



SRI PADMAVATI MAHILA VISVAIDYALAYAM

(Women's University)

Accredited by NAAC with "A" Grade

TIRUPATI - 517 502, Andhra Pradesh, INDIA



SPMVV INNOVATION and STARTUP POLICY for Students and Faculty



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www.spmvv.ac.in

SISP 2020

Abstract

SPMVV INNOVATION and STARTUP POLICY for Students and Faculty

The SPMVV Innovation and Startup Policy for students and faculty of Sri Padmavati Mahila Visvavidyalayam (Women's University) will enable the institute to actively engage students, faculty in innovation and entrepreneurship related activities. This framework will also facilitate the University in terms of Intellectual Property ownership management, technology licensing equity sharing, thus enabling creation of a robust innovation and Start up ecosystem.

Message from Hon'ble Vice Chancellor



Prof. Jamuna Duvvuru
Vice Chancellor
SPMVV, Tirupati

It is indeed a great pleasure and privilege for me to profusely thank the Ministry of Human Resource Development and All India Council of Technical Education, New Delhi for providing the guidelines on National Innovation and Startup Policy for students and faculty members of higher educational institutions and for giving an opportunity to develop a startup policy document that facilitates the promotion of innovation and entrepreneurship within the campuses. I am delighted to share that SPMVV is providing a conducive ecosystem to cater to the demands of startups through “SPMVV - Society for Innovation Incubation Entrepreneurship (SSIIE)”, that harbors incubation centers. The incubation centres such as Technology Business Incubator (TBI) & Rural Women Technology Park (RWTP) funded by DST, TePP Outreach cum Cluster Innovation Centre (TOCIC) funded by DSIR-PRISM, Institutions Innovation Council (SPMVV-IIC) established as per the directions of MHRD, DBT sponsored BioNest, the Women Biotech Incubation Facility (SPMVV-WBIF), along with the Skill development Centre, DST-CURIE-AI Centre,

and SPMVV-Training of Trainers Centre for Women and ICT Frontier Initiative (ToT-WIFI) identified by United Nations Asian and Pacific Training Centre for Information and communication Technology are working together vibrantly with the objective to help the faculty members and students to set-up and promote startups that are technology-based and to nurture their growth by providing the platform needed for establishment as successful entrepreneurs. With the initiative given by MHRD, due changes have been made in the document considering the needs of promotion of entrepreneurial skills among students and faculty members of SPMVV. We look forward to work together with all the other universities and affiliated institutions in dealing with related challenges. With all humility, I appreciate the efforts being made by ‘SPMVV innovation startup policy development committee’ and ‘Brainstorming Committee’ for their active contribution and support in developing this policy document to be implemented on SPMVV campus.

Message from Registrar



Prof. D.M. Mamatha
Registrar
SPMVV, Tirupati

I am very delighted to note that Sri Padmavati Mahila Visvavidyalayam, Tirupati has taken the responsibility of implementation of innovation and startup policy (SISP) for students and faculty of university to enable all the departments to actively engage the students and staff in innovation and entrepreneurship related activities.

The GoI has directed the higher education institutes to enunciate a policy to synergize science, technology, innovation and entrepreneurship in order to create robust innovation culture and ecosystem. So with the help of Innovation and Startup Policy, SPMVV intends to create an ecosystem for implementation of Research/activities in Stratups.

This document will pave the large number of students and faculty to work on new ways for developing ideas and converting them into successful entrepreneurs.

For every nation to get developed, the application of both science and technology has to go hand in hand. It goes without saying that, a nation's development and prosperity is judged to a large extent by the status of innovations of that nation.

I strongly believe that this policy take the responsibility for the growth of all possible facilities for research thirst and support and motivate all the faculty members and students toward innovations.

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Preamble

In order to enable us to understand the current role and involvement in streamlining and strengthening the innovation and startup ecosystem in the University, MHRD's Innovation Cell (MIC) along with All India Council of Technical Education (AICTE) conducted Orientation Programs on the theme "Orientation and Adoption of NISP at HEI Level" in the month of August 2020 with the following learning objectives;

- Reason for adoption of National Innovation and Startup Policy (NISP) by HEIs
- Provisions and components in NISP for HEIs to implement
- Desirable approaches, expected outcomes and likely impacts which will be created both at Micro & Macro level and Short- and Long-Term
- Task Sheet preparation: To-do list for adoption.

Sri Padmavati Mahila Visvavidyalayam (SPMVV) constituted an eleven member committee according to MIC instructions to brainstorm and develop SPMVV Innovation and Startup Policy (SISP) to address the need for inculcation of innovation and entrepreneurial culture in the University. This committee deliberated on various facets for nurturing innovation and Startup culture in SPMVV, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer & commercialization, equity sharing, etc. After several rounds of discussion, "SPMVV Innovation and Startup Policy 2020" for students and faculty of SPMVV was prepared.

The Vision envisaged for the new Innovation & Start-up Policy is:

“To create top notch ‘technology based and knowledge driven Startup ecosystem’ by fostering ‘culture of innovation and entrepreneurship’ which contributes to increased knowledge, wealth and employment in our society”.

Committee for SPMVV Innovation and Startup Policy (SISP)

The following members are nominated for the SPMVV Innovation Startup Policy Development Committee Based on National Innovation and Startup Policy (NISP) Guidelines.

- | | |
|---|-------------|
| 1. Prof. S. Jyothi
NISP University Coordinator
SPMVV, Tirupati | Convener |
| 2. Dr. J. Surya Kumar
CEO-Technology Business Incubator
SSIIE, SPMVV, Tirupati | Co-Convener |
| 3. Sri C.S. Reddy
Director, AP Mahila Abhivruddhi Society (APMAS)
Hyderabad | Member |
| 4. Sri R. Manigandhan
Project Coordinator
Regional Science Centre, Tirupati | Member |
| 5. Dr. Nagalakshmi
Managing Director
IMIS Pharmaceuticals Pvt. Ltd, Vijayawada | Member |
| 6. Prof. R. Naga Raju
Dean School of Sciences, SPMVV, Tirupati | Member |
| 7. Prof. T. Bharathi
Dean, School of Social Sciences
SPMVV, Tirupati | |
| 8. Prof. A. Ramakrishna Rao
Director
School of Engineering & Technology
SPMVV, Tirupati | Member |
| 9. Prof. J. Kathyayani
Dept. of Business Management
SPMVV, Tirupati | Member |
| 10. Prof. D. Kala Rani
Retd. Professor
Dept. of Biotechnology, SPMVV, Tirupati | Member |
| 11. Ms. Y. Amrutha Valli
Founder & CEO, PurpleApple Infosystems
South Delhi, New Delhi, India | Member |

Members of Brainstorming Meetings for SPMVV Innovation and Startup Policy (SISP) Development

1. Prof. A. Jyothi
Dean, School of Sciences
SPMVV, Tirupati
2. Prof. A. Ramakrishna Rao
Director, School of Engineering & Technology
SPMVV, Tirupati
3. Prof. T. Santh Rani
Institute of Pharmaceutical Technology
SPMVV, Tirupati
4. Prof. P. Vijaya Lakshmi
Dept. of Communication & Journalism
SPMVV, Tirupati
5. Prof. M. Usha
Dept. of Computer Science
SPMVV, Tirupati
6. Prof. M. Vidyavathi
Institute of Pharmaceutical Technology
SPMVV, Tirupati
7. Prof. B. Vijayalakshmi
Business Management
SPMVV, Tirupati
8. Prof. R. Usha
Dept. of Biotechnology
SPMVV, Tirupati
9. Prof. P. Uma Maheswari Devi
Dept. of Microbiology
SPMVV, Tirupati

1. Strategies and Governance

- a. With the help of Innovation and Startup Policy, SPMVV intends to create an ecosystem that can generate an entrepreneur in every family. To facilitate development of an entrepreneurial ecosystem in SPMVV, specific objectives and associated performance indicators shall be defined for assessment.
- b. Implementation of the entrepreneurial agenda will be the responsibility of the NISP Coordinator, SPMVV to bring in required commitment, which will be supported by the higher authorities of SPMVV.
- c. For expediting the decision making, hierarchical barriers should be minimized, and individual autonomy to be given to each incubator and Center in SPMVV.
- d. Research / activities in Startups where Microbial/ Animal/ human subjects are involved, clearance from respective ethics committee of SPMVV should be obtained.

2. Resource Mobilisation

Resource mobilisation plans will be made for supporting pre-incubation, incubation infrastructure and other facilities. A sustainable financial strategy should be defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.

- a. SPMVV will provide infrastructure and facilitate to promote innovation and startups related activities.
- b. Attempts will be made by SPMVV to raise funds from diverse sources such as State and Central - DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, etc. and non-government sources.
- c. To support incubators and incubatees, SPMVV may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
- d. SPMVV may also raise funding through sponsorships and donations. SPMVV will actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).

- e. The university may link the Startups with National/International fund providers and allow the Startups to take up corporate research projects to generate revenue.
- f. SPMVV will also work with industries/ Venture Capitalist / Govt. institutions to set up a “**Student Startup Fund**” to support outstanding Startups.

3. Startups Enabling Institutional Infrastructure

a. Initially create Pre-incubation facility

- This is to be used by students of SPMVV.
- Students to be enrolled in Pre-incubation facility.
- Each student to have a faculty member as mentor.
- This is a support system for students to “test” their ideas.
- They will be given 6 months time to validate their ideas.
- Pre-incubatees will get space in the incubator or any other dept to establish proof of concept.
- Institute to provide seed fund if possible.
- Pre-incubation Centre will be accessible to all interested students and faculty members.
- Pre-incubation Centre to conduct “Ideation Festivals/ Hackathons” at regular intervals to encourage students to generate and nurture innovation.
- Pre-incubatees to undergo training in Incubation Centres (TBI, BioNEST-WBIF) to understand more about innovation and entrepreneurship.
- Pre-incubation period will be for a period of 6 months.

b. Incubation Centers

- After completing Pre-incubation phase, Pre-incubatee to register as Incubatee in the Incubators.
- After their innovative ideas are validated, they can register a Startup company.
- Eligibility criteria: Students who have completed pre-incubation, Alumni of the University, regular faculty, individuals partnered with Faculty.
- Upon admission in the incubation center, the following facilities will be offered to the incubate companies on chargeable basis as decided by the institute
 - Office space
 - Computers
 - Printer

- Internet connection
 - Standard Furniture as decided by SPMVV/Incubators
 - Basic and advanced instruments of SPMVV (List enclosed in Annexure 1)
 - Document scanner
 - Library
 - Meeting and conference rooms with tele or video conferencing facilities
 - Internal Support: Incubatee will be supported with student interns if desired, to meet their Technical/Marketing/Sales requirements.
- A company desirous of getting seed loan may submit an application for seed fund after three months of incubation. The application of the seed loan shall clearly indicate the requirement, activities, expenditure heads and timeline.
 - Tenure of Incubation could be for 2 yrs with extension of another 6 months, if needed.

c. Mentoring and Advisory Services

- One of the objectives of Incubation is to utilize the technical expertise and lab infrastructure of SPMVV. Thus, every incubatee that is offered incubation has to select one faculty from SPMVV who shall act as mentor of the incubatee and guide the company on product development.
- Specialized or experienced mentors to be made available to the incubatees to assist with particular strategies or to provide project oriented consultation
- Institution will associate with professionals for accounting, IP, legal and management expertise on a part-time basis.
- Industry Mentor: SPMVV will create a database of mentors/experts.
- In return of the services and facilities provided to the members outside SPMVV (including SPMVV Alumni), 3% equity/stake in the Startup company will be taken by SPMVV for a duration as per Equity Exit Policy (Annexure 2)
- Other factors for consideration will be space, infrastructure, mentorship support, seed- funds, support for accounts, legal, patents etc.
- The Technical Mentor Committee will consist of experienced and qualified professionals from specific industry, leading bankers, seasoned venture capitalists, academicians and successful alumni entrepreneurs providing mentorship on technical issues.

- d. Product conceptualisation to market strategy for Startups should be developed by the institute on case to case basis using the stages of Technology Readiness Level (TRL) scale. (Annexure3)
- **Startup Phase:** Time bound approval of proposals would be given in 4 weeks to Innovators to demonstrate their product(s) as Pilot project.
 - **Boot up Phase:** Once the pilot study is successful, the SSIIE will approve companies to initiate product development.
 - **Scale up Phase:** The companies, which have successfully deployed their products in SSIIE, would then be given incentives as per the norms of SISP of SPMVV.
 - **Commercialization Phase:** The Commercialization Partners Committee will have a team of executives, entrepreneurs and investors who will work closely with Startup team and help in making business plans, networking and marketing of the product(s).

4. Nurturing Innovations and Startups

- a. SSIIE Incubation centres will provide a facilitating environment for UG, PG, Ph.D., Post-Doctoral students, Research Staff, faculty (including temporary), alumni of SPMVV and potential Startup applicants even from outside SPMVV.
- b. All students of Ph.D/ M.Tech./Professional PG courses have to register in any SSIIE incubation centres.
- c. Details regarding innovation / product development related to their research /project topic should be included in Ph.D thesis/ dissertation.
- d. Best Student innovation award will be decided as per SPMVV-SISP Guidelines.
- e. Best Mentor award for innovation also will be decided as per SPMVV-SISP Guidelines.
- f. Inculcate innovation and entrepreneurship knowledge across the faculty and students by
 - Conducting summer schools, awareness programs and training sessions for the students and faculty to write proposals.
 - Conducting orientation programs on success stories.
 - Encouraging students and faculty to attend free International & National online programs.

- Innovator centric provision for industrial visits periodically to stimulate & the opportunity to observe the innovation and strategy Coupled with the business.
 - Ideas collection from all the students/ faculties of the university with an idea box.
 - Conducting number of Hackathons among students community to increase awareness on innovations and Startups.
- g. SPMVV students will be given 5% grace marks and 20% attendance for every semester for student Prototype/ Startup teams.
 - h. SPMVV students may be permitted to undertake their Industrial and Project work at SSIIE Incubator centres where additional facilities are available on payment mode.
 - i. SPMVV student entrepreneurs working on a Startup idea from first year will be permitted to convert into their final year project for degree completion.
 - j. SPMVV students/Research Scholars can avail special leave for a semester to work for a Startup on a fulltime basis.
 - k. SPMVV students shall be given an additional 4 credits on successful development of the prototype in over and above the total program credits.
 - l. SPMVV students/Research Scholars, on returning, must satisfy all norms as per the course requirement to complete the course.
 - m. The Gap Year facility should ensure syllabus continuity at the time of joining back and after an appraisal process by an incubator where the student is attached.
 - n. Outstanding PG students who wish to pursue entrepreneurship can take a break of one year after 1st year, Professional graduate (Engineering/ Pharmacy/Nursing) can take a break after 2nd year and 5 year Integrated course student can take a break after 3rd year to pursue full time entrepreneurship.
 - o. This may be extended to two years at the most and these two years would not be counted for the time for the maximum time for graduation.
 - p. Thus a student shall be given an extra 2 years to complete all the requirements of the program of study.
 - q. Revenue generated in the startup company of SPMVV Students/Research Scholars incubated at SPMVV shall be shared between Students/Research Scholars and SSIIE/SPMVV in the ratio of 80 % and 20% respectively for a duration as per Exit Policy. (Annexure 2)

r. Engagement of Faculty in Startup activities

- The faculty members shall be involved as mentors to provide technical expertise or provide capital investment alone. The capital investment of permanent faculty is treated as a purely private commercial transaction for which University is not responsible.
- The permanent faculty who wish to involve in Startup on a part time basis can spend a day in a week in the Startup in addition to their teaching, research and other official activities.
- The contract faculty / Research staff who wish to involve in Startup can spend a day in a week in the Startup in addition to their teaching, research and other official activities.
- The committee constituted for the purpose shall take decision in granting a Startup by assessing the proposal submitted indicating the interest/ feasibility/ innovation/ market potential etc. The committee also will review the progress quarterly.
- Revenue generated in the startup company of SPMVV faculty incubated at SPMVV shall be shared between faculty and SSIIE/SPMVV in the ratio of 70 % and 30% respectively for a duration as per Exit Policy. (Annexure 2)
- Participation in Startup related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must be considered while evaluating the annual performance of the faculty.
- Every faculty may be encouraged to mentor at least one Startup.
- In order to attract and retain right people, institute should encourage academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
- The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads and awards.
- A performance matrix should be developed and used for evaluation of annual performance.

- Faculty should not engage research staff or other staff of institute in activities of their Startup and vice-versa.
- s. Alumni Startup candidates will be selected by a committee based on the project submitted to the incubation Centre. The selected candidate will be required to function either full time or part time.
- t. Faculty/ Research Scholars/ Students/ Alumni shall register their company with due permission/information from/to SPMVV.

5. Pedagogy

- a. The Departments shall be advised to change the course curriculum to be in tune with the emerging technologies and align to the requirements of the Industry and to introduce courses in entrepreneurship development through incubators.
- b. Industry Experts may be leveraged to teach courses at incubators and students who are interested may elect these courses.
- c. The evaluation provided by approved industry experts may be sent by the incubator to colleges/university for inclusion in the electives that students can learn as part of the degree course.
- d. A PGD course in Innovation and Entrepreneurship may be started where one can get degree while incubating and nurturing a Startup company.
- e. Inviting national and international experts related to entrepreneurship on a regular basis to strengthen Startup efforts.
- f. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.
- g. College Level Entrepreneurship Development Clubs (Bootcamps) shall be established through incubators to foster innovation and entrepreneurial spirit.
- h. Showcase for innovations done in the university.
- i. Mockup marketing place for innovators to initiate marketing in the campus.
- j. SPMVV to host Startup related National/International level workshops and conferences to promote Innovation and Startups.
- k. SPMVV shall celebrate annual “ Startup Day” to create awareness.

6. Product Ownership Rights for Technologies Developed at Institute

- a. Incubatees (Students/Faculty/Alumni) should fill in IP declaration form of SPMVV/SSIIE and declare the Intellectual Property developed and already owned by the incubate company. (Annexure 4)
- b. In case the incubate company is desirous of using the Intellectual Property of SPMVV, like patent, software code, copyright, design registration, developed product, etc. the incubate company shall make such request in writing to SPMVV. The terms and conditions for such IP licensing shall be decided by the Institute based on the IPR policy of SPMVV. (Annexure 5)
- c. The incubate company shall inform SPMVV if any student has contributed for technology development to be used in the product(s) development.
- d. The incubate company shall inform to SPMVV if any IP has been generated as a result of collaborative work with faculty members (who are not Incubatees) and is being incorporated into the product(s). Faculty member also has a right on the IP generated.
- e. The incubate company shall inform and acknowledge, if any SPMVV infrastructure (hardware, testing setup, instrumentation, computing resources, processes) has been used in developing the IP or technology that will go into the product(s).
- f. The incubate company shall make agreement with SPMVV before commercialization is done using the infrastructure/goodwill of SSIIE/SPMVV.
- g. The entrepreneur would have option of first purchasing the rights of IP from SPMVV and then being incubated or assigning equity to SPMVV *in lieu* of direct payments to SPMVV.
- h. The incubation centre would maintain a register with the details of any IP (patents, licenses, copyrights etc) that has been brought into the company prior or during incubation period at SPMVV. Also, any IP developed during the stay would be maintained in the register.

Amendment: SPMVV has every right to change, make additions or deletions to improve a text, piece of legislation, etc. time to time if necessary.

Acknowledgements: We thank National Innovation and Startup Policy (NISP) Implementation Team for this initiative and providing guidance throughout the process. We express my sincere thanks to our Hon'ble Vice Chancellor Prof. Jamuna Duvvuru for her encouragement and support to develop SPMVV Innovation Startup Policy (SISP). We thank all the members of the committee on 'SPMVV Innovation and Startup Policy' for students and faculty of SPMVV. Our special thanks to Sri C.S. Reddy, Director, AP Mahila Abhivruddhi Society (APMAS), Sri R. Manigandhan, Project Coordinator, Regional Science Centre, Tirupati, and Ms. Y. Amrutha Valli, SPMVV Alumni and Founder & CEO, PurpleApple Infosystems, New Delhi for their valuable insights and recommendations to enable formulation of these guidelines for SPMVV. I sincerely appreciate the members of SISP Brainstorming team who worked for creating this guideline document and gave their inputs throughout its preparation.

Prof. S. Jyothi

Convener

Dr. J. Surya Kumar

Co-Convener

SPMVV Innovation Startup Policy Committee

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- Andhra Pradesh Innovation & Start-up Policy 2014-2020, G.O.Ms.No:17, 09 .09.2014.
- Startup Policy AICTE- 2016, All India Council of Technical Education, November 2016.
- Centre for Innovation, Incubation & Entrepreneurship (CIIE) Policy And Framework, Indian Institute of Technology (Indian school of Mines) Dhanbad, September, 2018.
- SIDBI Innovation and Incubation Center Indian Institute of Technology, Kanpur Incubator Policy and Procedures November 2014.
- Sacred Heart Incubation Innovation Center (SHIIC), Sacred Heart College (Autonomous) Tirupattur, Vellore District, June 2015.

Annexure-1

SPMVV CENTRES - EQUIPMENT LIST

DST - CURIE

Department of Biotechnology – Kalpanachawla Science Block II

S.No	Name of the Equipment	Make/ Model
1.	Phase Contrast Microscope	Olympus
2.	FPLC	GE Healthcare
3.	Gel Documentation System	Kodak
4.	UV – Visible Double beam Spectrophotometer -2 Nos.	Shimadzu/UV 1800
5.	Gradient PCR	Applied Bio systems
6.	FTIR Spectrophotometer	Bruker / ALPHA-T
7.	Refrigerated Centrifuge – Floor model	Kubota
8.	Gel Dryer	J.L. Technologies
9.	Differential Scanning Calorimeter	METTLER Toledo/DSC 1/500
10.	Trans illuminator	Major Science
11.	CO ₂ Incubator	Thermo Fisher/371
12.	Rotary Flash Evaporator	Heidolph/564-01300-00
13.	Bead Beater	OmniInternational/19-010
14.	Spectrofluorophotometer	ShimadzuRF-530 IPC
15.	Deep Freezer (-20 °C)	Thermo Fisher
16.	DNA Sequencer	Applied Biosystems
17.	HPTLC	Anchrom Enterprises Pvt. Ltd
18.	XRD	Spectris Technologies Pvt. Ltd
19.	Biosafety Cabinet	Technico/Type B2,Vertical
20.	Auto Analyzer	Analytical Technologies /NOVA Lite 2021
21.	Hot Air Oven	Yorko
22.	MILLIPORE WATER PURIFICATION SYSTEM	MODEL - Analytica EDI-10 UV - MAKE- BIO-AGE

SSIIE-TBI

School of Engineering and Technology–C.V Raman Block-Ground Floor

S.No	Name of the equipment	Make/ Model
1.	Nano Spectrophotometer	Denovix DS11
2.	Class II typr B2 Biosafety Cabinet	Hitech
3.	Clean Room	Hitech
4.	BOD Incubator	Remi CI-10
5.	Micro Centrifuge	Eppendorf-5424R

6.	Inverted Microscope with Flourescence	Olympus CKX53
7.	Inverted Trinocular Microscope	Magnus –invi
8.	CO2 Incubator	Eppendorf- Galaxy 170S
9.	Laser Engraving Machine	SYNERGY MEASURMENTS PVT LTD - Keysight 4060
10.	Digital Oscilloscope	SYNERGY MEASURMENTS PVT LTD - Keysight U8002A model
11.	Variable DC Supply	SYNERGY MEASURMENTS PVT LTD - Keysight EDUX10028
12.	3D-Printer	Creality3D CR-10S 3d printer
13.	Liquid Nitrogen Container 20liner 20l	Cryogem
14.	Liquid Nitrogen Container 35l	Cryogem
15.	Liquid Nitrogen Container 45l	Cryogem
16.	Upright Chiller	Elanpro:ECG 625 DD
17.	Vertical Autoclave	Equitron-STWL
18.	Water Bath	Kemi-KWB-180-C
19.	Weighing Balance	Wenstar-PGB-630
20.	pH Meter	EI Deep Vision-111
21.	Magnetic Stirrer	Remi-2MLH
22.	Clinical Centrifuge	Remi-C-843/8
23.	Laser Engraving Machine	SYNERGY MEASURMENTS PVT LTD - Keysight 4060
24.	Digital Oscilloscope	SYNERGY MEASURMENTS PVT LTD - Keysight U8002A model
25.	Variable DC Supply	SYNERGY MEASURMENTS PVT LTD - Keysight EDUX10028
26.	3D-Printer	Creality3D CR-10S 3d printer
27.	Servo Computerised Universal Testing Machine	FINE MANUFACTURING -TFUC-200-SERVO
28.	Digital Rockwell/Brinell Hardness Tester	FINE MANUFACTURING - TRSNB-D
29.	Digital Fatigue Testing Machine	FINE MANUFACTURING - FTG-8-D
30.	Torsion Testing Machine	FINE MANUFACTURING -FTT-100NM-D
31.	Impact Testing Machine	FINE MANUFACTURING - FIT-300-N
32.	Digital Metallurgical Microscope	METZER INSTRUMENTS PVT LTD – METZ 797
33.	Stir Casting Furnace	SRI VANI HEATERS
34.	Heat Treatment Furnace	SRI VANI HEATERS
35.	CNC Turning Centre	ACE DESIGNERS – PLE TURN 40100

DST-CURIE-AI

School of Engineering and Technology–C.V Raman Block-3rd Floor

S.No	Name of the equipment	Quantity No.s
1.	Servers (Dell)	4

2.	Highend Desktop Computers (Dell)	20
3.	Interactive Flat Display	1
4.	Networking Printer	1
5.	Projector	1
6.	HP Laser Jet Color Printer	1
7.	P10 Outdoor Dip Single Colour LED Display	1
8.	P8 Outdoor LED Screen	1

**DST-Rural Women Technology Park
Science Block I - 2nd Floor**

S.No	Name of the equipment	Make/ Model
1.	Laboratory Spray Dryer (01)	Laboratory Spray Dryer Oil Free Compressor Piston, Spectra
2.	Freeze Dryer (01)	Freeze Dryer/Lyophilizer, Lark
3.	pHMeter (02)	PhMeter (Elico) Model Li-120-Elico
4.	Digital Weighing Balance Readability-0.1 Mg (02)	Digital Weighing Balance (02) (Schimadzu)
5.	Digital Weighing Balance Readability-0.01 Mg (02)	Electronic Weighing Balance (Wensar)
6.	Magnetic Stirrer (03)	Magnetic Stirrer, Model : 2ml
7.	Heating Mantle (04)	Heating Mantle 500 MI Capacity (Guna) Heating Mantle 1000 MI Capacity (Guna) Heating Mantle 2000 MI Capacity (Guna)
8.	Refrigerator (01)	Heating Mantle 1000 MI Capacity (Guna)
9.	Autoclave (01)	Heating Mantle 2000 MI Capacity (Guna)
10.	Hot Air Oven (01)	Hot Air Oven
11.	Soxhlet Apparatus With Glass Fit-500ml (02)	Soxhlet Apparatus 500ml 3 Test Soxhlet Apparatus 500ml 4 Test Soxhlet Apparatus 500ml 6 Test
12.	Soxhlet Apparatus With Glass Fit-1000ml (02)	Soxhlet Apparatus 1000ml 3 Test Soxhlet Apparatus 1000ml 4 Test Soxhlet Apparatus 1000ml 6 Test
13.	Melting Point Apparatus	Melting Point Apparatus (Guna)
14.	Solar food dryer (01)	Solar food dryer, Jayasorna agrotech
15.	Hot Plate (02)	Hot Plate
16.	Rotary Evaporator (02)	Rotary Evaporator, Indian Scientific

Annexure-2

Exit Policy

Once the formal incubation period ends, the company should be strong enough to survive outside of the incubator and within the competitive marketplace; this is one of the most critical phases of its life.

There are several ways for a start-up to exit the incubation programme. The start-up company exits the incubation programme and (1) continues independently, (2) is acquired by (or merged with) an established company, (3) discontinues its operations, or (4) is participating in a so-called 'growth' programme offered by the incubator or other involved stakeholders. These 'growth' support and infrastructure programmes aim to support start-ups with highgrowth potential after the incubation phase that still need support or dedicated infrastructure (office space, R&D labs, etc.) that they themselves cannot yet finance or realise.

Period of Incubation/ Exit:

The incubate company shall be offered an incubation period of two years. However based on the performance of the company and a written request the term can be extended by six months.

Exit: An Incubate company will leave the incubator under the following circumstances:

1. Completion of two years' stay (depending upon the students course year when applied) (if no extension granted)
2. Underperformance or non-viability of business proposition as decided on case to case basis
3. Irresolvable promoters' disputes on a case to case basis
4. Violation of any Incubation policy
5. When the 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.
6. Change in promoters' team without concurrence of committee.
7. Any change of more than 50% of equity ownership would require a prior approval of committee.

Any other reason for which committee may find it necessary for an incubate company to leave. Notwithstanding anything written elsewhere, committee decision in connection with the exit of an incubate company shall be final and shall not be disputed by any incubate company.

Equity exit policy

The equity-only compensation model characterizes the new for-profit incubation centers. In exchange for the space, seed capital, managerial and technical advice and network of contacts, the incubation center gets an equity stake in the startup. How much equity the incubator takes depends on the services and value it provides, the stage of development of the startup and, usually, the bargaining capacity of both parties.

One of the objectives of Incubation is to utilize the technical expertise and lab infrastructure, thus every company that is offered incubation has the option to select one faculty who shall act as mentor of the Incubatee and guide the company on product development. The incubatee can offer a 3% of share equity (on mutual agreed basis) or a consultation fee to the University as a consideration of mentorship of which 1% would be given to the concerned mentor.

The incubatee company shall allot 3% of the equity towards incubation and shall be maintained till the Company exits from the Incubator or the Company and Promoters raise investment from an Angel Investor, Venture Capital Fund or any other source (This will be applicable from the day product is ready from market). Equity will be decided based on various factors such as: duration of the incubation support needed by the company, financial condition of the company, revenue of the company etc.

If the company fails to raise investment from an Angel Investor, Venture Capital Fund or any other source for a period of five years from the date of the last issuance of shares in favour of Incubator, Incubator will have a right to sell its holding to the promoters of the Company at a value which will be higher of book value and fair value, and promoters of the Company will be bound to buy the shares from Incubator as stated above.

The main exit strategy for startups is to sell the company to a bigger one for a profit. The buyer takes over the startup using cash or stock as a compensation. Exits provide capital to startup investors, which can then return the money to their limited partners (in the case of Venture Capitalists) or to the investors themselves (in the case of business angels). It is mutual between the startup and Incubation center to retain the equity or encash it at the time of exit.

Annexure-3

Technology Readiness Levels (TRLs)

Technology Readiness Levels (TRLs) are used for understanding the maturity of a technology during its acquisition phase.

TRLs allow technical team/evaluators to have a consistent datum of reference for understanding technology evolution, regardless of their technical background.

Current TRL scale is a metric with **NINE** Technology Readiness Levels for describing the maturity of a technology from ideation stage

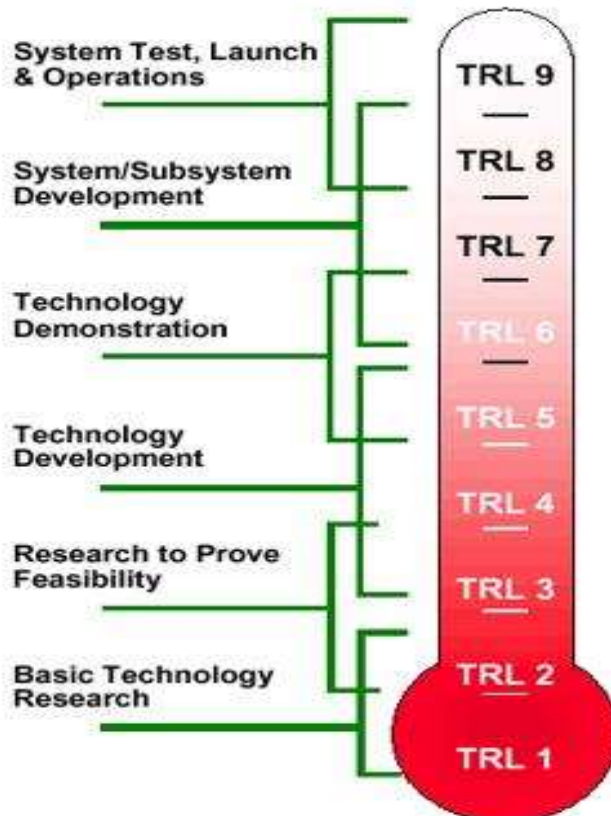
TRL-1 to highest degree of application/commercial readiness TRL -9

TRLs measure Core Technology maturity in a program not only during the selection process but in subsequent monitoring and evaluation phases also, until these technologies or products utilizing them, attain market readiness.

Levels in between covers

- establishment of proof of concept
- prototype development
- functional validations from models to real operational environments & clearances of mandatory regulatory barriers between levels towards market introduction of these technologies/products.

TRL Scale



Nine Levels of TRL

RESEARCH

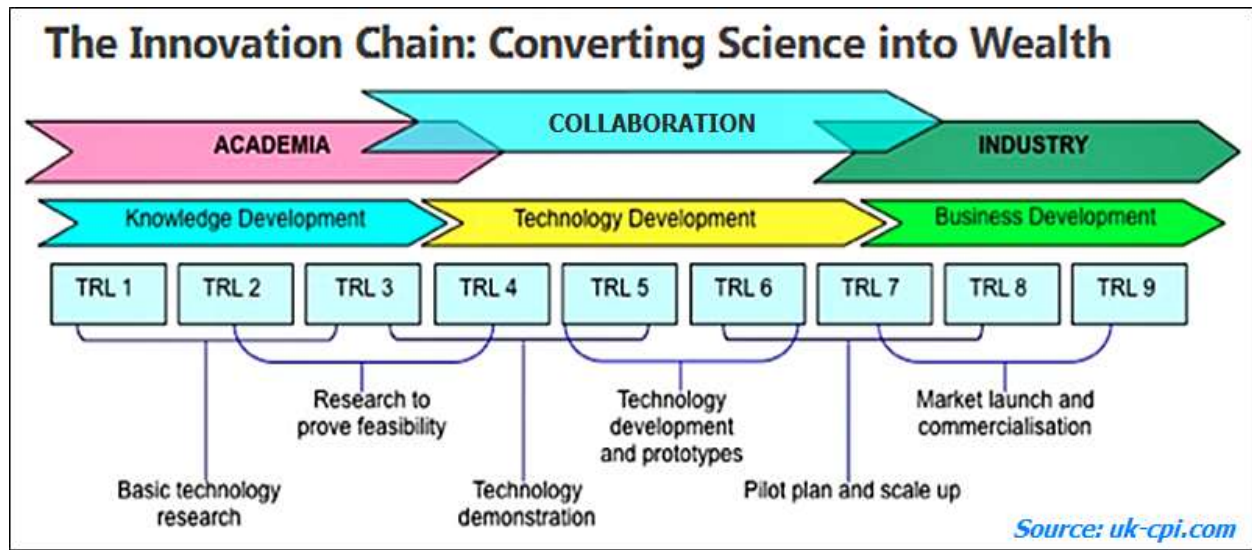
- **TRL-1** Ideation
- **TRL-2** Proof of Principle
- **TRL-3** Proof of Concept Demonstrated

DEVELOPMENT

- **TRL-4** Proof of Concept Established
- **TRL-5 & 6** Early Stage Validation

DEPLOYMENT

- **TRL-7** Late Stage Validation
- **TRL-8** Pre Commercialization
- **TRL-9** Commercialization & Post Market Studies



Annexure-4

**SRI PADMAVATI MAHILA VISVAVIDYALAYAM
AUTHORISATION TO INSTITUTE (EMPLOYER) BY AUTHORS/ INCUBATEES/
EMPLOYEES FOR “COPYRIGHTING/PATENT/TRADEMARK REGISTRATION”.**

(INSTITUTE OWNED WORK)

1. We/I (i) _____
- (ii) _____
- (iii) _____
- (iv) _____
- of Dept./Centre (i) _____
- (ii) _____
- (iii) _____
- (iv) _____

Sri Padmavati Mahila Visvavidyalayam (SPMVV), Tirupati –517 502 have developed
A product/ software/scientific work/literary work/Video work entitled
“ _____ ”.

This product /software/scientific work/literary work/video work has been developed by us during the course of our employment with SPMVV. We hereby do not claim ownership of this work as per the terms and conditions of our appointment in SPMVV. SPMVV is assigned the ownership of the said product/ software and we have no objection in SPMVV obtaining a copyright for the said software under the Indian Copyright Act, 1957.

Authors:

1. a. Name _____
b. Signature _____
c. Date _____
2. a. Name _____
b. Signature _____
c. Date _____
3. a. Name _____
b. Signature _____
c. Date _____
4. a. Name _____
b. Signature _____
c. Date _____

SRI PADMAVATI MAHILA VISVAVIDYALAYAM

APPLICATION FOR REGISTRATION OF COPYRIGHT/PATENT/TRADEMARK

To,

The Registrar of Copyright
Copyright Office
New Delhi

In Reply Quote Reference No. Date

Sir,

In accordance with Section 45 of the Copyright Act, 1957 (14 of 1957), we hereby apply for registration of copyright and request that entries may be made in the Register of Copyrights as in the enclosed Statement of Particulars sent herewith in triplicate.

We also send herewith duly completed the Statement of Further Particulars relating to the work (Literary work – Computer software).

2. In accordance with Rule 16 of the Copyright Rules, 1958, I have sent by prepaid registration post copies of this letter and of the enclosed statement(s) to the other parties concerned, as shown below:

Name and Address of the parties	Date of despatch
(1)	(2)
Not applicable	Not applicable

3. The prescribed fee has been paid, as per details below: IPO No.

_____ Dt. _____

For Rs. _____ (infig.) _____ (in words)

4. Communication on this subject may be addressed to:
Dean, Sponsored Research and Industrial Consultancy
Sri Padmavati Mahila Visvavidyalayam
Chittoor, Tirupati – 517 502

5. I/We hereby declare that to the best of my knowledge and belief, no person, other than to whom a notice has been sent as per paragraph 2 above has any claim or interest or dispute to my copyright of this work or to its use by me.
6. I/We hereby verify that the particulars given in this Form and in the Statement of Particulars and Statement of Further Particulars are true to the best of my/our knowledge, belief and information and nothing has been concealed there from.

Place:

Date:

Yours faithfully

Name: _____

Designation:

Signature: _____

Date: _____

List of Enclosures:

1. Statement of Particulars (in triplicate)
2. Statement of Further Particulars (in triplicate)
3. Declaration of Assignment of Rights (in triplicate)
4. Manuscript (in duplicate)
5. IPO for Rs. _____

STATEMENT OF PARTICULARS
(To be sent in triplicate)

1. Registration Number :
(in the Register Of
Copyrights)
2. Name, address and : a. Sri Padmavati Mahila
nationality of the applicant Visvavidyalayam
b.
3. Nature of the applicant's : interest
in the copyright of the work
4. Class and description of the : a. Computer software program
work b. Technical document
c. Artistic work
d. Video work
e. product
5. Title of the work :

6. Language of the work : _____
7. Name, address and : _____
nationality of the author and
if the author is deceased, the
date of his decease
8. Whether the work is : Unpublished/Published (Please tick)
published or unpublished?
9. Year and country of first : _____
publication and name, address and
nationality of the publisher

10. Years and countries of : subsequent
publications, if any, and names, _____
addresses and nationalities of the _____
publishers _____

11. Names, addresses and nationalities of the owners of the various rights comprising the copyright in the work and the extent of rights held by each, together with particulars of assignments and licenses, if any
- a. _____

- b. _____

12. Names, addresses and nationalities of other persons, if any, authorised to assign or license the rights comprising the copyrights
- _____
- _____
- _____
13. If the work is an Artistic work the location of the original work, including name, address and nationality of the person in possession of the work. (In case of an architectural work the year of completion of the work should also be shown)
- 13A. If the work is an Artistic work which is used or is capable of being used in relation to any goods, the application shall include a certificate from the Registrar of Trade Mark in terms of the proviso to sub-section (i) of section 45 of copyright Act, 1957.
14. Remarks, if any

Place: Tirupati

Date:

Authorised Offices of the Institute(s)

- (i) Name _____
Signature _____
Date _____
Office Seal

- (ii) Name _____
Signature _____
Date _____
Office Seal

- (iii) Name _____
Signature _____
Date _____
Office Seal

- (iv) Name _____
Signature _____
Date _____
Office Seal

1. Name of Authority: _____
Signature of Authority: _____
Designation: _____
Institution: _____
Date: _____

2. Name of Authority: _____
Signature of Authority: _____
Designation: _____
Institution: _____
Date: _____

SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SOFTWARE/PRODUCT LICENCE AGREEMENT
(RESEARCH/EDUCATIONAL)

The agreement is entered on _____ (day) _____ (month), 20 _____ (year) between SRI PADMAVATI MAHILA VISVAVIDYALAYAM (Address: Tirupati – 517 502, INDIA) (hereafter referred to as “LICENSOR”) and _____ (Address: _____) (hereafter referred to as “LICENSEE”).

It is understood that

WHEREAS SPMVV (Licensor) owns certain right, title and interest in the computer program entitled “_____” and relevant documentation (if any), as per SPMVV Code No. (hereafter referred to as PROGRAM).

WHEREAS, SPMVV is pleased to release the program for utilisation for promoting research and education.

WHEREAS, Licensee desires to procure the Program on non-exclusive basis and has paid the licence fees agreeing to the terms and conditions set down below.

WHEREAS, Licensor agrees to grant the necessary licence for promoting and fostering research and education in the public interest.

WHEREAS, Licensor, nevertheless retains all rights of ownership and intellectual property rights of the Program such as patent copyright and other licensing rights as deemed fit from time to time.

WHEREAS, Licensor, declares that no other licence, implicit or explicit, is transferred to the Licensee for any other purpose than mentioned herein.

NOW, the Licensor and Licensee, mutually agree to the following terms:

1. LICENSE

- (a) SPMVV agrees for granting non-exclusive licence to use the Program for research and education. The Licensee is not entitled for any right to distribute the Program to third party and shall use the Program on the following location:

Location _____

- (b) Licensee agree that the Program shall not be used for commercial purposes and the program will not be coded in another computer language or adapted to deny SPMVV the rights owned by it.
- (c) Licensor reserves the right to inspect Licensee's use of the programme to ascertain compliance of Licensee to the agreement
- (d) Licensee will obtain permission from SPMVV for using the Program in conjunction with commercially funded research so that SPMVV can consider approval of such use for the enhancement of research and educational objective.

2. License Fees

Licensee concerns to pay to SPMVV a fee of _____ as the sole amount mostly as media and other handling overhead costs for making the Computer Programme available.

3. Licensee's Display Obligation and Licensor's Post-Delivery Commitments

3.1 The Licensee will display in all copies of the Programme or its parts the Licensor's claim of the copyright in the following title:

"COPYRIGHT 20_____, SRI PADMAVATI MAHILA
VISVAVIDYALAYAM, ALL RIGHTS RESERVED" or "SPMVV, 20_____
ALL RIGHTS RESERVED".

3.2 Licensee will be given the PROGRAMME on 'AS IS' basis and it is not obligatory for Licensor to provide maintenance, updates or clarifications debugging.

3.3 Indemnity: Licensor declares that the Program is in evolutionary research phase and does not guarantee error or bug free code.

3.4 Licensor will not be subject to any responsibility for the results related to design/product etc. and no staff/faculty associated will be liable to ascertain ability for any damages directly or indirectly caused by the use of the Programme.

4. On return of the form in duplicate duly signed by the authorised person on behalf of the receiving Institute and advanced payment by cheque, the software, along with user manual, if any, will be dispatched*. The cheque is to be addressed to:

(Sponsored Research and Industrial Consultancy Account)
Sri Padmavati Mahila Visvavidyalayam
Chittoor, Tirupati – 517 502 (India)

5.

a. Name of person	Authorised of The	_____
receiving Institution (in Block Letters)		_____
Signature		_____
Date		_____
Seal		_____
b. Name of person	Authorised of The	_____
receiving Institution (in Block Letters)		_____
Signature		_____
Date		_____
Seal		_____

Note: One copy of the agreement will be made available to the receiving organisation.

SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SPMVV OWNERSHIP RIGHT WAIVER APPLICATION

I request that:

SPMVV claims no right on the technology/manuscript described below in the present form as I declare that I have developed the above outside the purview of sponsored project and with insignificant use of SPMVV facilities

(ii) SPMVV waives its ownership right in technology/manuscript described below:

Title: _____

Nature of work:

Software [] Invention [] Thesis []
Mask work [] Other tangible materials []

Description: _____

Department/Centre: _____

Sponsorship (if any): _____

SPMVV facilities/equipment utilized: _____

SPMVV funds utilized: _____

In case of thesis, whether any part formed a report of sponsored research contact:

Potential use of technology: _____

Date: _____

Signature _____

Name _____

Approved by HOD/HOC

Address _____

SRI PADMAVATI MAHILA VISVAVIDYALAYAM
COPYRIGHT AGREEMENT CONTRACT FOR COMMISSIONED WORK

Sri Padmavati Mahila Visvavidyalayam is pleased to assign the work described below to:

- A. Name of organisation: _____
Address _____

- B. Job description: As per enclosure
- C. Job contract _____
Reference: _____

As per the Intellectual Property Right Policy of the Institute, it is undertaken by the organisation receiving the job assignment that the Intellectual Property Right (Patent/Copyright) will rest with the Institute.

- [] Agreed
[] Agreed with any special clause (Enclosure) to be mutually agreed

Signature : _____

Name of authorised person of
the Institute executing work _____

Seal:

Date: _____

SRI PADMAVATI MAHILA VISVA VIDYALAYAM
SOFTWARE /PRODUCT OWNERSHIP/CONTROL AGREEMENT
(STUDENT/faculty)

1. I understand that I am entitled for all rights for inventions related to software/Product developed by me independently and implemented except when:
 - a. I have been paid for the work during the development of the said software;
 - b. the work related to sponsored/consultancy work where Institute has obligations to the sponsor;
 - c. the work relates to the research program of faculty member of the Institute.
2. I further understand that I am not entitled for ownership of the software/program related to or used in educational program (course work, assignments, thesis, etc.) even though the educational program formed partly/fully an assignment to me.
3. I undertake to assign to the Institute the ownership of computer software and execute necessary formalities as and when needed if the software formed part of 1a, b, c, and course work/assignment.
4. I understand that in case of my association in 1a, b, c, I shall be entitled for sharing of any income to be decided by appropriate authority as per norms laid down by the Institute from time to time.
5. I also undertake to inform SPMVV about any commercial exploitation of software developed and owned by me during my studentship at SPMVV.
6. My concurrence to the assignment of category is based on professional objectivity and consensus with supervisor and is not imposed.

Name: _____

Roll No.: _____

Department/Centre: _____

Signature _____

Date: _____

Annexure - 5

INTELLECTUAL PROPERTY RIGHTS POLICY

OF

SRI PADMAVATI MAHILA VISVAVIDYALAYAM, TIRUPATI

(SISP is adopting the IPR Policy of SPMVV as it is.)