

Digital Catalogue for Technologies and Products

under

Empowered Technology Group

by

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sanjeevs@iisc.ac.in

<https://www.istem.gov.in/>

How to Login? <https://www.istem.gov.in/>

Login ID: **INxxxx** Password: **(sent through email)**

Click for login



Registration of New Organization/Sign-in

Search for Equipment...



HOME

EQUIPMENT

INSTITUTIONS

PEOPLE ▾



Institution/Resources Registration



Researcher/User Registration



Supplier/Service Registration

Either this

(for first time)

Or

already have an account login here

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[Q FBR Status](#) [Sign-In/ Register](#) [Messages](#) [Announcement](#) [What's New](#) [Review](#) [Digital Catalogue](#)

THE VISION



THE MISSION

ABOUT I-STEM

It has always been the basic tenet of the Government of India, in generously funding R&D efforts at academic institutions over the years, that facilities established through such support be made available to those needing them

Home page

I-STEM Indian Science Technology and Engineering facilities Map
Linking Researchers and Resources

Search for Equipment...

HOME EQUIPMENT INSTITUTIONS PEOPLE

International Scientific and Technological Education Program

Map Satellite

Linking
Researchers and Resources

REGISTER AS AN EXPERT FBR Status Announcement What's New Review Digital Catalogue

THE VISION THE MISSION ABOUT I-STEM

Windows taskbar: Type here to search, 8:15 AM 6/1/2020

PEOPLE

Create/View Upload Reports

R&D Organisations
ETG Digital Catalogue
Publications
Patents
Projects

Technology and Product Development Cell

The screenshot displays the I-STEM (Indian Science Technology and Engineering facilities Map) website. The header includes the I-STEM logo with the tagline "Linking Researchers and Resources", a search bar, and navigation links for HOME, EQUIPMENT, INSTITUTIONS, and PEOPLE. A secondary navigation bar contains links for International Scientific and Technological Education Program, Create/View, Upload, and Reports. The main content area is titled "Technology and Product Development (TPD) Cell" and features a section titled "About Empowered Technology Group". This section contains text about the Cabinet's decision on 19.02.2020 to establish an Empowered Technology Group. A red arrow points to the "Add New" button in the top right corner of the content area. The footer includes links for REGISTER AS AN EXPERT, FBR Status, Announcement, What's New, Review, and Digital Catalogue. Below this, there are three columns: "THE VISION" with a graphic, "THE MISSION" with text about government funding, and "ABOUT I-STEM".

I-STEM Indian Science Technology and Engineering facilities Map
Linking Researchers and Resources

Search for Equipment... [HOME](#) [EQUIPMENT](#) [INSTITUTIONS](#) [PEOPLE](#)

[International Scientific and Technological Education Program](#) [Create/View](#) [Upload](#) [Reports](#)

Technology and Product Development (TPD) Cell [Add New](#)

About Empowered Technology Group

The Cabinet in its meeting held on 19.02.2020 approved constitution of an Empowered Technology Group, as an institutionalized structure to proactively lay down, coordinate and oversee national-level policies relating to procurement and induction, and Research and Development (R&D) in technologies that require large outlays in resources, both financial and human, and to render sound and timely advice for determining direction and trajectory of Government's R&D and Technology Development Programmes.

[REGISTER AS AN EXPERT](#) [FBR Status](#) [Announcement](#) [What's New](#) [Review](#) [Digital Catalogue](#)

THE VISION

THE MISSION

It has always been the basic tenet of the Government of India, in generously funding R&D efforts at academic institutions over the years, that facilities established through such support be made available to those needing them and qualified to make use of them for their own research work

ABOUT I-STEM

Digital Catalogue for Technology and Products Development

* Required field.

Basic Information:

Technology developed:*

Testing technology on Nano Science

Add Row

Delete Row

(Please select the checkbox and click on Delete button to delete a row).

Details of Inventor(s):

Inventor*	Institution /Organization /Company*	Department	Designation	Select
Dr. Advait Athreya	Ramaiah Institute of Technology	Electronics	Professor	<input type="checkbox"/>
Sangeetha G	Ramaiah Institute of Technology	Information Science	Technical Staff	<input type="checkbox"/>

Technical Application Area:*

Electronics and Semiconductors

If 'Other', please specify:

Please give more details of new technical application area:

(Maximum 2000 characters allowed.)

Add Row

Delete Row

(Please select the checkbox and click on Delete button to delete a row).

Organization(s):*

Indian Science Technology and Engineering facilities Map (I-STEM)	<input type="checkbox"/>
Ramaiah Institute of Technology	<input type="checkbox"/>

Affiliated Ministry:*

Science and Engineering Research Board

Type of technology development:*

☒ Indigenous ☐ Collaboration with Foreign Entity

Add New Page

Does the technology help in replacing any import items currently procured from outside India?

☐ Yes ☒ No

Does the technology have export potential?

☒ Yes ☐ No

Category of technology developed:*

☐ Immediate Deployment ☒ Futuristic ☐ Export Potential ☐ Import Substitution

Stage of Development:*

☒ Prototype Level ☐ Field Test ☐ Commercialized

Please describe (also specify the TRL Level):*

It is at prototype level

(Maximum 2000 characters allowed.)

Abstract:

Applications:*

Please describe all potential applications of the technology in bullet points below and/or attach a file:

Nanoscience and nanotechnology involve the ability to see and to control individual atoms and molecules. Everything on Earth is made up of atoms the food we eat, the clothes we wear, the buildings and houses we live in, and our own bodies.

(Maximum 2000 characters allowed.)

Please attach a .pdf file (max. size: 4MB) :

serviceinvoice (3).pdf

Advantages:*

How does this technology improve upon existing technologies? What differentiates it from other solutions to the problem it addresses? Please write in bullet points below and/or attach a file.

Nanotechnology is a field of research and innovation concerned with building 'things' generally, materials and devices on the scale of atoms and molecules. A nanometre is one billionth of a metre ten times the diameter of a hydrogen atom.

(Maximum 2000 characters allowed.)

Please attach a .pdf file (max. size: 4MB):

serviceinvoice.pdf

Add New Page

Technology Inputs:

Imported Equipment/Spare Parts:

Add Row	Delete Row	(Please select the checkbox and click on Delete button to delete a row).		
Equipment/Spare Parts		Year	ITC-HS Code	Select
<input type="text" value="SEM"/>		<input type="text" value="2019-20"/>	<input type="text" value="rtufbnh1"/>	<input type="checkbox"/>

Indigenous Equipment/Spare Parts:

Add Row	Delete Row	(Please select the checkbox and click on Delete button to delete a row).		
Equipment/Spare Part		Year	ITC-HS Code	Select
<input type="text" value="Microscope"/>		<input type="text" value="2019-20"/>	<input type="text" value="micras12"/>	<input type="checkbox"/>

Imported Raw Materials:

Add Row	Delete Row	(Please select the checkbox and click on Delete button to delete a row).		
Raw Materials		Year	ITC-HS Code	Select
<input type="text" value="Scanning Microscope"/>		<input type="text" value="2019-20"/>	<input type="text" value="testcf34"/>	<input type="checkbox"/>

Indigenous Raw Materials:

Add Row	Delete Row	(Please select the checkbox and click on Delete button to delete a row).		
Raw Materials		Year	ITC-HS Code	Select
<input type="text" value="Electron Gadget"/>		<input type="text" value="2019-20"/>	<input type="text" value="egtvb456"/>	<input type="checkbox"/>

Existing R&D Facilities used:*

Add Row	Delete Row	(Please select the checkbox and click on Delete button to delete a row).		
Facilities*		Year*	ITC-HS Code*	Select
<input type="text" value="TEM"/>		<input type="text" value="2019-20"/>	<input type="text" value="rtfgcv34"/>	<input type="checkbox"/>

ITC – Indian Tariff Code.

Add New Page

R&D Investment:

R&D Investment:

Add Row
Delete Row
(Please select the checkbox and click on Delete button to delete a row).

R&D investment (Rs. in Lakhs):*

Indian Source (Rs.)	Foreign Source (Rs.)	Year	Select
34	5	2019-20 ▾	<input type="checkbox"/>

Patents & Publications:

Add Row

Delete Row

(Please select the checkbox and click on Delete button to delete a row).

Patents:

Filed Patents (No.)	Granted Patents (No.)	Year	Select
<input type="text" value="5"/>	<input type="text" value="2"/>	<input type="text" value="2019-20"/>	<input type="checkbox"/>

Please list the patent(s)

Add Row

Delete Row

(Please select the checkbox and click on Delete button to delete a row).

Publications:

Submitted (No.)	Published (No.)	Year	Select
<input type="text" value="8"/>	<input type="text" value="4"/>	<input type="text" value="2019-20"/>	<input type="checkbox"/>

Please list the publication(s)

Commercialization Potential:

Who are the Potential Licensees?

List companies with any known contacts or highlight relevant industries:

Philips

GE

Add New

(Maximum 2000 characters allowed.)

Add New Page

What commercially available products (if any) address the same problem, at least in part?

Add Row

Delete Row

(Please select the checkbox and click on Delete button to delete a row).

Company	Product	Problem Addressed	Select
<input type="text" value="Test Company"/>	<input type="text" value="Test Product"/>	<input type="text" value="Covid 19"/>	<input type="checkbox"/>

Would you like to develop this invention further with corporate research support?*

☒ Yes ☐ No

Would you be interested in participating in cluster based programs for commercialization research or business planning for your invention?*

☐ Yes ☒ No

Indigenous Technology Development Plan:

Technologies/raw materials proposed to be indigenized and action plan:

Add Row

Delete Row

(Please select the checkbox and click on Delete button to delete a row).

Action Plan (Summary)	Year	Select
<input type="text" value="Will be submitted later"/> (Maximum 2000 characters allowed.)	<input type="text" value="2020-21"/>	<input type="checkbox"/>

Please attach a .pdf file (max. size: 4MB) :

No file chosen

Total Investment to be made on expansion (Rs. in Lakhs):

Add Row

Delete Row

(Please select the checkbox and click on Delete button to delete a row).

Indigenous Components (Rs.)	Imported Components (Rs.)	Year	Select
<input type="text" value="45"/>	<input type="text" value="4"/>	<input type="text" value="2020-21"/>	<input type="checkbox"/>

Reset

Save as Draft

Preview & Submit

Add New Page

Preview Page

Preview after Filling the form

Digital Catalogue for Technology and Products Development

Preview Page

Preview

Basic Information

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Affiliated Ministry:	Science and Engineering Research Board												
Type of Development:	Indigenous												
Does the technology help in replacing any import items currently procured from outside India?	No												
Does the technology have export potential?	Yes												

Preview Page

Category of technology developed:

Futuristic

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Prototype Level

Please describe in detail including the TRL Level:

It is at prototype level

Abstract:

Applications:

Nanoscience and nanotechnology involve the ability to see and to control individual atoms and molecules. Everything on Earth is made up of atoms the food we eat, the clothes we wear, the buildings and houses we live in, and our own bodies.

[serviceinvoice_\(3\)1.pdf](#)

Advantages:

Nanotechnology is a field of research and innovation concerned with building 'things' generally, materials and devices on the scale of atoms and molecules. A nanometre is one billionth of a metre ten times the diameter of a hydrogen atom.

[serviceinvoice1.pdf](#)

Technology Inputs:

Imported Equipment/Spare Parts:

Equipment/Spare Parts	ITC-HS Code	Year
<i>SEM</i>	<i>rtufbnh1</i>	<i>2019-20</i>

Indigenous Equipment/Spare Parts:

Equipment/Spare Parts	ITC-HS Code	Year
<i>Microscope</i>	<i>micras12</i>	<i>2019-20</i>

Imported Raw Materials:

Raw Materials	ITC-HS Code	Year
<i>Scanning Microscope</i>	<i>testcf34</i>	<i>2019-20</i>

Indigenous Raw Materials:

Raw Materials	ITC-HS Code	Year
<i>Electron Gadget</i>	<i>egtvb456</i>	<i>2019-20</i>

Preview Page

Existing R&D Facilities used:

Facilities	ITC-HS Code	Year
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R&D Investment:

Amount of R&D investment (Rs. in Lakhs):

Indian Source (Rs.)	Foreign Source (Rs.)	Year
34	5	2019-20

Patents & Publications:

Information about Patents:

Filed Patents (No.)	Granted Patents (No.)	Year
5	2	2019-20

Information about Publications:

Submitted (No.)	Published (No.)	Year
8	4	2019-20

Commercialization Potential:

Who are the Potential Licensees?

It is at prototype level

What commercially available products address the same problem?

Company	Product	Problem Addressed
Test Company	Test Product	Covid 19

Preview Page

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Yes

Would you be interested in participating in cluster based programs for commercialization research or business planning for your invention?

No

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Action Plan (Summary)	Year
<i>Will be submitted later</i>	<i>2020-21</i>

Total Investment to be made on expansion (Rs. in Lakhs):

Indigenous Components (Rs.)	Imported Components (Rs.)	Year
<i>45</i>	<i>4</i>	<i>2020-21</i>

Submit

Confirmation of Submission

Confirmation of Submission

Technology Product Submission

Thanks for the submission!.

The Unique code for your submission : TP19768914415.

Date of Submission: 27-5-2020, Submitted by I-STEM Team Head