

Application for Registration of Incubates

at

Centre for Design & Development of Eco-Friendly, Light Weight Technology for Automotive & Aerospace

The Innovex Lab of



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probe · perform · practice · Plastics

CIPET: School for Advanced Research in Polymers (SARP)

Advanced Research School for Technology and Product Simulation (ARSTPS)

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1. Introduction

“Centre for Design & Development of Eco-Friendly, Light Weight Technology for Automotive & Aerospace” is an INNOVEX LAB established by CIPET at its one of the R & D centre, CIPET: SARP-ARSTPS, Chennai with the funding support of Ministry of Commerce, Govt. The centre is focussed on the advanced research and developmental activities in the area of integrated hardware-software-mechanical solutions in design, manufacturing for various sectors including Automotive, Aerospace, Defence, Agriculture, Healthcare, etc with state of art infrastructure facilities. The main objective of the centre is to nurture startups and new product development in micro, small and medium enterprises (MSMEs) by providing workspace & advisory services, sharing facilities, and access to critical tools, information, contacts and resources for a stipulated period.

2. About CIPET: SARP-ARSTPS:

Central Institute of Plastics Engineering & Technology (CIPET) was established in 1968 by Government of India with the assistance of United Nations Development Programme (UNDP) at Chennai. CIPET is a premier national institution under the Ministry of Chemicals & Fertilizers, Govt. of India fully devoted to Skill Development, Technology Support Services, Academic and Research (STAR) in all the domains of plastics viz:- Design, CAD/CAM/CAE, Tooling & Mould Manufacturing, Plastics processing, Testing and Quality Assurance. CIPET operates from various locations spread across the country and catering to the needs of Polymer and allied industries.

CIPET has established 03 Research Schools for Advanced Research in Polymers (SARP) Viz. ARSTPS at Chennai, LARPM at Bhubaneswar, and APDDRL at Bengaluru which are on par with international standards; thus, enabling frontline researchers to execute their research goals in-line with the needs of the regions of the country. The activities of R & D centres of CIPET is mainly focussed on developing the technology for the need of plastics / allied industries in the applications of automotive, aerospace, defence, medical, agriculture, etc.

Advanced Research School for Technology and Product Simulation (ARSTPS), is one of the R&D centres of CIPET, committed to execute applied research in collaboration with industries in order to resolve the technical challenges and day to day needs of various sectors. ARSTPS offers Research and Technical Support Services right from the concept design to product launch, which includes Product

Design, Product and Process Optimization, Reverse engineering, Value Engineering, Prototyping, Product Validation, Tooling, and Production Support.

Out of the 3 Innovex labs being setup by CIPET at the respective Schools for Advanced Research in Polymers (SARP) Viz. ARSTPS at Chennai, LARPM at Bhubaneswar, and APDDRL at Bengaluru on par with international standards, the first lab will be setup at Chennai

The 1st INNOVEX LAB, i.e. “**Centre for Design & Development of eco-Friendly, Light Weight Technology for Automotive & Aerospace**” is established at CIPET: SARP-ARSTPS, Chennai. This will enable frontline researchers to execute their research goals in-line with the needs of the regions of the country.

In this regard, applications are invited from single entity / partnership, registered as a Company, Firm or Society under respective acts in India (or) Existing start-ups and MSMEs venturing into new product development for various Engineering sectors especially automotive, aerospace, defence, medical, agriculture, etc. to register as Incubates at CIPET: SARP-ARSTPS, Chennai

3. Facilities @ CIPET: SARP-ARSTPS:

Softwares for CAD	<ul style="list-style-type: none"> • PTC - CREO • UNIGRAPHICS-NX • CATIA
Hardware & Software for Reverse Engineering	<ul style="list-style-type: none"> • 3D Scanners • POLYWORKS • GEOMAGIC • MIMICS
Software for Simulation (CAE)	<ul style="list-style-type: none"> • Autodesk Mouldflow • Moldex 3D • Star CCM+ • Abacus • Hyperworks <u>MSC Software</u> <ul style="list-style-type: none"> • Nastron • Patron • Adams • Actron • Marc • Digimat • Fatigue

	<p><u>ANSYS</u></p> <ul style="list-style-type: none"> • Polyflow • Space Claim • HPC • N-Code • Design Life • Composite PrepPost
3D printers for Prototyping	<p>Solid based technology:</p> <ul style="list-style-type: none"> • Fused Deposit Modelling (FDM) - Stratasys F 900 Mc • Fused Deposit Modelling (FDM)- Stratasys F 400 Mc
	<p>Powder based Technology</p> <ul style="list-style-type: none"> • Selective Laser Melting (SLM) – SLM 280 HL • Selective Laser Sintering (SLS) – 3D system ProX 500
Batch Production	<ul style="list-style-type: none"> • Vacuum Casting- (Mould Volume: 500 mm³) SLM / 5 / 01 • Vacuum casting –(Mould Volume: 900 mm³) Renishaw / 5 / 04
Composite & Fabrication	<p>Design</p> <p>Software for Composite design</p> <ul style="list-style-type: none"> • Fibersim • Esacomp
	<p>Composite fabrication</p> <ul style="list-style-type: none"> • Resin Transfer Molding • Hand-layup • Vacuum Infusion
Product validation Equipment	<ul style="list-style-type: none"> • Multi Axial Fatigue Tester: Tension & Torsion • Tribometer: Pin-on-disc • Surface Profilometer: Form, Roughness & Waviness • Vision measurement • Noise Vibration Harness Tester • Polymer PVT Tester • Particle Size Analyzer

4. POLICIES & GUIDELINES FOR REGISTER / OPERATES AS INCUBATEE AT CIPET: SARP-ARSTPS

4.1 Eligibility Criteria:

The Incubates shall be a single entity / partnership, registered as a Company, Firm (or) Society under respective acts in India (or) Existing start-ups and MSMEs venturing into new product development. The applicants should fulfil any one of the following;

- involved in the business of technology / IP transfer,
- providing consultancy for creating spin offs/start-ups,
- scouting for R&D partners

4.2 Selection and Admission Process:

Pre-incubation:

Generally, pre-incubation is for the maximum period of 4 weeks. The applicant has to submit online application at CIPET Website www.cipet.gov.in. If the applicant found suitable, they will be provided access to the facilities of CIPET: SARP-ARSTPS and guidance to develop their business plan will be provided. Admission fee of Rs.10000/- will be charged for the same.

Incubation:

If the applicant is interested in applying for the incubation services of **CIPET: SARP-ARSTPS**, a detailed Project proposal needs to be attached along with the application. The proposal should comprise of the following.

- Details of product / process / technology to be developed & intellectual property
- Project Plan
- Business Plan
- Details of resource and infrastructure requirements– Should include the no. of computers, softwares, equipment / machineries, expertise etc.
- Justification for choosing CIPET: SARP-ARSTPS for incubation.

The application will be scrutinized by a team of experts having relevant technical, financial and domain expertise. The short listed applicants will be called for presentation before an Evaluation Committee. Based on the recommendations by the evaluation committee, the incubatee will be selected.

4.3 Evaluation Criteria:

Evaluation will be based on the following criteria:

- Potential of the proposed product / process / technology
- Financial & commercial viability
- Leverage of CIPET:SARP-ARSTPS capabilities
- Prospects for IP Creation
- Alignment with thrust areas of CIPET: SARP-ARSTPS, i.e., integrated hardware-software-mechanical solutions in design, manufacturing for various sectors including Automotives, Aerospace, Defence, Agriculture, Healthcare, etc.

4.4 Facilities offered to the incubates and Charges:

CIPET: SARP-ARSTPS will offer three types of facilities/services to incubatee companies.

(A) Individual Infrastructure Facilities:

- Office Space: One cabin is approximately 300sq.ft.
- Office furniture (storage and chairs)
- Internet

(B) Common Infrastructure and Services:

- Conference Hall with Projector.
- Utilities (power, water and HVAC)

(C) Technical Infrastructure and Services:

- Product Design (CAD/CAE)
- Reverse Engineering (3D Scanner & Software)
- Prototyping (Additive Manufacturing / CNC Machining)
- CNC CMM & Other inspection system
- Product validation

The incubatee companies will be required to pay fees for the above services offered by CIPET: SARP-ARSTPS. Consolidated monthly payment of Rs.10000/- for SI. No. (A) & (B) will be charged from the incubatee. Charges for facilities under SI.No. (C) be based on the approved hour rates with 30 – 50% subsidiary. The Charges will be different for first & second year, start-ups and MSMEs, nature of agreement & type of Services.

4.5 Agreements:

The incubatee company need to sign one or more agreements at the time of admission into CIPET: SARP-ARSTPS as detailed below:

- Incubation agreement with CIPET: SARP-ARSTPS (for Charges, revenue sharing, equity stake or a combination of these whichever is applicable)

- Intellectual property / Transfer of technology agreement/Technology licenses agreement with CIPET: SARP-ARSTPS, if needed.

4.6 Tenure of Incubation:

The incubatee companies will be permitted to operate from the CIPET: SARP-ARSTPS for a maximum period of 2 years which may be extended by one more year, if necessary.

4.7 Exit Policy:

Incubatee companies will exit from CIPET: SARP-ARSTPS under the following circumstances:

- On successful completion of product development & test marketing
- On completion of two years / after extended period.
- Underperformance or non-viability of the business venture
- Disputes among the promoters, affecting the viability of the company
- When the incubatee company enters in an acquisition, merger or amalgamation deal or reorganization deal resulting in a substantial change in the profile of the company, its promoters, directors, shareholders, products or business plan
- Incubatee plans for a public issue
- Change in promoters/founding team without concurrence of CIPET:SARP-ARSTPS
- Any change of more than 50% of equity ownership unless approved by CIPET:SARP-ARSTPS
- Violation of CIPET:SARP-ARSTPS policies
- Any other reason for which CIPET: SARP-ARSTPS finds it necessary for an incubatee company to leave.
- Notwithstanding anything written elsewhere, CIPET: SARP-ARSTPS decision in connection with the exit of an incubatee company shall be final & shall not be disputed by any incubatee company.

4.8 Intellectual Property Policy:

Consideration for IP policy will be as per IP policy of CIPET: SARP-ARSTPS. The policy guidelines shall be as below:

- For transfer/ licensing of/ permission to use IP in favour of the incubatee companies and for the facilities provided by CIPET:SARP-ARSTPS, the respective companies shall have to consider sharing of revenue or equity
- The percentage of equity and revenue sharing will be decided by CIPET: SARP-ARSTPS and is to be given in favour of CIPET: SARP-ARSTPS.

4.9 Consultation:

Any consultant needs to be hired from outside CIPET: SARP-ARSTPS directly by the incubatee company shall be with prior approval of CIPET: SARP-ARSTPS. Payments to be made by the incubatee company directly to the concerned consultant.

4.10 Others:

- In case of start-ups, the incubate company shall be offer a % revenue share for a maximum period of 3 years after completion to CIPET:SARP-ARSTPS
- In the case of established MSMEs, CIPET:SARP-ARSTPS will charge a competitive fee AND/OR agree to a revenue share for a maximum period of 3 years after completion for the new product being developed in the incubator
- The above Policies and Procedures are subject to periodical review and amendment without prior notice.