

DR. MGR ERI

**National Innovation and Startup Policy
For Students, Faculty and Management
2020**

SEPTEMBER 1, 2020



Dr. M.G.R.
EDUCATIONAL AND RESEARCH INSTITUTE
DEEMED TO BE UNIVERSITY

University with Graded Autonomy Status

(An ISO 21001 : 2018 Certified Institution)

Periyar E.V.R. High Road, Maduravoyal, Chennai-95. Tamilnadu, India.



NATIONAL INNOVATION AND STARTUP POLICY
2020 for STUDENTS, FACULTY AND MANAGEMENT

Drafted by



Following the guidelines of

Innovation Cell, Ministry of Education, Gov. of India



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Section 1: Executive Summary

This Policy Document has been created to share with faculty and students of Dr. MGR Educational and Research Institute, the processes followed for developing innovative and entrepreneurial projects.

The project describes the procedures for getting funds from MGR DST NewGen IEDC pre-incubator, process for applying for intellectual property rights and the format for applying for an Industry collaboration for research and consultancy.

The following Goals and Objectives have been set to develop the Innovation and Entrepreneurship Ecosystem at the Institute

Goals and Objectives

1. Increase the number of students and faculty to participate in prototyping and hackathons.
 - a. Increase the awareness events
 - b. Organize Faculty development programs and short time workshops for students
 - c. Organize competitions and identify potential
 - d. Offer courses in Entrepreneurship
2. Develop innovative prototypes that would be attractive for the market
 - a. Mentor students to develop the prototypes
 - b. Network the students with the companies
 - c. Apply for IP rights for the prototypes
3. Increase the number of campus companies in the incubator
 - a. Create a good infrastructure to attract student and faculty companies
 - b. Create a brand – show success stories
 - c. Availability of funding sources
 - d. Have networks to promote virtual incubation
4. Commercialize innovations to increase total revenue
 - a. Link up with companies in the same sector likely to be interested in collaborations
 - b. IP Commercialisation
 - c. Fine tune forms – NDA, financial evaluation etc.

Section 2: Preamble

Dr. MGR Engineering College was started in the year 1988 by Tmt. Kannammal Education Trust. The Founder Chancellor Shri. A.C. Shanmugam, former M.P. and M.L.A. started the Institute with a Vision to encourage the Entrepreneurial Spirit in the New Generation Students. Thai Mookambiagai Dental College was started by the Trust in 1991. In 2003, Dr. M.G.R. Educational and Research Institute obtained the Deemed University Status from the University Grants Commission and the Ministry of Human Resource Development, Government of India. In 2008, ACS medical College and Hospital became a constituent of the Institute.

The Institute is accredited by NAAC as A Grade and some of the Depts are accredited by NBA. The Institute is one of the select Deemed to be Universities conferred with Special status by the University Grants Commission in March 2018 to start new courses and off-campus programs

Today, the Institute offers Professional Degrees in Architecture, Arts, Computer Applications, Commerce, Dental Surgery, Education, Engineering & Technology, Law, Medicine and Allied Sciences, Science and Management Studies. Spread over 3 spacious campuses are around 15,000 students, studying in various undergraduate, post graduate and Ph.D. courses. The Institute supports two Community Outreach Medical Centers and numerous Research Centers.

A large number of students from the local region and other states prefer Dr. MGR Educational and Research Institute for the environment which is student friendly as well as give many opportunities for building their career. The students also build a network across disciplines during their study period. Opportunities for industry internships, placements are available for all. Numerous international collaborations help in identifying higher studies opportunities in other countries. University supports students with innovative and entrepreneurial potential by funding their prototypes and incubating start-ups.

The Institute started the **Dr. A.P.J. Abdul Kalam Center of Excellence in Innovation and Entrepreneurship (AKC)** with the mandate to create an innovation and entrepreneurial ecosystem in the campus in March 2016. AKC has been functioning to develop the entrepreneurship and innovation potential of the Institute.

In the national Atal Ranking of Institutes for Innovation Achievements (ARIIA), Dr. MGR Educational and Research Institute is in the Top 25 Institutes among the Deemed to be Universities. This has been possible due to the prototypes developed by students, courses in Entrepreneurship and IP and campus companies from the University.

Section 3: NISP Overview

3.1: MGR ISP

3.1.1: Innovation and Entrepreneurship at the Institute

The Institute has a focus on encouraging Innovation and Entrepreneurship among students and faculty. Towards the same the Institute has a pre-incubator funded under the DST NewGen IEDC scheme. Entrepreneurship Education is offered as an elective and a full time MBA – IEV has been introduced by the Institute.

There are 4 campus companies incubated in the Institute. In order to develop the innovation ecosystem further the following long term and short term objectives have been put forward.

3.1.2: Long term Objective

To be the sought-after Institute Incubator for innovators

3.1.3: Mid Term Objectives

1. Register an Incubator for the Institute – become self-sustaining.
2. Apply for funding with a cohort of 20 start-ups.
3. Identify industry and international collaborations.
4. Develop Alumni mentor network.

3.1.4: Short Term Objectives

1. Training Faculty in Innovation and Entrepreneurship – 5 per year
2. Engage with a large number of students through E Cell events and get participants for Hackathons - targeting atleast 200 students every year
3. Identify students with potential innovative ideas funding pre-incubation support – 20 projects to be funded
4. Support Faculty and student entrepreneurship – atleast 5 Campus start-ups per year
5. Offer courses in Entrepreneurship – Credit courses and MBA – IEV to be offered
6. Patent Cell to facilitate student IPR filing – 5 per year
7. Network with Industry by identifying internship and skill development partners

Strategic Plan to develop Innovation and Entrepreneurship at the Institute

To develop an Incubator for the University

It is envisaged to start an Incubator which will provide office space, business services, coaching and mentoring, funding, and access to networks.

It will be located at the Adayalampattu campus of the University – which is closer to the city. A space of 5000 square feet adjacent to the pre-incubation DST NewGen IEDC will be provided for the Incubator.

Initial funding for the Incubator will be provided by the Institute.

Sectors – While it will be agnostic to sectors, there is much experience in medical equipment from the pre-incubation prototypes.

Legal Structure – It is suggested that the Incubator be registered under Section 8 Company

1. A minimum of four Board Meetings where the business of the organisation is discussed must be organized. This ensures that the activities of the organisation are aligned with its objectives. The minutes of the meetings are also to be maintained.
2. **Transparency:** The Section 8 company is required to adhere to the regulations under The Companies Act, 2013 and hence needs to submit statutory and other filings to the Ministry of Corporate Affairs (MCA) and other statutory authorities.
3. **Holding of Equity:** The incubator, as part of supporting start-ups, provides seed fund in the form of equity investment.
4. Minimum 2 persons should subscribe their name to the MoA and apply to the Regional Director for registration under Section 8 of The Companies Act, 2013
5. **Pre-conditions for incorporation of Section 8 Company:** There are three conditions for this:
 - a. The Company must be formed for charitable objects.
 - b. Income and profits should be applied towards these objects.
 - c. It should not pay any dividend to its members.
6. **Member & Directors:** It can be formed with just two persons. It should have at least two directors, who need not be members. The company can be formed with shares or can be formed, limited by guarantee. If the company is formed with shares, then each

member gets votes in proportion to their shares. If the company is formed with a limited by guarantee, then each member gets one vote.

7. **Operations:** Such a company can operate in any state without additional formalities.
8. Annual accounts and annual return of the company to be filed annually with RoC. Maintenance of various secretarial records including inter-alia minutes books for the board meeting, general meeting and various other statutory registers is required to be maintained
9. **Work Culture - Incubators,** therefore, need to mimic a start-up's culture to be able to empathise with them. Owing to the cultural differences between an academic institution and a start-up, the incubator manager should take conscious steps to define, build and nurture a culture in the incubator.
10. Innovation is the key to an incubator's setting up, existence and growth. While there is no set formula for creating an innovative enterprise, the four models, namely, marketplace of ideas, visionary leader, systematic innovation, collaborative innovation account for the majority of the most successful companies today
11. **Revenue Model**
 - a. **Rent Model:** Rental charges to clients can be a source of funds though incubators need to achieve a significant size before this becomes a major income source.
 - b. **Equity Model:** Incubators can take minority stakes (2-6 %) in incubated businesses, often in return for free and low rent periods, enabling future income from dividend payments. An additional equity (e.g 1-2%) may be further added for additional periods spent in the incubators.
 - c. **Royalty Model:** According to this model, revenues earned by the client will legitimate a royalty payment for the incubator. Usually the royalty is at around 5% of the revenue and is limited in time (on an average, five years).
 - d. **Deferred Debt Model:** In this model the services provided to the client are valued, along with incubator's overheads, and then charged in the incubation fee. The client has up to 10 years to pay back the debt to the incubator. Once the client has left the incubator and/or when the client has reached an agreed financial target, the total debt due to the incubator is fixed and the repayment can start. Repayment can be in a lump sum or partial payments.

Sources of Funds for the Incubator can be the following

1. Program funding
2. Professional fees for mentoring –
3. Management fees- typically, the management fees are between 2% & 3% p.a. of the total investment fund.
4. **Exits:** Incubators that hold equity in start-ups are poised to receive cash flow from successful ‘exits’ – liquidity events where start-ups raise additional funds and return the incubators’ investment.
5. **CSR Funds:**
6. Sponsorship
7. Rent
8. Host Institute

3.2: Goals and Objectives

1. **Increase the number of students and faculty to participate in prototyping and hackathons to know the value of innovation and critical thinking skillset.**
 - a. Organize Faculty development programs and short time workshops for students.
 - b. Organize competitions and identify potential
 - c. Offer courses in Entrepreneurship
2. **To develop an Innovative prototype by students/faculty by enabling the access of Incubator resources and facilities**
 - a. Mentor students to develop the prototypes.
 - b. Network the students with the companies
 - c. Apply for IP rights for the prototypes
3. **To Increase the number of campus companies/early stage entrepreneurs to support internships, jobs, create entrepreneurial buzz and spirit within campus**
 - a. Create a good infrastructure to attract student companies.
 - b. Alumni start-up and their support in incubation.
 - c. Create a brand – show success stores.
 - d. Availability of funding sources
 - e. Have networks to promote virtual incubation
4. **To Commercialize Student/Faculty innovations**

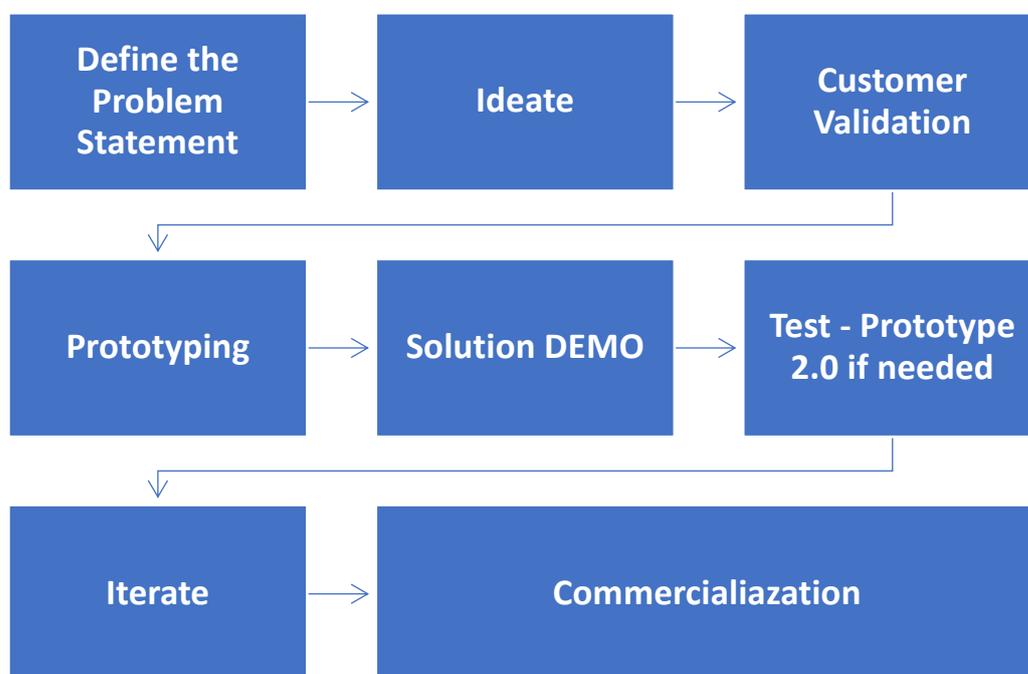
- a. Link up with companies in the same sector likely to be interested in collaborations for scaleup.
- b. Collaborate and Co-create business relationship and knowledge exchange with the campus companies.
- c. Fine tune forms
 - i. NDA (Non-Disclosure Agreement)
 - ii. Patent forms (National/PCT)
 - iii. MoUs (Collaboration)
 - iv. Financial evaluation (Sustainability)
 - v. Exit strategy.

3.3: Key Performance Indicators

- 1) Number of students in Entrepreneurship Cell activities
- 2) Number of students participating in national Innovation events
- 3) Number of faculty as mentors for students projects
- 4) Number of faculty who take up courses in Innovation and Entrepreneurship
- 5) Number of campus companies
- 6) Commercialization of projects and joint ventures with Industry

Section 4: Norms for student and faculty

4.1: Ideation to prototyping



4.2: IP Filling

Dr MGR PFC – Patent Facilitating Cell

Dr MGR patent facilitating cell initiated to create awareness and extend assistance on protecting Intellectual Property Rights (IPR) including patent, copyright, trade mark, Trade secret, geographical indication etc. at institution level. These PFCs have also established Intellectual Property committee to work with MGR ISP.

IP/Patent Facilitation

Institute PFC helps in filing and other IPR applications in India and in other countries. These patent and IP applications are drafted and filed through innovator and patent attorneys on the panel. The cost of filing these patents is borne by Institute. IP Committee conduct following awareness programmes.

- Awareness on **IP sessions**
- Linking Students and faculty with **MoE KAPILA Initiative**
- **Prior Art Search and Proper Inventory Disclosure training**
- **Patent drafting** workshops
- **IP Commercialization Sessions**

4.2.1: IPR Process guidelines and Facilitation

IPR Process guidelines and Facilitation

IPR filling and process for the students and faculty will be guided by the PFC. The following process will be guided by the Dr MGR IP facilitating team.

1. Patent drafting

- a. Orientation to 3 key elements in patenting (Novelty, utility and inventive step)
- b. PS – Provisional Specification (If your idea is in concept level)
- c. CS – Complete Specification (Should be filled within 12 months from the date of PS filled date)
- d. Claim drafting
 - i. Dependant claims drafting
 - ii. Independent claims drafting
- e. Filling directly with Complete specification (Including Claims and Diagrams)

2. Prior Art Search

- a. Pre search with open sources (Google patents, Patentscope and other global search databases)
- b. Post search Session with innovator through Patent Attorney
- c. Re - draft with more information if any needed

3. Patent filling

- a. National / PCT

4. Application publication

- a. Early publication request process if in hurry for the grant

5. Apply for examination

6. FER – First Examination Report from IP Office

- a. Reply and modify based on the report

7. Patents Publication (Post examination publication)

8. Patent grant

9. IP Commercialization

- a. Initiating commercialization from the date of filling through
 - i. Industry connect
 1. Incubator
 2. IIPC
 3. Placement Cell
 - ii. Second level funding to scale up
 1. Nidhi Prayas
 2. Start-up NIDHI
 3. BIRAC Grant

10. Technology transfer

- a. IP Sharing

4.3: IP Commercialization

For IP Commercialisation we adopt and involve all the stakeholders (Innovator, Incubator, Departments, IIPC, PFC, Placement Cell) of our institute.

IP Commercialisation is the process of getting your IP to market to create new revenue streams, whether on your own, through a partnership or via a combination of the two. By reviewing the inventors idea/product the PFC committee will suggest on TT or direct commercialization through funding opportunity. Inventors has 100% liberty to choose either. This can also include university researchers using it to communicate their research through application part of it.

Dr MGR IP facilitating team:

S. No	Name	Description	E Mail / Mobile
1	Dr Rama Vaidyanathan	Point of Contact to industries for MoU from Institution (NISP Nominee)	ramavaidyanathan@drmgrdu.ac.in / 9841002846
2	Dr. J. Arun Kumar	IP Awareness for Students and Faculty	arunkumar.j@drmgrdu.ac.in / 6379554847
3	Dr. Anandhi	IP Filling / C Intel	Anandhi.ece@drmgrdu.ac.in / 9962200875
4	Dr. Bala Krishnan	IIPC / Technology transfer In charge	iipc@drmgrdu.ac.in / 9841199624
5	Dr. V. Natarajan	Commercialization Assist / Expert	natarajan.ari@drmgrdu.ac.in / 9962535000
6	Dr. M. Vijai Anand	Commercialization Assist / Expert	Drvijayanand3@gmail.com / 9841002491

External Experts

S. No	Name	Description	E Mail / Mobile
1	Mr. Balaji	IP Filling / NewGen IEDC Prototypes	balaji.ntu@gmail.com / 7338714790

Annexure 1: Forms and Fees

Annexure 2: Industry Institute Collaboration Project format

Section 5: Dr APJ Abdul Kalam COE in Innovation and Entrepreneurship

Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship

With an aspiration to contribute to Nation building, Dr. MGR Educational and Research Institute started the **Dr. A.P.J. Abdul Kalam Center of Excellence in Innovation and Entrepreneurship** with the mandate to create new knowledge, acquire new capabilities and assist the Institute in building an intelligent human resource pool. The Center was inaugurated on March 22nd, 2016 by Prof. M.S. Swaminathan, renowned Indian geneticist, International Administrator and Father of the Green Revolution Program in India.

Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship was awarded the DST - New Generation Innovation and Entrepreneurship Cell (NewGen IEDC) by the National Science & Technology Entrepreneurship Development Board (NSTEDB), Dept. of Science and Technology, Govt. of India in August 2017.

NewGen IEDC has a mission to “promote knowledge based and technology-driven start-ups by harnessing young minds and their innovation potential in an academic environment.”

NewGen IEDC is a 5 year grant from DST, GOI to convert student ideas into prototypes / Business plans. This includes a one-time establishment grant of Rs. 25 lakhs, operational costs and a prototype development grant of Rs. 2.5 lakhs per project. In the first year , 10 projects, second year 15 and in the next three years 20 projects every year can be funded under this scheme

The Center is in the 3rd year and has funded 25 projects completely. Twenty projects are being mentored presently. Four campus companies are being incubated in the Center.

Four companies In addition, the Center offers Co-working incubation space for Campus Companies. The Incubator offers various training courses in Entrepreneurship for the students and incubatees.

In addition, the Institute also gets funds from MSME for incubation.

5.1: Vision and Mission

VISION

We strive to be the best inter-disciplinary Center for Research, Innovation and Entrepreneurial training. The Center is a role model for sustainable growth.

MISSION

- To conduct research in priority areas for the local region and the country
- To foster and encourage collaboration between small business firms and academia
- To stimulate technological innovation in the University environment
- To increase commercialization of innovations from the University

CORE VALUES

- We are passionate about research and innovation
- We believe in inclusive and diverse teams
- We believe in continuous education
- We believe in interacting with our customers to validate our ideas
- We are accountable for our actions to the future
- We treat every individual as an equal partner

5.2: Biotechnology Research

The Center works on cutting edge research in Biodiversity Genomics, evolution of antibiotic resistance in bacteria and biotransformation. Research funds have been received to study Mosquito Biodiversity, colchicine biotransformation and development of a sensor based diagnostic kit for SARS – Cov-2. Research facilities include Oxford Nanopore sequencing, fluorescence spectroscopy, real time PCR, ELISA reader and other microbial technique requirements.

There are 4 Senior Scientists and 3 Research Fellows in the Center. The center offers workshops and training in Bioinformatics and in use of Biotechnology equipment.

5.3: MGR DST NewGen IEDC

MGR DST NewGen IEDC

The Center was awarded the DST - New Generation Innovation and Entrepreneurship Cell (NewGen IEDC) by the National Science & Technology Entrepreneurship Development Board (NSTEDB), Dept. of Science and Technology, Govt. of India in August 2017. NewGen IEDC has a mission to “promote knowledge based and technology-driven start-ups by harnessing young minds and their innovation potential in an academic environment.”

This is a 5 year grant from DST, GOI to convert student ideas into prototypes / Business plans. This includes a one-time establishment grant of Rs. 25 lakhs, operational costs and a prototype development grant of Rs. 2.5 lakhs per project. In the first year , 10 projects, second year 15 and in the the next three years 20 projects every year can be funded under this scheme.

Application for NewGen IEDC grant

The Call for Ideas for Incubation will be announced in July every year. Students of Dr. MGR Educational and Research Institute solely or collaboration with students of other Institutes can apply for the grant. The selection will be based on the commercialization potential, novelty and application. Selected projects will be funded and mentored at the Abdul Kalam Center of Excellence.

5.3.1: Procedure for Application and Rules and Regulations of Grant

1. The Prototype Grant is given to a student team to convert their idea into a business plan. During the time of pre-incubations, the student team in collaboration with AKC has to do the following:
 - a. Testing if there is a market for the idea
 - b. Link into specific specialist networks and expertise
 - c. Produce a prototype
 - c. Form a business plan
 - d. Present to external investors if required
2. Funds for the Project will be released as per the student Action plan and the completion of tasks.

3. The expenses for the student project must be approved by the Purchase Committee of AKC. The student team will be required to maintain their own accounts in the format prescribed by AKC.
4. The project must be completed within 1 year of acceptance of the grant and the prototype / Business Plan must be submitted to Dr. MGR ERI DST NewGen IEDC.
5. The seed grant will be treated as a loan without interest to the student team. The prototype will be treated as property of the AKC. In case of Patent applications, the use of University resources will be analyzed as given in the AKC Policy Document. In general, it will be a property of the Institute with the students named as the innovators.
6. The student innovators, if they wish to be entrepreneurs will be given the first opportunity to commercialize.
7. In such a case, the University will hold a minimum of 4 % non-dilutable equity of the innovator's share in the start-up.
8. Termination of Grant : In the event that the progress of the project is not satisfactory or the students do not attend the review meetings Dr MGR ERI NewGen IEDC the project funding will be cancelled.

Annexure 3: MoU between student incubatees and MGR DST NewGen IEDC

Annexure 4: MoU between Mentor and MGR DST NewGen IEDC

Annexure 5: Format for Application for funds

Annexure 6: Utilization Certificate

Annexure 7: Employee Non-Disclosure Agreement

Section 6: Entrepreneurship, Innovation and IP as education

6.1: MBA in IEV (Innovation, Entrepreneurship and Venture development)

The MBA (IEV) is offered by Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship of the Institute. Started in 2016, the Center has faculty trained in Entrepreneurship Education by Wadhvani Foundation and are already teaching Entrepreneurship courses to the Engineering Students. The Center is managing the DST NewGen IEDC pre-incubator since 2017 and has funded and mentored 25 student prototypes and 4 start-ups. The faculty have rich experience in mentoring students in converting their ideas into a prototype and Business Plan.

Unique Points of MGR – AKC

- Trained Entrepreneurship Educators
- Access to a Student Start-up Lab – fabrication, IoT and Robotics
- Access to Biotechnology Equipment
- Patent Application Facilitation
- Co-working Space for Start-ups
- Access to Mentors from the local Industry network

6.2: Entrepreneurship education

The Entrepreneurship Curriculum is offered in collaboration with the Wadhvani Foundation through LearnWISE platform - Designed for facilitated learning (i.e. the course is facilitated by our MGR trained faculty member AKA Entrepreneurship educators). Each Facilitator organizes the students into ‘Batches’ to teach a particular Course. This helps organize the classroom activities by

- Showing videos to debrief each session objectives - Interaction.
- Conducting activities – Team & Individual
- Tracking assignments and - Team & Individual
- Quizzes - Individual
- Practice ventures - Team & Individual

Entrepreneurship Credit Courses offered:

6.2.1: Orientation to Entrepreneurship

- **Orientation program in Entrepreneurship** (1 Credit Course - UG)
 - Explore e cells – Success stories – Characteristics of Successful Entrepreneurs – Communication – Design thinking – Sales skills – Managing risk – Are you ready to be an entrepreneur.

6.2.2: Technical Entrepreneurship

- **Foundation course in Entrepreneurship** (1 Credit Course - UG) (Elective)
 - Self-discovery – Opportunity discovery – Customer and solution – Business model – Validation – Money – Marketing and sales – Practice venture

6.2.3: Advanced Entrepreneurship

- **Advanced course in entrepreneurship** (1 Credit Course -UG) (Elective)
 - Recap and review on fundamentals – Refining Business Model – Exploring ways to revenue – Funding the growth – Building a team – Creating a branding and channel strategy – Leveraging technologies – Measuring your progress – Legal matters – Final project

6.2.4: Bio business (3 Credit Course - PG)

- **Overview of the biotechnology industry**
 - Sectors in Biotechnology Industry - Trends and key issues faced by the Biotechnology Industry - Case study of Top Biotech Companies in India and abroad
- **Product development**
 - Industrial R&D and product development - Product development and project management - Transition from R&D to business units.
- **Intellectual property**
 - Business Models and R&D - Intellectual property in biotech - Product development for commercial partners - Transitioning an idea - Patent laws.
- **Bioethics and legal issues**
 - Bioethics and current legal issues - Ethics of new technology - Bioethics and current legal issues - Marketing and public perceptions in product development.
- **Entrepreneurship**

- Entrepreneurial business - New venture creation - Technology transfer and business planning - Financing biotech businesses and project finance - How to make the case for a project budget - Case discussion on entrepreneurship issues.

6.3: IPR

6.3.1: Research Methodology (2 Credit Course - PG)

- Selection, Analysis, and statement of the Research Problem - Literature Review and Formulation of Objectives – using the following Critical thinking Skills Drawing a Concept map - Oral Communication – Debating – Questioning - Collaborating, Evaluation and Reasoning.
- Research Design – Types of Study - Types of Data - Measures of Variability - Setting up - the Hypothesis - data collection techniques and tools – sampling - Describing data – Charts and graphs - Data processing – Categorization – coding - summarization.
- Data Analysis and Report Writing: Statistical measures - Regression and correlation - significance test - Report writing – Purpose – format – content - editing and evaluation. Using Citation tools - Report for specific purposes – Theses, Journals, Grant application – Oral presentation to an audience - use of project management digital tools and plagiarism checking.
- Introduction to Intellectual property - Types of intellectual property rights – Patent – Copyright - Trade Mark - Industrial Design - Geographical Indication - Trade Secrets - Traditional Knowledge - Elements of Patentability - Novelty, Non-Obviousness (Inventive Steps) Industrial Application – Non patentable inventions – Process of patenting – National and International – Form and Fees for IP India
- Prior Art Search - Patent drafting - Drafting patent Claims – Types of claims - Registration Procedure - Rights and Duties of Patentee- Patent infringement - Licensing – Franchising - Joint ventures; Non-Disclosure Agreements (NDAs) - Material Transfer Agreements (MTAs)

6.3.2: Legal aspects of Biotechnology (4 Credit Course – UG)

- **Introduction to intellectual property**
 - Types of IP - Patents, Trademarks, Copyright & Related Rights - Industrial Design Protection of GMOs - IP as a factor relevance to Biotechnology and few Case Studies
- **Amendments and agreement**
 - History of GATT & TRIPS Agreement - Madrid Agreement - Hague, Agreement - WIPO Treaties; Budapest Treaty – PCT - Indian Patent Act 1970 & recent amendments.
- **Forms**
 - National and PCT filing procedure - Time frame and cost -Status of the patent applications filed; Budapest while patenting – disclosure / non –disclosure; Financial assistance for patenting - introduction to existing schemes, patent licensing and agreement - patent infringement - meaning, scope, litigation - Case studies.
- **Biosafety**
 - Introduction - Historical Background - Introduction to Biological Safety Cabinets; Primary Containment for Biohazards - Biosafety Levels; Biosafety Levels of Specific Microorganisms - Recommended Biosafety Levels for Infectious Agents and Infected Animals.
- **Bioethics**
 - Human genome project and its ethical issues - Gene testing - prenatal diagnosis, genetic manipulations - germline therapy - genetic studies on ethnic races.

The Curriculum helps students

- Understand and Discover Entrepreneurship
- Build a strong Foundation for students to Start, Build, and Grow a viable and sustainable venture
- Develop an entrepreneurial outlook and mindset, critical skills and knowledge
- Mitigate three types of risks: Customer, Business Model, Product/ Technical expertise
- Practice venture

The students learn the critical thinking skills:

- Design thinking

- Lean Methodology
- Forming and leading teams
- Pitching and Presentation
- Use of new communication and collaborative tools and social channels

Students acquire the knowledge to

- Develop a business model from a problem/idea for products and services
- Develop customers, channels and traction
- Build a Marketing and Communication Strategy
- Build Revenue Streams, Pricing and Cash flow
- Raise Capital
- Practice venture

Section 7: Executive Committees

7.1: IIC – Institution Innovation Council

Sl. No.	Role	Name	Designation	Department
1	President	Dr. Rama Vaidyanathan	Director R&D	Dr. APJ Abdul Kalam CoE in Innovation and Entrepreneurship
2	Vice President	Dr. S Manivannan	Dean, Phase II	Dr. MGR Educational and Research Institute
3	Convener	Bhuvaneshwari Nagarajan	Faculty Co-ordinator	Dr. APJ Abdul Kalam CoE in Innovation and Entrepreneurship
4	Innovation Activity Coordinator	Dr. Arunachalam	HoD	Computer Science, Phase II
5	Internship Activity Coordinator	Dr. Balakrishnan	IIPC Coordinator	MGR Institute Industry Partnership
6	Start-up Coordinator	H Mohamed Rizwan	Manager	Dr. APJ Abdul Kalam CoE in Innovation and Entrepreneurship
7	ARIIA Coordinator	Dr. J Arun Kumar	Associate Professor	Department of Biotechnology
8	IPR Coordinator	B Anandhi	Assistant Professor	Department of Electronics and Communication Engineering
10	Member	Dr. Keerthi Narayanan.V	Assistant Professor	Faculty of Dental Surgery
11	Member	U.Indumathi	Assistant professor	CSE
12	Member	Dr. R. Kavitha	Assistant Professor	Computer Science
13	Member	Vigneshwari J	Assistant Professor	FACULTY OF EDUCATION
14	Member	Nandhini kutty	Teaching assistant	Fashion design
15	Member	Muruganandham	Assistant Professor	Mathematics
16	Member	Ramya.N	Assistant professor	Human Resource Management
17	Member	Dr.A.Arivumangai	Assistant Professor	Civil
18	Member	Dr.L.Ramapriya	Assistant Professor	Chemistry

19	Member	Kasthurirangan B	Lecturer	HMCT
20	Member	S.T.Rama	Assistant Professor	EEE
21	Member	Dr. Kowsalya	Director	Center for International Collaborations

7.2: NewGen IEDC

Advisory Board – MGR DST NewGen IEDC	
Role	Name and Position
Chairman of the Advisory Board	Dr. S Geethalakshmi
	Vice Chancellor
	Dr. M.G.R. Educational and Research Institute
Representative of NSTEDB, Govt. of India	Dr. Naveen Vasishta
	Director/Scientist ' E'
	NEB Division, Department of Science and Technology New Delhi 110016
Representative of EDII, Ahmedabad	Dr. S. B. Sareen
	Faculty & Head
	Centre for SMEs & Business Development Services Entrepreneurship Development Institute of India
	P.O.Bhat - 382 428, Dist. Gandhinagar, Gujarat (India)
Member Secretary & Overall Coordinator MGR DST NewGen IEDC	Dr. Rama Vaidyanathan
	Director (R & D)
	Dr. M.G.R. Educational and Research Institute
Senior faculty members from Dr. MGR Educational and Research Institute	Dr. N.S. Shubhashree
	Dean Engg. And Science, Dr. M.G.R. Educational and Research Institute
	Convener, MGR Institute Innovation Council
	Dr. Venil N Sumantran
	Scientific Advisor, Dr. APJ Abdul Kalam Center of Excellence in Innovation and Excellence, Dr. MGR Educational and Research Institute
Representative of a nearby Incubator	Dr. P. Chandrakumar
	Head, Vel Tech TBI, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Morai, Tamil Nadu

Alumni of the Institute	Dr. P. Sathiya Moorthi
	Managing Partner, Moon Foods
	Thiruchengode, Chennai
	Mr. Dhawal Moghe
Representative of Lead Bank/ Angel Investor/ Venture Capital	Deputy General Manager- Supply Planning at Godrej Consumare Products Ltd., Mumbai
	Mr. Balaram Nair
	Vice President, The Chennai Angels balram@thechennaiangels.com , 9884813292
Representative of Industry Association	Gp Capt Dr R Venkataraman (Retd)
	General Manager
	Madras Management Association

7.4: MGR ISP

An Apex Committee for the Institute Innovation and Start-up Policy was constituted with the following members in July 2020:

Er. A.C.S. Arun Kumar,	President, Dr. MGR Educational and Research Institute
M. Ravichandran, Ph.D.	Pro Vice Chancellor
Dr. S. Geethalakshmi	Vice Chancellor
Rama Vaidyanathan, Ph.D.,	Director (R & D) and NISP Nominee to AICTE

The apex committee constituted the members of the MGR ERI Institute Start-up Policy Expert Committee on 4th Aug 2020; Atleast 60 % of the members must be present in a meeting for taking decisions.

S.No.		Name	Position
1	Convener Institute - NISP - Nominee	Rama Vaidyanathan, Ph.D.	Director (R & D) Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship, Dr. MGR Educational and Research Institute
2	Academic Members	J. Arun Kumar, Ph.D.	Faculty Coordinator – MGR DST newGenIEDC
3	Academic Members	S. Manivannan, Ph.D.	Dean – Humanities and Sciences; Vice President, MGR Institute Innovation Council
4	Academic Members	N. S. Shubhashree, Ph.D.	Dean – Engg. & Sciences

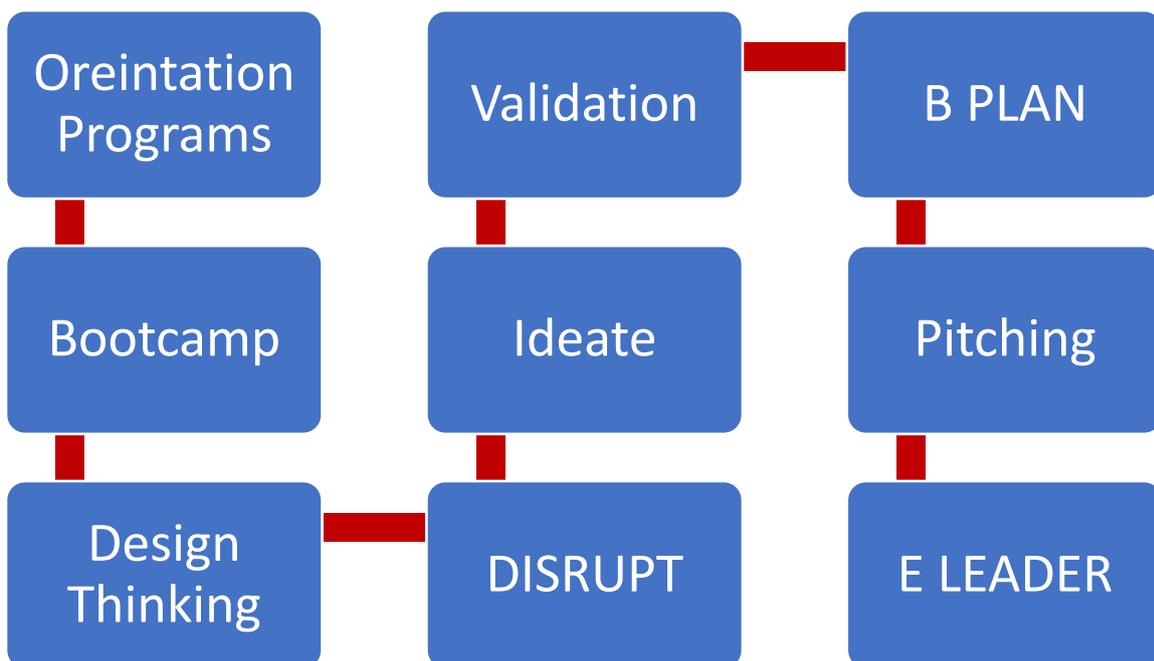
5	Academic Members	V. Natarajan, Ph.D.	Director, Coir Research Project
6	Academic Members	V. Rajalaxmi, Ph.D.	Vice Principal, Faculty of Physiotherapy
7	Academic Members	Asst. Prof. B. Anandi	Patent Cell Coordinator
8	Academic Members	C. Balakrishnan, Ph.D.	Head- Campus Placement/ Industry Institute Planning Cell
9	Academic Members	S. Geetha, Ph.D.	Head – Dept. of Computer Science Engineering, Coordinator – MGR MSME Incubator
10	Academic Members	Dr. Keerthi narayanan	Coordinator - Thai Mookambigai Dental College
11	Academic Members	R. Kowsalya	Coordinator – International Programs
12	Innovator/Alumni/Start-up Founders	Mohammad Rizwan	Alumni and Faculty Coordinator – MGR DST NewGen IEDC
13	Innovator/Alumni/Start-up Founders	Madheswaran L	CEO, Fenice Technical Solutions LLP
14	Innovator/Alumni/Start-up Founders	Sabariswaran S	CEO, BrainBuds Healthcare Pvt. Ltd.
15	Innovator/Alumni/Start-up Founders	R. Logeswaran	CEO, IGNIT Technical Solutions
16	Innovator/Alumni/Start-up Founders	Pankaj Jangid	CEO, PPM Design Studio LLP
17	Student	Mr. R. Yogesh	Student Intern – Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship
18	External Expert	Mr. Shashank Rajurkar	Consultant, Entrepreneur
19	Industry Association	Gp Captain (Retd) Venkataraman	GM, Madras Management Association
20	Industry Association	Mr. M. Balachandran	President, Ambattur Industrial Estate Manufacturers Associational (AIEMA)
21	Industry Association	Mr. Craig Jude Morreyra	Manager, Wadhvani Foundation
22	Industry Association	Dr. S. Marceline	President, Confederation of Women Entrepreneurs
23	Industry Association	Dr. Suresh Kumar	President, Indian STEP and Incubator Association

Section 8: Student Clubs

8.1: Innofy E Cell (Student lead)

We Foster the entrepreneurial spirit among the students and faculty mindset that can be developed by any professionals who aspires to become an employer. The increasing demand and recognition for Innovation and Entrepreneurship for ensuring the welfare of the society and economic growth have motivated this great leap forward to promote the Entrepreneurship Development Cell. With proper education, Entrepreneurship can be inculcated into the minds of young professionals. Thus Dr MGR E Cell (Arizone and Innofy E Cell) aims to foster Techno-entrepreneurship more systematically and comprehensively with a focus on incubating in all ventures through technology interventions.

The idea behind is to promote and develop high-end entrepreneurship and assist budding entrepreneurs to incubate their technology venture. We have 250 + e cell students across discipline. The following are the major objectives of our EDP Cell.



Annexure 1:

IDF and Forms and fees for IPR:

INVENTION DISCLOSURE FORM

Title:

Department:

Organization:

PATENTABILITY REQUISITES

S. NO	Criteria	Description
1.	Novelty	
2.	Non - Obviousness	
3.	Industrial Utility	

Note:

1. For a patent to get granted, it should satisfy all the above three criteria.
2. This can be tested by rigorous patent search- "The Combination of all novel key aspects of your invention should not be present in any one patent or non patent document/Public domain". So, 100% accurate search couldn't be attainable.
3. 100% confidentiality of the invention is maintained by the patent analyst
4. Make Sure that your invention not be a non patentable invention from Section 3 and 4

Title:

Abstract:

Keywords:

Advantages:

Details of the Forms required to be filed under The Patents Rules 2003

Number of Entry	On what payable	Number of the relevant Form	For e-filing		For physical filing	
			Natural person(s) or Startup(s) or Small entit(y)/(ies)	Other(s), alone or with natural person(s) or Startup(s) or Small entit(y)/(ies)	Natural person(s) or Startup(s) or Small entit(y)/(ies)	Other(s), alone or with natural person(s) or Startup(s) or Small entit(y)/(ies)
1	2	3	4	5	6	7
			Rupees	Rupees	Rupees	Rupees
1.	On application for a patent under sections 7, 54 or 135 and rule 20(1) accompanied by provisional or complete specification— (i) for each sheet of specification in addition to 30, excluding sequence listing of nucleotides and/ or amino acid sequences under sub-rule (3) of rule (9); (ii) for each claim in addition to 10; (iii) for each page of sequence listing of nucleotides and/ or amino acid sequences under sub-rule (3) of rule (9).	1	1600 Multiple of 1600 in case of every multiple priority. (i) 160 (ii) 320 (iii) 160 subject to a maximum of 24000	8000 Multiple of 8000 in case of every multiple priority. (i) 800 (ii) 1600 (iii) 800 subject to a maximum of 120000	1750 Multiple of 1750 in case of every multiple priority. (i) 180 (ii) 350 Not allowed	8800 Multiple of 8800 in case of every multiple priority. (i) 880 (ii) 1750 Not allowed
2.	On filing complete specification after provisional up to 30 pages having up to 10 claims – (i) for each sheet of specification in addition to 30, excluding sequence listing of nucleotides and/ or amino acid sequences under sub-rule (3) of rule (9); (ii) for each claim in addition to 10. (iii) for each page of sequence listing of nucleotides and/ or amino acid sequences under sub-rule (3) of rule (9).	2	No fee (i) 160 (ii) 320 (iii) 160 subject to a maximum of 24000	No fee (i) 800 (ii) 1600 (iii) 800 subject to a maximum of 120000	No fee (i) 180 (ii) 350 Not allowed	No fee (i) 880 (ii) 1800 Not allowed
3.	On filing a statement and undertaking under section 8.	3	No fee	No fee	No fee	No fee
4.	i) On request for extension of time under sections 53(2) and 142(4), rules 13(6), 80(1A) and 130 (per month).	4	480	2400	530	2600
	ii) On request for extension of time under sub-rule (5) of rule 24B (per month).	4	1000	4000	1100	4400
	iii) On request for extension of time under sub-rule (11) of rule 24C (per month).	4	2000	10000	2200	11000
5.	On filing a declaration as to inventorship under sub-rule (6) of rule 13.	5	No fee	No fee	No fee	No fee
6.	On application for postdating.	-	800	4000	880	4400
7.	On application for deletion of reference under section 19(2).	-	800	4000	880	4400
8.	(i) On claim under section 20(1);	6	800	4000	880	4400
	(ii) On request for direction under section 20(4) or 20(5).	6	800	4000	880	4400
9.	(i) On notice of opposition to grant of patent under section 25(2);	7	2400	12000	2600	13200
	(ii) On filing representation opposing grant of patent under section 25(1).	7A	No fee	No fee	No fee	No fee
10.	On giving notice that hearing before Controller shall be attended under rule 62(2).	-	1500	7500	1700	8300
11.	On application under sections 28(2), 28(3) or 28(7).	8	800	4000	880	4400

12.	Request for publication under section 11A(2) and rule 24A.	9	2500	12500	2750	13750
13.	Application for withdrawing the application under section 11B(4), and rules 7(4A) and 26.	29	No fee	No fee	No fee	No fee
14.	On request for examination of application for patent— (i) under section 11B and rule 24(1); (ii) under rule 20(4)(ii).	18	4000 5600	20000 28000	4400 6150	22000 30800
14A.	On request for expedited examination of application for patent under rule 24C.	18A	8000	60000	Not allowed	Not allowed
14B.	Conversion of the request for examination filed under rule 24B to request for expedited examination under rule 24C.	18 A	4000	40000	Not allowed	Not allowed
15.	On application under section 44 for amendment of patent.	10	2400	12000	2650	13200
16.	On application for directions under section 51(1) or 51(2).	11	2400	12000	2650	13200
17.	On request for grant of a patent under sections 26(1) and 52(2).	12	2400	12000	2650	13200
18.	On request for converting a patent of addition to an independent patent under section 55 (1).	-	2400	12000	2650	13200
19.	For renewal of a patent under section 53—					
(i)	before the expiration of the 2nd year from the date of patent in respect of 3rd year;	-	800	4000	880	4400
(ii)	before the expiration of the 3rd year in respect of the 4th year;	-	800	4000	880	4400
(iii)	before the expiration of the 4th year in respect of the 5th year;	-	800	4000	880	4400
(iv)	before the expiration of the 5th year in respect of the 6th year;	-	800	4000	880	4400
(v)	before the expiration of the 6th year in respect of the 7th year;	-	2400	12000	2650	13200
(vi)	before the expiration of the 7th year in respect of the 8th year;	-	2400	12000	2650	13200
(vii)	before the expiration of the 8th year in respect of the 9th year;	-	2400	12000	2650	13200
(viii)	before the expiration of the 9th year in respect of the 10th year;	-	2400	12000	2650	13200
(ix)	before the expiration of the 10th year in respect of the 11th year;	-	4800	24000	5300	26400
(x)	before the expiration of the 11th year in respect of the 12th year;	-	4800	24000	5300	26400
(xi)	before the expiration of the 12th year in respect of the 13th year;	-	4800	24000	5300	26400

(xii)	before the expiration of the 13th year in respect of the 14th year;	-	4800	24000	5300	26400
(xiii)	before the expiration of the 14th year in respect of the 15th year;	-	4800	24000	5300	26400
(xiv)	before the expiration of the 15th year in respect of the 16th year;	-	8000	40000	8800	44000
(xv)	before the expiration of the 16th year in respect of the 17th year;	-	8000	40000	8800	44000
(xvi)	before the expiration of the 17th year in respect of the 18th year;	-	8000	40000	8800	44000
(xvii)	before the expiration of the 18th year in respect of the 19th year;	-	8000	40000	8800	44000
(xviii)	before the expiration of the 19th year in respect of the 20th year.		8000	40000	8800	44000
20.	On application for amendment of application for patent or complete specification or other related documents under section 57—	13				
(i)	before grant of patent;		800	4000	880	4400
(ii)	after grant of patent;		1600	8000	1750	8800
(iii)	where amendment is for changing name or address or nationality or address for service.		320	1600	350	1750
21.	On notice of opposition to an application under sections 57(4), 61(1) and 87(2) or to surrender a patent under section 63(3) or to a request under section 78(5).	14	2400	12000	2650	13200
22.	On application for restoration of a patent under section 60.	15	2400	12000	2650	13200
23.	Additional fee for restoration under section 61(3) and rule 86(1).	—	4800	24000	5300	26400
24.	On notice of offer to surrender a patent under section 63.	—	1000	5000	1100	5500
25.	On application for the entry in the register of patents of the name of a person entitled to a patent or as a share or as a mortgage or as licensee or as otherwise or for the entry in the register of patents of notification of a document under sections 69(1) or 69(2) and rules 90(1) or 90(2).	16	1600 (In respect of each patent)	8,000 (In respect of each patent)	1750 (In respect of each patent)	8,800 (In respect of each patent)
26.	On application for alteration of an entry in the register of patents or register of patent agents under rules 94(1) or rule 118(1).	—	320	1600	350	1750
27.	On request for entry of an additional address for service in the Register of Patents under rule 94(3).	—	800	4000	880	4400
28.	On application for compulsory license under sections 84(1), 91(1), 92(1) and 92A.	17	2400	12000	2650	13200
29.	On application for revocation of a patent under section 85(1).	19	2400	12000	2650	13200
30.	On application for revision of terms and conditions of licence under section 88(4).	20	2400	12000	2650	13200

31.	On request for termination of compulsory licence under section 94.	21	2400	12000	2650	13200
32.	On application for registration as a patent agent under rule 109(1) or rule 112.	22	3200	Not applicable	3500	Not applicable
33.	On request for appearing in the qualifying examination under rule 109(3).	—	1600	Not applicable	1750	Not applicable
34.	For continuance of the name of a person in the register of patent agents— (i) for the 1st year to be paid along with registration; (ii) for every year excluding the 1st year to be paid on the 1st April in each year.	— —	800 800	Not applicable Not applicable	880 880	Not applicable Not applicable
35.	On application for duplicate certificate of patent agent under rule 111A.	--	1600	Not applicable	1750	Not applicable
36.	On application for restoration of the name of a person in the register of patent agents under rule 117(1).	23	1600 (Plus continuation fee under entry number 34)	Not applicable	1750 (Plus continuation fee under entry number 34)	Not applicable
37.	On a request for correction of clerical error under section 78(2).	—	800	4000	880	4400
38.	On application for review or setting aside the decision or order of the controller under section 77(1)(f) or 77(1)(g).	24	1600	8000	1750	8800
39.	On application for permission for applying patent outside India under section 39 and rule 71(1).	25	1600	8000	1750	8800
40.	On application for duplicate patent under section 154 and rule 132.	—	1600	8000	1750	8800
41.	(i) On request for certified copies under section 72 or for certificate under section 147 and rule 133(1).	—	1000 (up to 30 pages and, thereafter, 30 for each extra page)	5000 (up to 30 pages and, thereafter, 150 for each extra page)	1100 (up to 30 pages and, thereafter, 30 for each extra page)	5500 (up to 30 pages and, thereafter, 150 for each extra page)
	(ii) On request for certified copies under section 72 or for certificate under section 147 and rule 133(2).	--	2400 (up to 30 pages and thereafter, 30 for each extra page)	12000 (up to 30 pages and thereafter, 30 for each extra page)	3300 (up to 30 pages and thereafter, 30 for each extra page)	13200 (up to 30 pages and thereafter, 30 for each extra page)
42.	For certifying office copies, printed each.	—	800	4000	880	4400
43.	On request for inspection of register under section 72, inspection under rule 27 or rule 74A.	—	320	1600	350	1750
44.	On request for information under section 153 and rule 134.	—	480	2400	530	2650
45.	On form of authorisation of a patent agent.	26	No fee	No fee	No fee	No fee
46.	On petition not otherwise provided for.	—	1600	8000	1750	8800
47.	For supplying of photocopies of the documents, per page.	—	10	10	10	10
48.	Transmittal fee for International application.	—	3200	16000	3500	17600
48A.	Transmittal fee for International application (for ePCT filing).	—	No fee	No fee	Not applicable	Not applicable

49.	For preparation of certified copy of priority document and for transmission of the same to the International Bureau of World Intellectual Property Organization.	—	1000 (up to 30 pages and, thereafter, 30 for each extra page)	5000 (up to 30 pages and, thereafter, 150 for each extra page)	1100 (up to 30 pages and, thereafter, 30 for each extra page)	5500 (up to 30 pages and, thereafter, 150 for each extra page)
49A.	For preparation of certified copy of priority document and e-transmission through WIPO DAS.	—	No fee	No fee	Not applicable	Not applicable
50.	On statement regarding working of a patented invention on a commercial scale in India under section 146(2) and rule 131(1).	27	No fee	No fee	No fee	No fee
51.	To be submitted for claiming the status of a small entity or startup	28	No fee	No fee	No fee	No fee
52.	Request for adjournment of hearing under rule 129A (for each adjournment).	-	1000	5000	1100	5500
53.	Miscellaneous form under rule 8(2), to be used when no other form is prescribed.	30	As applicable			

**LIST OF IPR FORMS
(The Patents Rules 2003)**

Form No.	Section and rule	Title
1	2	3
1.	Sections 7, 54 and 135 and rule 20(i).	Application for grant of a patent.
2.	Section 10; rule 13.	Provisional/ Complete Specification.
3.	Section 8 and rule 12.	Statement and undertaking.
4.	Sections 53(2) and 142(4), rules 13(6), 24B(4) (ii), 80(1A) and 130.	Request for extension for time.
5.	Section 10(6) and rule 13(6).	Declaration as to inventorship.
6.	Sections 20(1), 20(4), 20(5) and rules 34(1), 35(1) or 36(1).	Claim or request regarding any change in applicant for patent.
7.	Section 25(3) and rule 55A.	Notice of opposition on grant of a patent.
7 A.	Section 25(1) and rule 55(1)	For filing a representation opposing grant of a patent under sub-section (1) of section 25.]
8.	Sections 28(2), 28(3) or 28(7) and rules 66, 67, 68.	Request or claim regarding mention of inventor as such in a patent.
9.	Section 11A(2) and rule 24A.	Request for publication.

10.	Section 44 and rule 75.	Application for amendment of patent.
11.	Sections 51(1), 51(2) and rules 76, 77.	Application for direction of the Controller.
12.	Sections 26(1) & 52(2) and rules 63A and 79.	Request for grant of patent.
13.	Section 57 and rule 81(1).	Application for amendment of the application for patent/ complete specification.
14.	Sections 57(4), 61(1), 63(3), 78(5) and 87(2) and rules 81(3)(b), 85(1), 87(2), 98(1), 101(3) or 124	Notice of opposition to amendment/ restoration/ surrender of patent/ grant of compulsory licence or revision of terms thereof or to a correction of clerical errors.

15.	Section 60 and rule 84.	Application for restoration of patents.
16.	Sections 69(1) or 69(2) and rules 90(l) and 90(2).	Application for registration of a title/interest in a patent or share in it or registration of any document purporting to affect proprietorship of the patent.
17.	Sections 84(1), 91, 92 or 92(A) and rule 96.	Application for compulsory licence.
18.	Section 11B and rules 20(4)(ii) and 24B(l)(i).	Request for examination of application for patent.
19.	Section 85(1) and rule 96.	Application for revocation of a patent for non- working.
20.	Section 88(4) and rule 100.	Application for revision of terms and conditions of licence.
21.	Section 94, rule 102(1).	Request for termination of compulsory licence.
22.	Rules 109(1) and 112.	Application for registration of Patent Agent.
23.	Section 130(2) and rule 117(1).	Application for the restoration of the name in the register of Patent Agents.
24.	Sections 77(1)(f), 77(1)(g) and rules 130(1) and 130(2).	Application for review / setting aside controller's decision/ order.
25.	Section 39 and rule 71(1).	Request for permission for making patent application outside India.
26.	Sections 127, 132 and rule 135.	Form of authorisation of a Patent Agent/ or any person in a matter or proceeding under the Act.

27	Section 146(2) and rule 131(1).	Statement regarding the working of the Patented invention on commercial scale in India.
28	Rules 2(fa) and 7	To be submitted by a small entity with every document for which a fee has been specified.
29	Section 118(4) and rules 7(4A), 24C(5) and 26	Request for withdrawal of patent application
30	Rule 8(2)	Miscellaneous form, to be used when no other form is prescribed

Annexure 2:

Industry institute collaboration project format

<TITLE of Project>

1. AIM: To develop and test new methods

2. OBJECTIVE

Give the steps to reach the AIM

3. REVIEW OF LITERATURE

Background and Relevant Literature

4. Stages of Work done

Establish prior knowledge of both partners. After signing of non-disclosure agreement between parties, this document is shared.

Work to be done: Give protocols wherever necessary

5. Establish Milestones and timelines

Milestone	Activity	Time	Performance Indicator
1	Literature Review and Submission of Protocols	1 month	Document Submission
2	Lab testing	1 month	Demonstration
3	Testing in scaled up and intended location	2 months	Demonstration and Quality control testing
4	Submission of Protocols	1 Month	Document Submission

6. Time Schedule

T₀ = Date of receipt of Initial Advance (kick-off)

Total Duration =3 Months

Sl. No	Milestones	Period in months	1	2	3
1.		1			
2.		1			
3.		1			

7. Responsibilities

7.1 Responsibility of University

7.2 Responsibility of M/s. Company

8. Project Deliverables

9. Project Team

10. Schedule of Payment

Sl. No.	Milestones	Amount in Rupees
1.	Initial Advance (30%)	
2.	Payment at the end of first month (30%)	
3.	Payment at the end of Second month (20%)	
4.	Final Payment upon submission of final report (20%)	
TOTAL		

Research Proposal Details

1.	Name of the Institution with Full Address	
2.	Title of the Research Proposal	
3.	Name of the Principal Investigators (Address/Phone/E-mail)	
4.	Advisors	
5.	Proposed duration of Research Project	

11. Declaration

I / We hereby agree to abide by the rules and regulations of company and accept to be governed by all the terms and conditions laid down for this purpose.

I / We certify that I / We have not received any grant-in-aid for the same purpose from any other Department of the Central Government / State Government / Public Sector Enterprise during the period to which the grant relates.

	Signature & Name	Designation
Principal Investigators		
Head of the Institution	Dr. C. B. Palanivelu	Registrar Dr. MGR Educational & research Institute, University, Chennai – 600095

References:

Annexure 3:

Agreement between Incubatee and Dr MGRERI DST NewGen IEDC

Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship of Dr. M.G.R. Educational and Research Institute located at E.V.R. Periyar Salai, Adayalampattu (hereinafter referred to as Dr MGR ERI DST – NewGen IEDC) has been granted Funding for DST NewGen IEDC from the National Science and Technology Entrepreneurship Board (NSTEDB), Dept. of Science and Technology, Govt. of India, to promote knowledge based and technology-driven start-ups by harnessing young minds and their innovation potential in an academic environment, hereby enter into an agreement with

The following students of Dr. M.G.R. Educational and Research Institute

(Hereinafter referred to as incubatees)

Towards the incubation of the student start-up to convert their idea into a viable business proposal on the 21 of September 2017.

Objective of the Agreement

The student team in collaboration with DrMGRERI DST-NewGenIEDC has to do the following:

- a) Testing if there is a market for the idea
- b) Link into specific specialist networks and expertise
- c) Produce a prototype
- d) Form a business plan
- e) Present to external investors if required

Responsibilities of the Dr MGR ERI DST NewGen IEDC

- 1) DrMGRERI DST-NewGenIEDC will facilitate the development of the idea given by the students into a viable business plan by offering structured coaching, infrastructure, networking and economic support for the development of a Start-up.
- 2) DrMGRERI DST-NewGenIEDC will assign the student team to a suitable mentor or mentors for structured coaching in key areas of technology, IPR, team and market opportunity.
- 3) DrMGRERI DST-NewGenIEDC will provide space for the Incubatee in the Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship, Dr. M.G.R. Educational and Research Institute, Adayalampattu Campus.
 - a. Infrastructure: The incubate will be assigned a Work table in the Lab and / or access to Computer Lab with high speed internet and attached printer.

- b. Access to Common Meeting rooms for business requirements
- c. A minimum Rental of Rs. 300 per month will be charged for the space.

4) Provide seed funding to the project:

Towards the creation of the prototype (Includes purchase of rental, raw material, chemicals and consumables etc.)	:Rs. 2,00,000/-
Honorarium to Mentor	: Rs. 25,000/-
Fellowship to Student group	: Rs.25,000/-
TOTAL	: Rs.2,50,000/-

- 5) Enable the required networking required for the project. Enable presentation to investors for funding.
- 6) Intellectual Property Rights : In the event that the prototype has the potential for commercialization, the University will assist in the patent application process. The ownership of the patent will be decided from case to case:
 - a. Dr. M.G.R. Educational and Research Institute will apply for the patent with the innovators named. The innovators will get the first right of commercialization if they are the entrepreneurs.
 - b. If the University gives a No Objection Certificate the student team can apply for the patent on their name.

Responsibilities of the Student Incubatee:

- 1) The student Incubatee will be assigned to a mentor with whom the team has to interact to create a viable Business Plan. The mentor or mentors will give a structured coaching in key areas such as the technology, customer, team, IPR, funding, market opportunity.
- 2) The Incubatee must create a prototype to prove their idea and get market feedback.
- 3) At the end of the incubation period the incubatee will be encouraged to make a presentation to outside investors to bring in private investments to their start-up.
- 4) **Seed Funding:** Each incubatee team can get seed funding for creating their prototype or for activities related to developing their start-up. The application for funds for purchase of material etc. must be submitted to the Director – Dr. MGR ERI DST NewGen IEDC in the format given. All the bills etc. must be submitted to the Auditor through the Faculty Coordinator.
- 5) The incubatee must attend monthly review meetings and must report to the Director and Faculty Coordinator.
- 6) **Tenure of Incubation:** The project will be reviewed by an external committee of experts within 6 months. The project must be completed within an year of the start of the acceptance of the grant and the prototype must be submitted to Dr. MGR ERI DST NewGen IEDC.
- 7) Materials purchased for the project from the seed funding will be the property of the Institute. If the incubatee wishes to take it with him / her, the funding given by the Institute will be treated as a loan without interest which has to be repaid.
- 8) The Incubatee Company is required to provide a Non - Dilutable Equity equivalent to 3% of the promoter's equity to Dr. M.G.R. Educational and Research Institute, In addition to this the Incubatee Company has to provide 1% of the promoter's equity or 100 shares whichever is higher to each mentor from the Institute.

2) Termination Policy:

- a)** Incubatee can exit from the Incubation facilitation at any time with proper written permission from the Director Incubation & Entrepreneurship.
- b)** Dr. MGR ERI DST NewGen IEDC may expel Pre- Incubate at any time if he/she not abide with the rules and regulations of Dr. MGR ERI DST NewGen IEDC and Dr. M.G.R. Educational and Research Institute.
- c)** Dr. MGR ERI DST NewGen IEDC also has authority to expel he/she who is indulged in interdisciplinary activities inside Dr. MGR ERI DST NewGen IEDC.

Signed by

Student Incubatees

Director
Dr. MGR ERI DST NewGen IEDC

Registrar
Dr. M.G.R. Educational and Research Institute

Annexure 4

Agreement between Mentor and Dr MGRERI DST NewGen IEDC

Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship of Dr. M.G.R. Educational and Research Institute located at E.V.R. Periyar Salai, Adayalampattu (hereinafter referred to as DrMGRERI DST-NewGenIEDC) has been granted Funding by DST NewGen IEDC from the National Science and Technology Entrepreneurship Board (NSTEDB), Dept. of Science and Technology, Govt. of India, to promote knowledge based and technology-driven start-ups by harnessing young minds and their innovation potential in an academic environment, hereby nominate the

As a Mentor for the project to be conducted by the following student

Mentor Agreement

I hereby agree to help the student team in collaboration with DrMGRERI DST-NewGenIEDC has to do the following:

- a) Testing if there is a market for the idea
- b) Link into specific specialist networks and expertise
- c) Produce a prototype
- d) Form a business plan
- e) Present to external investors if required

I hereby agree to attend annual review meeting of the DST NewGenIEDC.

I will ensure the submission of quarterly progress report of the student's project.

I will ensure that the project is completed as per the time schedule given.

Responsibilities of the Dr MGR ERI DST NewGen IEDC

1. DrMGRERI DST-NewGenIEDC will facilitate the development of the idea given by the students into a viable business plan by offering structured coaching, infrastructure, networking and economic support for the development of a Start-up.
2. DrMGRERI DST-NewGenIEDC will assign the student team to a suitable mentor or mentors for structured coaching in key areas of technology, IPR, team and market opportunity.
3. DrMGRERI DST-NewGenIEDC will provide space for the Incubatee in the Dr. APJ Abdul Kalam Center of Excellence in Innovation and Entrepreneurship, Dr. M.G.R. Educational and Research Institute, Adayalampattu Campus.
4. Infrastructure: The incubate will be assigned a Work table in the Lab and / or access to Computer Lab with high speed internet and attached printer.
5. Access to Common Meeting rooms for business requirements
6. A minimum Rental of Rs. 300 per month will be charged for the space.

3) Provide seed funding to the project:

- 4) Towards the creation of the prototype :Rs. 2,00,000/-

- 5) (Includes purchase of rental, raw material, chemicals and consumables etc.)
- 6) Honorarium to Mentor : Rs. 25,000/-
- 7) Fellowship to Student group : Rs.25,000/-
- 8) TOTAL : Rs.2,50,000/-
- 9) Enable the required networking required for the project. Enable presentation to investors for funding.
- 10) Intellectual Property Rights : In the event that the prototype has the potential for commercialization, the University will assist in the patent application process. The ownership of the patent will be decided from case to case:
 - c. Dr. M.G.R. Educational and Research Institute will apply for the patent with the innovators named. The innovators will get the first right of commercialization if they are the entrepreneurs.
 - d. If the University gives a No Objection Certificate the student team can apply for the patent on their name.

Responsibilities of the Mentor:

1. The mentor must ensure that the students create a prototype to prove their idea and get market feedback.
2. The mentor must ensure that a patent application is made for the idea. They will interact with the patent agent referred by the NewGenIEDC.
3. The mentor must ensure that the seed funding for the prototype is used. The application for funds for purchase of material etc. must be submitted to the Director – Dr. MGR ERI DST NewGen IEDC in the format given. All the bills etc. must be submitted to the Auditor through the Faculty Coordinator.
4. The mentor must attend quarterly review meetings along with the student group at the DST NewGenIEDC.
5. The mentor must attend the annual board meeting conducted by Dr. MGR DST NewGenIEDC.
6. The mentor must take an active role in commercialization of the project . They must guide the students to apply for Start-up Nidhi and other such funding agencies.
7. **Tenure of Incubation:** The project will be reviewed by an external committee of experts within 6 months. The project must be completed within an year of the start of the acceptance of the grant and the prototype must be submitted to Dr. MGR ERI DST NewGen IEDC.
8. Materials purchased for the project from the seed funding will be the property of the Institute. If the incubate wishes to take it with him / her, the funding given by the Institute will be treated as a loan without interest which has to be repaid.
9. The Incubatee Company is required to provide a Non - Dilutable Equity equivalent to 3% of the promoter's equity to Dr. M.G.R. Educational and Research Institute, In addition to this the Incubatee Company has to provide 1% of the promoter's equity or 100 shares whichever is higher to each mentor from the Institute.

10. Termination Policy:

- a. Mentor can exit from the Incubation facilitation with a written letter. They will have to return Mentorship fee.

- b. Dr. MGR ERI DST NewGen IEDC may expel Pre- Incubate at any time if he/she not abide with the rules and regulations of Dr. MGR ERI DST NewGen IEDC and Dr. M.G.R. Educational and Research Institute.
- c. Dr. MGR ERI DST NewGen IEDC also has authority to expel he/she who is indulged in indisciplinary activities inside Dr. MGR ERI DST NewGen IEDC.

Signed by

Mentor

Director

Dr. MGR ERI DST NewGen IEDC

Registrar

**Dr. M.G.R. Educational and Research
Institute**

Annexure 5:



Dr. M.G.R.
EDUCATIONAL AND RESEARCH INSTITUTE
DEEMED TO BE UNIVERSITY



University with Graded Autonomy Status

(An ISO 21001 : 2018 Certified Institution)

Periyar E.V.R. High Road, Maduravoyal, Chennai-95. Tamilnadu, India.



Dr. M.G.R.
DST NewGen
IEDC
Practice your Venture



ABDUL KALAM CENTRE
INNOVATION &
ENTREPRENEURSHIP
DEVELOPMENT

Nurturing Leaders of Tomorrow

SANCTION REQUEST FOR PURCHASE/FUND

Ref: NewGen/SR/2021/DDMM

Team No:

From: (Student Name)

Request for the sanctioning for the following items for Dr. MGR ERI – DST New Gen IEDC

Project Number:

Title:

Sl. No.	Description of the items to be PURCHASED	Make	Cost	Quantity	Total
				TOTAL	

Project Students

- 1.
- 2.

Director

Coordinator

Annexure 6:



Dr. M.G.R.
EDUCATIONAL AND RESEARCH INSTITUTE
DEEMED TO BE UNIVERSITY



University with Graded Autonomy Status
(An ISO 21001 : 2018 Certified Institution)
Periyar E.V.R. High Road, Maduravoyal, Chennai-95. Tamilnadu, India.



DST NewGen IEDC UTILIASATION CERTIFICATE

S. No	Description	Amount Released	Expenditure	Balance
	Recurring			
1	Equipments			
2	Product			
	Non Recuring			
3	Consumables			
4	Contingencies			
5	Outsourced Services			
6	Travel			
7	Patenting Charges			
8	Company Incorp Fees			
9	Miscellaneous			
	Total			

Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and the money has been actually utilized for the purpose for which it was sanctioned:

Date:

Place:

Signature
Name
Chief Finance Officer
(Head of the Finance)

Signature
Name
Head of the Organisation

Annexure 7:

EMPLOYEE CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT

THIS AGREEMENT, made this **2nd Day of January, Two Thousand Sixteen**, between

Dr. M.G.R. Educational and Research Institute, a Deemed to be University under Section 3 of the UGC Act of 1956, located at E.V.R. Periyar Salai, Maduravoyal, Chennai - 600 095, Tamil Nadu, India (hereinafter called "employer"), represented by its Registrar, **Dr. C.B. Palanivelu**,

And

Dr. _____ (hereinafter called "employee") of _____, Chennai- _____, Contact no. _____

WITNESSETH:

WHEREAS Employee has been engaged by the Employer to perform certain services in connection with the Research, development, design of Scientific problem and support Employer in its various activities;

WHEREAS the parties anticipate that in the course of performing such services Employee will be given access to confidential information pertaining to the Employer's scientific programs, research activities, any third party consultancy projects and operations, which information is valuable and not generally known to others; and

WHEREAS it is anticipated that the Scientific activities and other services to be performed by Employee will include services relating to third party or to funding agencies intended to become a part of the Employer's proprietary information or proprietary products which, with or without further modification, may be used or patented or licensed or sold by Employer to third parties; and

WHEREAS the parties desire to confirm their respective rights in and to such proprietary information and products, as well as to preserve the confidentiality of the same;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and conditions herein set forth, as well as other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, it is agreed that:

A. Employee shall promptly disclose to Employer, in writing, all inventions, ideas, discoveries, and improvements whether or not patentable or registrable under Copyright or similar statutes, made or conceived or reduced to practice or learned by Employee, either alone or jointly with others, during the period of employment with Employer and during the employment hours and utilizing the infrastructure of the Employer. Employee agrees that all such inventions (intellectual, visual or material) are the sole property of Employer.

B. Employee assigns to Employer all right, title and interest in and to any and all inventions, ideas, discoveries, and improvements, with the exception of inventions, ideas, discoveries, and improvements that qualify for protection

Any inventions, ideas, discoveries, and improvements conceived or made by Employee prior to the execution of this Agreement and not intended to be included within its provisions are listed or described on Exhibit "A" attached to this Agreement, and the absence of any such list or description indicates that there are no such inventions, ideas, discoveries, or improvements not covered by this Agreement.

1. Confidential Information. The terms "Confidential Information" and "Proprietary Data" mean information and data not generally known outside, including but not limited to, patent applications, information relating to inventions, discoveries, products, plans, calculations, concepts, design sheets, design data, system design, blueprints, computer programs, algorithms, software, firmware, hardware, manuals, drawings, photographs, devices, samples, models, processes, specifications, instructions, research, test procedures and results,

equipment, identity and description of computerized records, customer lists, supplier identity, financial information, business plans, costs, pricing information, and all other concepts or ideas involving or reasonably related to scientific programs, research activities, student project information and operations and shall include all information disclosed to or received by Employee in the course of the performance of tasks assigned by Employer to the Employee to the extent that such information: (i) constitutes or relates to Scientific research programs, research activities, developed or to be owned by Employer (or any parent or subsidiary or affiliate), including design information and documentation, work flow documentation, performance and functional specifications, operations manual, and all know-how and technology embodied in such scientific program or research activity and documentation; (ii) constitutes or related to the Scientific programs or other work product to be produced or developed by Employee for Employer, and marked confidential except for subject matter and information:

- a. To the extent that is necessary to be disclosed to the partner from other institutes for collaboration projects or outsourcing of certain work or research publications/dissemination or technical notes or research reports to be submitted to funding agencies
 - b. that is or becomes generally known or available to the public without breach of this Agreement;
 - c. that is known to the Employee at the time of disclosure, or as evidenced by written records;
 - d. that is known or independently developed by the Employee outside the working hours without using the infrastructure of the Employer and can be proven as such through written records of the Employee;
 - e. that is disclosed to the Employee in good faith by a third party who has an independent right to such subject matter and information;
 - f. that is required to be disclosed by law.
2. Nondisclosure; Continuing Obligation. Employee shall not use any confidential information of Employer for any purpose other than as necessary for the performance of tasks assigned by the to the Employee; and Employee shall not transfer or disclose any confidential information to any person, corporation, agency or other entity, without the prior written consent of Employer. The restrictions set forth herein with regard to use or disclosure of information shall continue after termination of any agreement under which Employee may be performing services for the and shall apply so long as any information subject to such restrictions shall not properly have come into the public domain by disclosure in issued patents or otherwise. Employee will not disclose to or use any trade secret or other confidential information of any third party of which the employee may have knowledge without the express permission of the owner of such information.
3. Rights in Employee's Work Product. All programming, inventions, documentation, data or reports generated or developed by Employee pursuant to agreement with the Employer, and all other tangible and intangible results and work products of the services performed by Employee for the Employer (all of which are sometimes referred to herein as the Employee's "work product"), shall be and remain the exclusive property of the Employer and shall be treated for purposes of this Agreement as confidential information of the Employer, and Employee shall not make any use or disclosure of any such work product except in accordance with this Agreement. The Employee agrees specifically that all work products, to the extent permitted by law, shall be considered works made for hire for the benefit of the Employer. Employee shall perform any acts that may be deemed necessary or desirable by the Employer to confirm or evidence more fully the Employer's ownership of all materials referred to in this Section to the fullest extent possible, including without limitation, by executing further written assignments or other instruments of transfer in such form as may be requested by Employer. Employee hereby represents and warrants that he/she has the full right and authority to perform his obligations, to convey to the Employer the unencumbered ownership of his work product, and to grant the rights and licenses herein granted, and that he/she has neither assigned nor otherwise entered into any agreement by which he/she purports to assign any right, title, or interest to any technology or intellectual property right that would conflict with his obligations under this Agreement. Any benefits accruing from assignment of rights to third parties will be shared between Employer and Employee under mutually agreed terms. The Employee however gets the first right to get a license if he/she wishes to commercialize any of the work products by entering into a separate agreement in the form of a spinout/spin-off company. Any benefits accruing from any consultancy work carried for third parties will be shared between Employer and Employee under mutually agreed terms.

4. Return of Materials. Upon the termination of any agreement under which Employee may be performing services for or developing products or materials for the Employer, Employee shall promptly return all copies of any memoranda, manuals, brochures, external or internal specifications, books, records, papers, writings, or other documented confidential information of the Employer, including all work product and all notes or other materials made or compiled by Employee. To the extent that any confidential information may have been recorded or otherwise placed in any computer memory or storage device or incorporated in any documents or material which cannot practicably be returned to the Employer, Employee shall promptly destroy, purge or delete from the same all such confidential information.

5. Integration; Amendment; Severability. This writing is intended by the parties as the final expression of their agreement and is the complete and exclusive statement of the terms thereof, and supersedes any prior negotiations, representations or agreements between the parties on this subject. This Agreement may be modified or amended only by a writing signed by both parties. In the event that any portion of this Agreement may be determined to be invalid or unenforceable, the parties agree that such provision will be treated as if it had been deleted and that such invalidity or non-enforceability will not affect the remaining portions of this Agreement. The parties agree to substitute for any such invalid or unenforceable provision a valid provision which shall approximate as closely as possible the intent and economic effect of the invalid provision. If, moreover, any one or more of the provisions contained in this agreement shall for any reason be held to be excessively broad as to time, duration, geographical scope, activity or subject, it shall be construed by limiting and reducing it, so that such provision, as so reduced and limited, shall be enforceable to the extent compatible to the applicable laws as it shall then appear.

Employee understands that the use or disclosure of any of the Confidential Information and/or Proprietary Data may be cause for an action at law or in equity in an appropriate court of the State of Tamil Nadu or of any state of India, and that without waiving the right to collect damages from Employee, Employer shall be entitled to an injunction prohibiting the use or disclosure of the Confidential Information and Proprietary Data.

IN WITNESS WHEREOF, the parties have hereunto set their hands or caused this Agreement to be executed, under seal, as of the day and year first above written.

Signature of EMPLOYEE

Signature on behalf of EMPLOYER

DATE: