is used to automatically dispose the pads without any human intervention.	<b>2.4 Concept &amp; Objective</b>	.To segregate the wrapper and pad by means of paper separation process .To provide automatic Chemical disinfecting and Spray based on the timing schedule - Disinfectant Process .To implement automatic drier to dry the Napkin based on the weight of the pad - Drying Process .To implement automatic flow outlet for the Blood and other liquid components based on the disinfectant level and outlet to the ditch -Flow level Process .To implement a small crusher for the crushing the plastic and dried contents of the pad . To develop a small burner to burn the crushed pad.
<b>2.5 Specify the potential areas of application in industry/market in brief</b>	Educational Institutions having residential place for girl students and Faculty members ?9All Hospitals taking care of Adults and women health care ?9Even at home who have girl kids and women ?9Airports, Hotels, Motels and other travel places ?9Corporate Offices, Government Offices like post offices etc., and other offices ?9As women are the major customer segment, the device can be used anywhere at anytime.	<b>2.6 Briefly provide the market data for the potential idea/ innovation</b>	?9Easy way of dispose of Napkin after use. ?9Affordable Cost ?9Less Space and Simple Design ?9No Hazards during Burning ?9NIL Odour ?9Ease of Use
<b>2.7 Name and details of Mentors</b>	1.Dr.R.Tamilselvi , Professor PG program Head, CoS, Sethu Institute of Technology, 2.. Dr.M.Parisa Beham ,Professor Head, ECE, Sethu Institute of Technology,	<b>2.8 Experience and Qualification of Mentors</b>	Dr.R.Tamilselvi, PhD, 20yrs, Dr.M.Parisa Beham, PhD, 20yrs
<b>2.9 Contact Details of Mentors</b>	8883925991, 9500902886,	<b>2.10 Current Development Status of innovation</b>	Prototype Developed, TRL 7
<b>2.11 Expected time of completion of idea</b>	12 Months	<b>2.12 Idea Sector</b>	Healthcare & Life sciences, Medical Devices, Pharmaceuticals, Biotech, AYUSH and any related sub-sector
<b>3. Financial requirements:</b>			

3.1 Activity-wise break			
Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	10.000	8.500	1.500
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	3.000	2.550	0.450
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	2.000	1.700	0.300
<b>Total</b>	15.000	12.750	2.250
Approved Activity-wise break			
Approved By	Approved Date		
PMAC	23/07/2022		



Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	10.000	8.500	1.500
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	3.000	2.550	0.450
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	2.000	1.700	0.300
<b>Total</b>	15.000	12.750	2.250

Uploaded Proposal	View/Download
Uploaded Minutes of the Selection Committee	View/Download
Uploaded Name and signature of the BI incharge	View/Download

Application Remarks			
Action	Date	Status	Remark
PMAC	23/Jul/2022 07:51:23 PM	Approved By PMAC	The financial sanction is as approved by the committee in the 2nd PMAC meeting. Check your mail and do the needful as instructed on priority basis. This maybe treated as most urgent. View/Download



I declare that:

1. I have read the entire scheme guidelines and shall abide by all the requirements stipulated therein for seeking financial assistance.
2. I hereby declare that information given above is true to the best of my Knowledge and that I have not withheld/distorted any material fact.
3. Any information/ documents that may be required to be verified shall be provided immediately before the concerned authority.
4. I hereby declare that I have not availed any financial assistance for this purpose from any other scheme from any Central/ State govt. agency.
5. In case the Idea is approved, Host Institute would undertake to make facilities available to carry out the development arrange for the submission of periodic progress reports and other information that may be required by the Ministry.

**6. I certify that the accounts of the funds received and spent will be kept and made available on demand, as per scheme guidelines**

**7. I certify that the funds will be used only for Idea development as per activities defined in Scheme Guidelines & no funds out of this grant will be utilized for any other activity/production purposes.**

Dr. Tanil Belvi  
PG Head (CS)

Principal SIT &lt;principal@sethu.ac.in&gt;

**Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg.**

MSME Innovative Scheme <helpline-msme@gov.in>  
To: principal@sethu.ac.in

23 July 2022 at 20:03

विकास आयुक्त का कार्यालय  
(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)

निर्माण भवन, सातवीं मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108



OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIA

Nirman Bhawan, 7<sup>th</sup> Floor, Maulana Azad Road,  
New Delhi-110 108

Ph. EPAX-23063800. 23063802. 23063803. 23063804. 23063805 & 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-2022

To,

SETHU INSTITUTE OF TECHNOLOGY

Subject: Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg..

Sir,

I am directed to inform you that the idea(s) / proposals received from your Institute under the above scheme were considered by the PMAC meeting held on 22/06/2022. The committee has approved this idea(s). The details of approved idea / proposal are as under.

Sl. No.	Name of Incubatee and proposed idea of innovation	Project cost	Amount Sanctioned as GOI Share (Rs. In lakhs)	Incubatee Share (Rs. In lakhs)
1	A Sabah Afroze , &nbsp;Accurate classification and detection of Osteoarthritis in Knees using thermal images	15.000	12.750	2.250

Further, in order to release Gol grant, it is requested to go through instructions/ guidelines on Revised procedure for flow of funds under Central Sector Schemes O.M from M/o Finance, D/o Exp. vide no. 1(18)/PFMS/FCD/2022 dated 9.03.2022 carefully and nomination of CTTC Bhubaneswar as CNA vide letter dated No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Model -2 for release of funds to HIs (For details Click here )

1. CTTC Bhubaneswar has opened Saving A/c in SBI for release of fund to HIs as CNA Account. The contact officer of CTTC, Bhubaneswar is Shri Skrout, 9437965670, skrout@cttc.gov.in

2. All HIs have to inform CTTC, Bhubaneswar about the name of SBI Branch and code, where the Sub Agency (SA) account of HI is to be opened.

7/26/2022, 1:30 PM

3. CTTC, Bhubaneswar will integrate it with CNA account through SBI Banks help
4. HI will open new Zero Balance Current A/c in SBI in the branch shared with CTTC, Bhubaneswar and link with the CNA account.
5. HI shall share the mandate form with CTTC, Bhubaneswar and O/o DC (MSME) through email- schand@dcmsme.gov.in with a copy to ramakrishnan.v@gov.in

Yours faithfully,  
(V. Ramakrishnan  
Dy. Director

This is an automated message, Do not reply.



Reference No. :- **IDEATN003130****1. Details of Incubatee:**

<b>1.1 Details of the Host Institute (HI)</b>	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	<b>1.2 Name of the Business Incubator (BI)</b>	Dr.R.Tamilselvi , PG Head & Professor, ECE , sittbi@sethu.ac.in , 9944551673
<b>1.3 Category of the Incubatee</b>	Others	<b>1.4 Incubatee Name</b>	A Sabah Afroze
<b>1.5 State</b>	TAMIL NADU	<b>1.6 District</b>	VIRUDHUNAGAR
<b>1.7 Email Id</b>	sabahmohamedali3@gmail.com	<b>1.8 Mobile Number</b>	9629865196
<b>1.9 Category</b>	OBC	<b>1.10 Gender</b>	Female
<b>1.11 Address</b>	Ms.A. Sabah Afroze Full Time Research Scholar/ECE, Sethu Institute of Technology, Kariapatti-626115, Virudunagar.		

**2. Details of Idea:**

<b>2.1 Title of proposed idea/innovation</b>	Accurate classification and detection of Osteoarthritis in Knees using thermal images	<b>2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of</b>	No
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<b>2.3 Briefly explain newness/uniqueness of the innovation</b>	The main treatments of OA are healthy lifestyle which includes maintaining a healthy weight and workout regularly. In routine clinical practice, radiography is the first choice for imaging modality for diagnosis of OA, because it is widely accepted as the gold standard for diagnosing OA, but it has some limitations when assessing early stage OA and monitoring progression. While there are improvements in the treatment of OA, the challenge is early recognition X-rays are a helpful tool for figuring out joint pain. The aim of our research is to predict soft tissue inflammation around the joint in order to detect osteoarthritis using Image processing techniques. For measuring and assessing biomaterials, thermal wave imaging is a potential, non-invasive, non-contact and safe imaging method. Thermal wave imaging has the unique ability to measure physiological changes. The thermal images of bone will be taken and the pre-processing will be carried out and undergone feature extraction. Through the extracted features, the status of the bone will be classified as normal or osteoarthritis.	<b>2.4 Concept &amp; Objective</b>	.To use thermal images for enhancing the internal structure of the knee region. .To identify the preferred treatment location for the OA patient by applying suitable image processing algorithms. .To perform comparative study in order to analyze the effect of image processing algorithms in thermal images. .To make out the suitable imaging technique for knee osteoarthritis. The aim of our research is to predict soft tissue inflammation around the joint in order to detect osteoarthritis using Image processing techniques. For measuring and assessing biomaterials, thermal wave imaging is a potential, non-invasive, non-contact and safe imaging method. Thermal wave imaging has the unique ability to measure physiological changes. The thermal images of bone will be taken and the pre-processing will be carried out and undergone feature extraction. Through the extracted features, the status of the bone will be classified as normal or osteoarthritis.
<b>2.5 Specify the potential areas of application in industry/market in brief</b>	.Lot of industries working in medical device's , who are interested in purchasing the devices for abnormality detection are very much interested in this medical device. .Medical Universities who are interested in health care knowledge and a device at low cost can purchase this device. .Various Hospitals, research institutes can utilize this device as there is a want for sufficient intention of needed medical devices modernization. .As the target customers are hospitals, physicians etc, all the basic needs and amenities are available.	<b>2.6 Briefly provide the market data for the potential idea/ innovation</b>	.Lot of industries working in medical device's , who are interested in purchasing the devices for abnormality detection are very much interested in this medical device. .Medical Universities who are interested in health care knowledge and a device at low cost can purchase this device. .Various Hospitals, research institutes can utilize this device as there is a want for sufficient intention of needed medical devices modernization. .As the target customers are hospitals, physicians etc, all the basic needs and amenities are available.
<b>2.7 Name and details of Mentors</b>	1.Dr.R.Tamilselvi , Professor PG program Head, CoS, Sethu Institute of Technology, 2.Dr.M.Parisa Beham, Professor Head, ECE, Sethu Institute of Technology 3.Mrs.M.Uma Maheshwari ,AP/CSE, Sethu Institute of Technology,	<b>2.8 Experience and Qualification of Mentors</b>	Dr.R.Tamilselvi -PhD-20yrs,Dr.M.Parisa Beham-PhD-20yrs,Mrs.M.Uma Maheshwari -M.E(PhD)2YRS
<b>2.9 Contact Details of Mentors</b>	8883925991,9500902886,9994119335	<b>2.10 Current Development Status of innovation</b>	Prototype Developed , TRL 7

<b>2.11 Expected time of completion of idea</b>	12 Months	<b>2.12 Idea Sector</b>	Healthcare & Life sciences, Medical Devices, Pharmaceuticals, Biotech, AYUSH and any related sub-sector
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**3. Financial requirements:**

<b>3.1 Activity-wise break</b>			
<b>Particular/Item</b>	<b>Total idea project cost (Rs. In lakh)</b>	<b>Amount GOI assistance (Rs. In lakh)</b>	<b>Incubatee share (Rs. In lakh)</b>
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	10.000	8.500	1.500
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	3.000	2.550	0.450
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	2.000	1.700	0.300
<b>Total</b>	15.000	12.750	2.250

<b>Approved Activity-wise break</b>	
<b>Approved By</b>	<b>Approved Date</b>
PMAC	23/07/2022

Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	10.000	8.500	1.500
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	3.000	2.550	0.450
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	2.000	1.700	0.300
<b>Total</b>	15.000	12.750	2.250

Uploaded Proposal	View/Download
Uploaded Minutes of the Selection Committee	View/Download
Uploaded Name and signature of the BI incharge	View/Download

Application Remarks			
Action	Date	Status	Remark
PMAC	23/Jul/2022 08:03:12 PM	Approved By PMAC	The financial sanction is as approved by the committee in the 2nd PMAC meeting. Check your mail and do the needful as instructed on priority basis. This maybe treated as most urgent. View/Download



I declare that:

1. I have read the entire scheme guidelines and shall abide by all the requirements stipulated therein for seeking financial assistance.
2. I hereby declare that information given above is true to the best of my Knowledge and that I have not withheld/distorted any material fact.
3. Any information/ documents that may be required to be verified shall be provided immediately before the concerned authority.
4. I hereby declare that I have not availed any financial assistance for this purpose from any other scheme from any Central/ State govt. agency.
5. In case the Idea is approved, Host Institute would undertake to make facilities available to carry out the development arrange for the submission of periodic progress reports and other information that may be required by the Ministry.



**6. I certify that the accounts of the funds received and spent will be kept and made available on demand, as per scheme guidelines**

**7. I certify that the funds will be used only for Idea development as per activities defined in Scheme Guidelines & no funds out of this grant will be utilized for any other activity/production purposes.**



Principal SIT &lt;principal@sethu.ac.in&gt;

## Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg.

MSME Innovative Scheme <helpline-msme@gov.in>  
To: principal@sethu.ac.in

23 July 2022 at 21:47

विकास आयुक्त का कार्यालय  
(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)

निर्माण भवन, सातवीं मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108



OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIA

Nirman Bhawan, 7<sup>th</sup> Floor, Maulana Azad Road,  
New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 & 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-202

To,

SETHU INSTITUTE OF TECHNOLOGY

Subject: Approval of ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg..

Sir,

I am directed to inform you that the idea(s) / proposals received from your Institute under the above scheme were considered by the PMAC meeting held on 22/06/2022. The committee has approved this idea(s). The details of approved idea / proposal are as under.

Sl. No.	Name of Incubatee and proposed idea of innovation	Project cost	Amount Sanctioned as GOI Share (Rs. In lakhs)	Incubatee Share (Rs In lakhs)
1	Brindha , &nbtp BIOPOLYMER FOR ECOFRIENDLY BAGS	11.000	11.000	0.000

Further, in order to release Gol grant, it is requested to go through instructions/ guidelines on Revised procedure for flow of funds under Central Sector Schemes O.M from M/o Finance, D/o Exp. vide no. 1(18)/PFMS/FCD/2022 dated 9.03.2022 carefully and nomination of CTTC Bhubaneswar as CNA vide letter dated No. 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Model -2 for release of funds to HIs (For details Click here )

1. CTTC Bhubaneswar has opened Saving A/c in SBI for release of fund to HIs as CNA Account. The contact officer of CTTC, Bhubaneswar is Shri Skrout, 9437965670, skrout@cttc.gov.in

2. All HIs have to inform CTTC, Bhubaneswar about the name of SBI Branch and code, where the Sub Agency (SA) account of HI is to be opened.

7/26/2022, 1:3

Reference No. :- IDEATN003215

**1. Details of Incubatee:**

<b>1.1 Details of the Host Institute (HI)</b>	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	<b>1.2 Name of the Business Incubator (BI)</b>	Dr.R.Tamilselvi , PG Head & Professor, ECE , sittbi@sethu.ac.in , 9944551673
<b>1.3 Category of the Incubatee</b>	Student	<b>1.4 Incubatee Name</b>	Brindha
<b>1.5 State</b>	TAMIL NADU	<b>1.6 District</b>	MADURAI
<b>1.7 Email Id</b>	brindhavspa@gmail.com	<b>1.8 Mobile Number</b>	9445258932
<b>1.9 Category</b>	OBC	<b>1.10 Gender</b>	Female
<b>1.11 Address</b>	A.BRINDHA 16/6, BALAKRISHNAN MUDALIAR STREET PALANGANATHAM, MADURAI 625003		

**2. Details of Idea:**

<b>2.1 Title of proposed idea/innovation</b>	BIOPOLYMER FOR ECOFRIENDLY BAGS	<b>2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of</b>	No
<b>2.3 Briefly explain newness/uniqueness of the innovation</b>	In our daily life we use various water-soluble products even though we are not aware of it. The most common example can be a dishwasher or washing machine pods. This type of product is often wrapped in a type of plastic that we hesitate to remove until we check the instructions on the packaging, which indicate that it is not necessary. Suddenly, we find ourselves in front of a water-soluble product.	<b>2.4 Concept &amp; Objective</b>	Water-soluble bags are made from a derivative composed of polyvinyl alcohol (PVA) and organic plastics (water-soluble synthetic polymer) which dissolve in contact with water. This is a biodegradable product also known in the market as ecological water-soluble bags, which are highly respectful with the environment as they do not leave any waste and are an excellent alternative to traditional plastics.

<b>2.5 Specify the potential areas of application in industry/market in brief</b>	Water soluble packaging refers to the type of packaging made from biodegradable materials that dissolve in water leaving behind harmless and non-toxic aqueous solution .It is best suited for water owing to its better solubility in water with minimum residue and good impact resistance. However, Water soluble packaging is manufactured in different grades, including cold water and hot water soluble PVA grades .Water soluble packaging products such as films, bags and pouches are manufactured using polyvinyl alcohol (PVOH), which is a synthetic polymer highly soluble in water. Water soluble packaging is mainly used in the packaging of dyes, detergents, agrochemicals, and other industrial chemicals. Additionally, they are used in the manufacture of disposal bags, laundry bags, and shopping bags.	<b>2.6 Briefly provide the market data for the potential idea/ innovation</b>	MarketsandMarkets, the global water soluble packaging market is estimated to be valued at USD 2.8 billion in 2019 and is projected to reach USD 3.7 billion by 2025, recording a CAGR of 5.0. The rising application of water soluble packaging in multiple industries and the growing environmental and sustainability concerns led to a surge in demand for biodegradable packaging. The rise in awareness regarding the drawbacks of using single-use plastics and government intervention in banning the use of such plastics affecting the environment adversely have significantly driven the growth of the water soluble packaging market.North America is projected to account for the largest market share during the forecast period In 2018, North America accounted for the largest market share in the water soluble packaging market. This is attributed to the high adoption of water soluble packaging in various industries. The problem of plastics waste generation is intensifying by the day. According to EPA, in the US, 70 of the plastics end up in landfills, and this is because of the popular "throw-away" culture. However, the growing awareness among the people regarding the need for reduction of single-use plastics usage, coupled with government interventions to ban their use, drives the market for water soluble packaging in the North American region.
<b>2.7 Name and details of Mentors</b>	Dr M Sheik Dawood , Professor,Sethu Institute of Technology Mrs R Devika,AP, Sethu Institute of Technology	<b>2.8 Experience and Qualification of Mentors</b>	Dr M Sheik Dawood -PhD-22 yrs ,Mrs R Devika-M.E(PhD)-7 yrs
<b>2.9 Contact Details of Mentors</b>	9171409899,7598046081	<b>2.10 Current Development Status of innovation</b>	Prototype in progress
<b>2.11 Expected time of completion of idea</b>	10 Month	<b>2.12 Idea Sector</b>	Miscellaneous Sector (Environment, Forests, Water & Sanitation; Foods, Beverages, FMCG, Consumer Goods; Infrastructure, Construction, Housing; IT, ITES, Electronics, White Goods, Telecommunication; Metals, Engineering, Machinery, Automation and Transportation, Automotive, E Vehicles, Railways, Aviation, UAV and any other sub-sector)
<b>3. Financial requirements:</b>			



**3.1 Activity-wise break**

Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	8.000	8.000	0.000
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	2.000	2.000	0.000
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	1.000	1.000	0.000
<b>Total</b>	11.000	11.000	0.000

**Approved Activity-wise break**

Approved By	Approved Date
PMAC	23/07/2022

Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	8.000	8.000	0.000
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	2.000	2.000	0.000
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	1.000	1.000	0.000
<b>Total</b>	11.000	11.000	0.000

#### 4. Other students/Entrepreneurs associated with this project/idea

Name	Aadhar No/Udhyog Aadhar No/Udyam Registration
S.HARSHINI	799415975363
G.GOWRI	207860984732
U.ANIS FATHIMA	667104060670
Uploaded Proposal	View/Download
Uploaded Minutes of the Selection Committee	View/Download
Uploaded Name and signature of the BI incharge	View/Download
Student Id / bonafide certificate duly certified by HI	View/Download

#### Application Remarks

Action	Date	Status	Remark
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**SIT**mailMs. P. Meenalochini  
shun

Principal SIT &lt;principal@sethu.ac.in&gt;

**Approval of Ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design & IPR) of MSME Champion Scheme for Gol assistance-reg.**MSME Innovative Scheme <helpline-msme@gov.in>  
To: principal@sethu.ac.in

23 July 2022 at 20:36

विकास आयुक्त का कार्यालय  
(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
(भारत सरकार)निर्माण भवन, सावकी मंजिल, मौलाना आज़ाद रोड,  
नई दिल्ली-110 108OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIANirman Bhawan, 7<sup>th</sup> Floor, Maulana Azad Road,  
New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 &amp; 23063806

File No. : 17(2)/ MSME Innovative/PMAC/2021-22

Date : 23-07-2022

To,

SETHU INSTITUTE OF TECHNOLOGY

Subject: Approval of Ideas/ proposals submitted by your Institute under the Incubation Component of MSME Innovative Scheme( Incubation, Design &amp; IPR) of MSME Champion Scheme for Gol assistance-reg..

Sir,

I am directed to inform you that the idea(s) / proposals received from your Institute under the above scheme were considered b the PMAC meeting held on 22/06/2022 The committee has approved this idea(s). The details of approved idea / proposal are a under.

Sl. No.	Name of Incubatee and proposed Idea of Innovation	Project cost	Amount Sanctioned as GOI Share (Rs. In lakhs)	Incubatee Share (Rs In lakhs)
1	SRIVARSHINI SETHURAMAN , &nbsp;LTLC DETECTOR	10.750	10.750	0.000

Further, in order to release Gol grant, it is requested to go through instructions/ guidelines on Revised procedure for flow of funds under Central Sector Schemes O.M from M/o Finance, D/o Exp. vide no. 1(18)/PFMS/FCD/2022 dated 9.03.2022 carefully and nomination of CTTC Bhubaneswar as CNA vide letter dated No, 41(1)/Budget/MSME Champions/2021 dated 27.06.2022 for Model -2 for release of funds to HIs (For details Click here )

1. CTTC Bhubaneswar has opened Saving A/c in SBI for release of fund to HIs as CNA Account. The contact officer of CTTC, Bhubaneswar is Shri Skrout, 9437965670, skrout@cttc.gov.in

2. All HIs have to inform CTTC, Bhubaneswar about the name of SBI Branch and code, where the Sub Agency (SA) account of HI is to be opened.

3. CTTC, Bhubaneswar will integrate it with CNA account through SBI Banks help
4. HI will open new Zero Balance Current A/c in SBI in the branch shared with CTTC, Bhubaneswar and link with the CNA account.
5. HI shall share the mandate form with CTTC, Bhubaneswar and O/o DC (MSME) through email- schand@dcmsme.gov.in with a copy to ramakrishnan.v@gov.in

Yours faithfully,  
(V. Ramakrishnan  
Dy. Director

This is an automated message, Do not reply



Reference No. :- **IDEATN003236****1. Details of Incubatee:**

<b>1.1 Details of the Host Institute (HI)</b>	SETHU INSTITUTE OF TECHNOLOGY , SETHU INSTITUTE OF TECHNOLOGY PULLOOR, VIRUDHUNAGAR DISTRICT,KARIAPTTI-626115. , 04566308006 , principal@sethu.ac.in , 9443564850	<b>1.2 Name of the Business Incubator (BI)</b>	Dr.R.Tamilselvi , PG Head & Professor, ECE , sittbi@sethu.ac.in , 9944551673
<b>1.3 Category of the Incubatee</b>	Student	<b>1.4 Incubatee Name</b>	SRIVARSHINI SETHURAMAN
<b>1.5 State</b>	TAMIL NADU	<b>1.6 District</b>	MADURAI
<b>1.7 Email Id</b>	srivarshinii.22@gmail.com	<b>1.8 Mobile Number</b>	8825518720
<b>1.9 Category</b>	OBC	<b>1.10 Gender</b>	Female
<b>1.11 Address</b>	4A,7TH NEW STREET,MUTHURAMALINGAPURAM,BYKARA, MADURAI-625004		

**2. Details of Idea:**

<b>2.1 Title of proposed idea/innovation</b>	LTLIC DETECTOR	<b>2.2 Whether the idea involves use of existing intellectual property or not, give brief detail there of</b>	The idea of our project is not existing in any intellectual property. We got this idea from the problem faced by the wireman. We gathered information by wireman those who are involved in the maintenance work of transformers and electric poles. There is a chance of wireman to get electric shock if incase they not properly demagnetize the electric circuit by opening .
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### 2.3 Briefly explain newness/uniqueness of the innovation

The three phase transformer consists three transformers either separate or combined with one core. The primary and secondary of the transformer can be independently connected either in star or delta. There are four possible connections for a 3-phase transformer bank. The magnetising current and voltage drops in impedances have been neglected. Under the balanced condition, the line current is a  $\sqrt{3}$  times the phase winding current. In this configuration, the corresponding line and phase voltage are identical in magnitude on both primary and secondary sides. The secondary line-to-line voltage is in phase with the primary line-to-line voltage with a voltage ratio equal to the turns ratio. If the connection of the phase windings is reversed on either side, the phase difference of  $180^\circ$  is obtained between the primary and the secondary system. Such a connection is known as an  $180^\circ$  connection. The delta-delta transformer is satisfactory for a balanced and unbalanced load. If one transformer fails, the remaining two transformers will continue to supply the three-phase power. This is called an open delta connection. If third harmonics present, then it circulates in a closed path and therefore does not appear in the output voltage wave. The phasor diagram of the  $\Delta$ -Y connection of the three phase transformer is shown in the figure below. It is seen from the phasor diagram that the secondary phase voltage  $V_{an}$  leads the primary phase voltage  $V_{AN}$  by  $30^\circ$ . Similarly,  $V_{bn}$  leads  $V_{BN}$  by  $30^\circ$  and  $V_{cn}$  leads  $V_{CN}$  by  $30^\circ$ .

### 2.4 Concept & Objective

The phasor diagram of the configuration is shown in the figure above. There is a phase shift of  $30^\circ$  lead exists between respective phase voltage. Similarly,  $30^\circ$  leads exist between respective phase voltage. Thus the connection is called  $+30^\circ$  connection. Current is detected by the current sensor. A Hall effect sensor is a type of sensor. It detects the presence and magnitude of a magnetic field using the Hall effect. When the device is placed within a magnetic field, the magnetic flux lines exert a force on the semiconductor material which deflects the charge carriers, electrons and holes. The phase shows the star-delta connection of transformer for a phase shift of  $30^\circ$  lag. This connection is called  $-30^\circ$  connection. This connection has no problem with the unbalanced load and third harmonics. The delta connection provided balanced phase on the Y side and provided a balanced path for the circulation of third harmonics without the use of the neutral wire. By reversing the connection on either side, the secondary system voltage can be made to lag the primary system by  $30^\circ$ . Thus, the connection is called  $-30^\circ$  connection. The Y-Y connection is not satisfactory for the unbalanced load in the absence of a neutral connection. If the neutral is not provided, then the phase voltages become severely unbalanced when the load is unbalanced. The Y-Y connection contains a third harmonic, and in balanced conditions, these harmonics are equal in magnitude and phase with the magnetising current.

<b>2.5 Specify the potential areas of application in industry/market in brief</b>	<p>PROBLEM IDENTIFICATION: To open the LT line, open the AB switch (Air break switch) on the transformer. In the transformer, the three phase line is connected with the moving contact. For the maintenance, all the three moving contacts of transformer should be in open. In case by error if any one moving contact didn't open properly means the wireman might experience electric shock. SOLUTION OFFERED: To avoid getting exposed to the electric shock, wireman can use our LTLC detector which detects the electromagnetic radiation from the fixed contact which carries. The star-delta connection of three phase transformer is shown in the figure above. The primary line voltage is <math>\sqrt{3}</math> times the primary phase voltage. The secondary line voltage is equal to the secondary phase voltage. If one transformer of delta-delta connection is damaged or accidentally opened, then the defective transformer is removed, and the remaining transformer continues to work as a three phase bank. The rating of the transformer bank is reduced to 58% of that of the actual bank. This is known as the open delta or V-V delta. Thus, in open winding transformer, two transformers are used instead of three for the 3-phase operation. Thus let the <math>V_{ab}</math>, <math>V_{bc}</math> and <math>V_{ca}</math> be the voltage applied to the primary winding of the transformer. The voltage induced in the transformer secondary or on winding one is <math>V_{ab}</math>. The voltage induced on the low voltage winding two is <math>V_{bc}</math>. There is no winding between points a and c. The voltage may be found by app.</p>	<b>2.6 Briefly provide the market data for the potential idea/ innovation</b>	<p>A Hall effect sensor is a type of sensor. It detects the presence and magnitude of a magnetic field using the Hall effect. When the device is placed within a magnetic field, the magnetic flux lines exert a force on the semiconductor material which deflects the charge carriers, electrons and holes. This device is used to detect the air flow in five meter distance. When the leakage current flow through the LT line is detected by LTLC detector by a wireman in five meter distance. Within a five meter distance current flow detected by a device. The <math>V_{ca}</math> is equal in magnitude from the secondary terminal voltage and <math>120^\circ</math> apart in time from both of them. The balanced three phase line voltage produced balanced 3-phase voltage on the secondary side. If the three transformers are connected in delta-delta configuration and are supplying rated load and if the connection becomes V-V transformer, the current in each phase winding is increased by <math>\sqrt{3}</math> times. The full line current flows in each of the two phase windings of the transformer. Thus each transformer in the V-V system is overloaded by 73.2%. It should be noticed that the load should be reduced by <math>\sqrt{3}</math> times in case of an open delta connected transformer. Otherwise, serious overheating and breakdown of the two transformers may take place. LTLC DETECTOR the wireman can easily detect the current by the 5 meter electromagnetic radiation in the wire of flow of electron in the wire the current creates the radiation of the electromagnetic field.</p>
<b>2.7 Name and details of Mentors</b>	<p>1. Mrs.P.Meenalochini AP(Sr.Gr)/EEE/Sethu Institute of Technology, 2. Mrs.V.S.Chitra., AP/EEE/ Sethu Institute of Technology</p>	<b>2.8 Experience and Qualification of Mentors</b>	<p>1. Mrs.P.Meenalochini AP(Sr.Gr)/EEE 13 Years M.E(Ph.D) 2. Mrs.V.S.Chitra AP/EEE 11 YEARS M.E</p>
<b>2.9 Contact Details of Mentors</b>	<p>. meenalochinip@gmail.com, 9940436461 2. chitravsssethu.ac.in , 9629989817</p>	<b>2.10 Current Development Status of innovation</b>	<p>Now we developed circuit for this particular device, we also studied many research articles related to voltage analysing wave detector and radiation tester. We have collected more than 50 research articles and studied the concept of sensor and radiation.</p>
<b>2.11 Expected time of completion of idea</b>	<p>Our target month for completing this product is November 15th 2022</p>	<b>2.12 Idea Sector</b>	<p>Power, Renewables, Electricals, Power Electronics, Energy Efficiency and any related sub-sector</p>
<b>3. Financial requirements:</b>			

3.1 Activity-wise break			
Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	8.000	8.000	0.000
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	2.000	2.000	0.000
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	0.750	0.750	0.000
<b>Total</b>	10.750	10.750	0.000
Approved Activity-wise break			
Approved By	Approved Date		
PMAC	23/07/2022		



Particular/Item	Total idea project cost (Rs. In lakh)	Amount GOI assistance (Rs. In lakh)	Incubatee share (Rs. In lakh)
Technology related Expenditure towards machine usage charges etc., Electricity charges, Procurement of raw material , testing/Calibration charges, other charges essential for development of idea <b>Max (10.00) lakh.</b>	8.000	8.000	0.000
Charges for mentor/handholding supporting team <b>Max (3.00) lakh.</b>	2.000	2.000	0.000
Travelling Expenses or any other item not covered as above may be allowed as per need for development of the idea <b>Max ( 2.00) lakh.</b>	0.750	0.750	0.000
<b>Total</b>	10.750	10.750	0.000

#### 4. Other students/Entrepreneurs associated with this project/idea

Name	Aadhar No/Udhyog Aadhar No/Udyam Registration
SUNDARA PANDIAN B	8867667662
RAFEEL MOHAMMEDU A M	8433623612
MANOHARAN SNEHA	8438996126
Uploaded Proposal	View/Download
Uploaded Minutes of the Selection Committee	View/Download
Uploaded Name and signature of the BI incharge	View/Download
Student Id / bonafide certificate duly certified by HI	View/Download

#### Application Remarks

Action	Date	Status	Remark
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PMAC	23/Jul/2022 08:36:42 PM	Approved By PMAC	The financial sanction is as approved by the committee in the 2nd PMAC meeting. Check your mail and do the needful as instructed on priority basis. This maybe treated as most urgent. <a href="#">View/Download</a>
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☒ **I declare that:**

1. I have read the entire scheme guidelines and shall abide by all the requirements stipulated therein for seeking financial assistance.
2. I hereby declare that information given above is true to the best of my Knowledge and that I have not withheld/distorted any material fact.
3. Any information/ documents that may be required to be verified shall be provided immediately before the concerned authority.
4. I hereby declare that I have not availed any financial assistance for this purpose from any other scheme from any Central/ State govt. agency.
5. In case the Idea is approved, Host Institute would undertake to make facilities available to carry out the development arrange for the submission of periodic progress reports and other information that may be required by the Ministry.
6. I certify that the accounts of the funds received and spent will be kept and made available on demand, as per scheme guidelines
7. I certify that the funds will be used only for Idea development as per activities defined in Scheme Guidelines & no funds out of this grant will be utilized for any other activity/production purposes.