Draft Innovation and Start up Policy of RRCE according to NISP 2019 Policy

1. Strategies and Governance and Management at Institute Level:

An Apex committee has been formulated with the following members to guide the Policy formulation and policy implementation team members of RRCE.

1. Dr. A.C. Shanmugam, B.A. L.L.B, FIMSA, FRCPS (Glasgow, U.K)
   Chairman – RRGI, Bengaluru.
2. Sri. A. C. S. Arun kumar,
   President, RRGI, Bengaluru.
3. Dr.S.Vijayanand, Executive Director, RRGI
4. Dr.S.Jeyabalan, Special Officer, RRGI
5. Dr.T.Chandrashekar, Principal, RRCE
6. Dr.R.Balakrishna, Dean and Professor, CSE, RRCE
7. Dr.S.Usha, Dean – Research & Innovation, RRCE
8. Dr.G.Vinoth, Chief Start up Designer, Pongu Venutures, Chennai.
9. Dr.J.Amutharaj, NISP Co-ordinator, RRCE & Convener
10. Dr.A.Muruganandham, Professor, ECE & ARIIC Co-ordiantor

Dr. T.Chandrashekar, Principal & Dr. J. Amutharaj, NISP Co-ordinator, RRCE will identify members from each of the groups/departments to hold discussions and create members panel. But anyhow it is a growing members list.

2. RRCE - ISP Formulation Committee and Implementation Team/ Steering Committee:

2.1. RRCE Innovation and start up Policy Formulation Committee at Institute Level

1. Dr.T.Chandrashekar, Principal, Chairperson
2. Dr.R.Balakrsihna, Dean & Professor, CSE, Member
3. Dr.S.Usha, Dean – Research, Professor and Head, CSE, Member
4. Dr.J.Amutharaj, Professor and Head, ISE & NISP Co-ordinator & Convenor
5. Dr.C.Ramesh, Professor and Head, Mechanical Engg., Member
6. Dr. V.Ramesh, Professor and Head, Civil Engineering, Member
7. Dr.L.Rangaiah, Professor and Head, ECE Dept., Member
8. Dr.N.Saravanan, Professor and Head, EEE Dept., Member
9. Dr.G.Vinoth, Founder & CEO, Pongu Ventures, Chennai. & External Member

10. Dr.M.Valluvan, Founder and CEO, Vyasaka Technologies Private Limited , External Expert from Industry and Consultant - Web based Start up creation.
11. Dr.A.Muruganandham, Professor, ECE & Member
12. Dr.K. Aravinthan, Associate Professor, Civil Engineering & Member
13. Dr. N. Sreenivasalu Reddy, Associate Professor, Mechanical Engg. & Member
14. Dr.D. Sobya, Associate Prof, ECE & Member
15. Prof, Sincy Elizabath Kuruvilla, Asst Professor, EEE & Member

2.2. RRCE Innovation and start up Policy Implementation Team/Steering Committee

An Implementation Team / Steering Committee with following executive members are formulated to Implement National Innovation and Startup Policy and support Implementation Team and clubs of College (HEI) Level in association with RajaRajeswari Institute Innovation Cell (RRIIC).

1. Chair Person : Dr. T.Chandrashekar, Principal
2. Convener : Dr.J.Amutharaj, NISP Co-ordinator, RRCE

Sl. No	Team / Club / Centre Established in the Campus	Executive Committee members	Key Performance Indicator(s)
1	IPR Cell	Dr.R.Balakrishna, Dean, RRCE Dr.Rajesh K.S, ASP, CSE Dr.N.Sreenivasalu Reddy, ASP, Mech. Engg., & IPR Co-ordinator - RRIIC Dr.K.Aravinthan, ASP, Civil Engg. & NIRF Co-ordinator	40 IPR to be filed by Faculty members and 5 Student patents to be filed per year
2	Women Entrepreneurship and Start Up Creation Cell	Dr.S.Usha, Dean – Research & Innovation, Vice President – RRIIC Mrs. Jyothi A.P., ASP, ECE & Member, RRIIC	5 Women Entrepreneurship Team and 5 Women Start ups at HEI level per year
3	IDEA Club & Prototype Centre	Dr. J.Amutharaj, Professor & Head – ISE & President – RRIIC, Dr. Neha Singhal, AP - ISE Mrs. T. Devi, AP-CSE	A minimum of 50 Ideas to be identified and 25 Prototypes to be developed per year
4	Innovation Club	Dr.C.Ramesh, Professor & Head, Mech. Engg. & Convener – RRIIC Dr.P.Bhuvaneswari, ASP, ECE Prof. Avinash C M, Asst. Prof., EEE Member - RRIIC	Two National Level, 4 HEI level Innovation Competitions and Promotion of students and faculty members for participation

5	Entrepreneurship Development Cell	Dr.R.Muruganandam, Professor, ECE & ARIIA Co-ordinator, RRCE Mrs. Sincy Kuruvilla, Asst. Prof., EEE & Social Media Co-ordinator, RRIIC	Two National Level, 5 HEI level EDC activities & Promotion of 50% of students and 70% of faculty members for participation in Entrepreneurship Development Activities in the campus and National Level Events
6	Start up Club	Dr. D.Sobya, ASP – ECE & Start up Co-ordinator, RRIIC Mrs. Rajeshwari S, AP - ISE Mr. Ravikumar T, AP –Mech. Engg. Ms. Veena N, AP – Civil Engg.	10 Startup Teams and 5 Entrepreneurship Team & 5 Start up at HEI level per year
7	Internship Training Centre @ Start ups	Dr. Vijaya, S.M., ASP – ECE & Faculty Innovation Co-ordinator, RRIIC Dr.Sumitha Manoj, ASP – ECE & Internship Co-ordinator - RRIIC Mr. Dineshkumar M, AP - ISE	Arrangement of Internship Training for at least 25% of the students in Start ups in the Campus

3. Resource Mobilization:

A sustainable financial strategy should be defined in order to reduce organization constraints to work on the entrepreneurial agenda.

3.1. Investment in the entrepreneurial activities should be a part of the Institutional financial strategy. Minimum 1% fund of the total annual budget of the college should be allocated for funding and supporting innovation and entrepreneurial activities through creation of separate “Innovation Fund”.

3.2. Raising funds by bringing in external funding through various govt. agencies such as DST, DBT, AICTE, TDB, NSTEDB, BIRAC, CSIR, NRDC and NSDF.

3.3. To support technology incubators in the campus, the academic institutions may approach industries under CSR Fund as per section 135 of the Companies Act 2013.

3.4. Institute may raise funds through Sponsorships, Donations from Companies and also through Alumni network of the Institute.

4. Establishment of Start-up infrastructure and Eco System:

4.1. RRCE creates facilities such as IDEA Lab, Fabrication Labs, Mobile Application Development Lab, Internet of Things Lab and Makers Space for Idea Development, Prototype Design, Evaluation and Application of Technology for solving Problems in the Industry, Academia and Society by Technology adoption.

4.2. Creation of Pre-Incubation facility in campus according to the guidelines of MoEs Innovation Cell, EDC, IEDC and New-Gen IEDC.

4.3. Institution Innovation Council offer mentoring and relevant services through Pre-Incubation units / incubation unit's in-return for fees, equity sharing basis and or zero payment basis to the student and faculty innovators and Entrepreneurs.

4.4. Autonomy in executing Innovation and Entrepreneurship activities to train the students and faculty members as Start up Founders and Entrepreneurs.

5. Nurturing Innovations and Start ups in RRCE:

5.1. RRCE establishes processes and mechanisms for easy creation and nurturing of Start ups / enterprises by students (UG, PG, and Ph.D.) staff (including temporary or project staff), faculty members, alumni and potential start up applicants even from outside the institutions.

5.2. RRCE is committed to ensure pre-incubation & Incubation facility and extends support to start ups by students, staff and faculty for mutually acceptable time-frame and collaborate with nearest incubation facilities in other HEIs in the region in order to facilitate access to their students, staff and faculty.

5.3. RRCE will allow licensing of IPR from institute to start up: Ideally students and faculty members intending to initiate a start up based on the technology developed or co-developed by them or the technology owned by the institute, should be allowed to take a license on the said technology on easy term, either in terms of equity in the venture and / or license fees and/ or royalty to obviate the early stage financial burden.

5.4. Will allow setting up a start up (including social start ups) and working part-time for the start ups while studying and working. Based on the need and requirements, RRCE may allow the students / staff to work on their innovative projects and setting up start ups (including Social Start ups) or work as intern / part-time in start ups (incubated in any

recognized HEIs/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes / Business Models.

5.5. Student inventors will be allowed to opt for start up in place of their mini project / major project, seminars, summer trainings. The area in which student wants to initiate a start up may be inter-disciplinary or multi-disciplinary.

5.6. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the institute to register their company with due permission from the institution.

5.7. Students entrepreneurs should be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the Head of the Institute/Principal/Director based on recommendation of the faculty mentor, Head of the Department and NISP Co-ordinator.

5.7. RRCE will permit the students to take a semester/year break (or even more depending upon the decision of review committee constituted by the institute) to work on their start ups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. Department will set up a review committee for review of start up by students, and based on the progress made, it may consider giving appropriate credits for academics in their academic project work, Seminar presentation and Internship.

5.8. RRCE extends provision of accommodation to the entrepreneurs within the campus for some period of time. and permit faculty members and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the college) as sabbatical / unpaid leave / casual leave/ earned leave for working on startups and come back.

5.9. RRCE allows the student entrepreneurs and faculty entrepreneurs and Innovators to utilize its resources to establish start up as a fulltime effort. The seniority and other academic benefits during such period may be preserved for such staff or faculty.

5.10. RRCE is willing to start an AICTE approved part-time / full time, Degree Programme such as M.S/MBA/PGDM with the Specialization in Innovation, Entrepreneurship and Venture development where one can get degree while incubating

and nurturing a startup company. RRCE is willing to adhere the guidelines issued by AICTE in this regard.

5.11. RRCE will facilitate the Startup activities / Technology development by allowing students/ faculty / staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners in association with industries for mentoring support and technology adoption.

1. Short-term / six-month / one-year part-time entrepreneurship training.

2 Mentorship support on regular basis to the start up founder, Entrepreneurs and Innovators.

3 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.

4 RRCE ensures linking of the startups with other seed-fund providers / angel funds investor companies / venture funds or itself may set up seed-fund once the incubation activities mature.

6. Guidelines for License institute IPR as follows:

6.1. In return of the services and facilities, institute may take **2% to 9.5%** equity/ stake in the startup / company, based on brand used, faculty contribution, support provided and use of institute's IPR (a limit of 9.5% is suggested so that institute has no legal liability arising out of startup. The institute should normally take much lower equity share, unless its full-time faculty / staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed funds, support for accounts, legal, patents etc.

6.2. For full time staff and faculty, institute can take no-more than 20% of shares that staff / faculty takes while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares, listed above. However, no restriction on shares that faculty / staff can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case the faculty/ staff holds the

executive or managerial position for more than three months in a startup, then they will go on sabbatical / leave without pay / earned leave.

6.3. In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of 15 MIC services offered by the institute/incubator. In that case, during the cooling period, institute cannot force startup to issue equity on the first day of granting incubation support.

6.4. RRCE also provides services based on mixture of equity, fee-based and / or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the institute on rental basis. Institute could extend this startup facility to alumni of the institute as well as outsiders. Participation in start-up 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.

6.5. Every faculty may be encouraged to mentor at least one startup, product development and commercialization as well as participating and nurturing of startups to be added in the duties and responsibilities of faculty members and each faculty may choose a mix and match of these activities (in addition to minimum required teaching and guidance) and then respective faculty are evaluated accordingly for their performance and promotion. RRCE is proposed to update / change / revise performance evaluation policies for faculty and staff as stated above. RRCE ensures that at no stage any liability accrue to it because of any activity of any startup.

7. Product Ownership Rights for Technology Developed by faculty or student at Institute:

7.1. If the facilities and funds obtained from the college are used substantially or when IPR is developed as a part of curricular or academic activity such as project work then IPR should be jointly owned by the inventors and the college.

Inventors and College could together license the product or IPR to any commercial organization, with inventors having the primary say. License fees could be either / or a mix of

1. Upfront fees or one-time technology transfer fees
2. Royalty as a percentage of sale-price

3. Shares in the company licensing the product

7.2. On the other hand, if the product or IPR is developed by innovators not using any of the college facilities, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product or IPR will be entirely owned by the inventors in proportion to the contributions made by them. In this case, inventors (staff or Student) can be permitted to decide on license the technology to third parties or use the technology the way they deem fit.

7.3. If there is any dispute in ownership, a minimum five member committee consisting of two faculty members (having knowledge, experience and developed sufficient IPR and translated to commercialization), two alumni of the college or industry experts having experience in technology commercialization and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction.

7.4. All institutes' decision-making body with respect to incubation, IPR, Technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / college will have no say, including heads of department, heads of institutes, deans or registrars.

7.5. Interdisciplinary research and publication on startup and entrepreneurship will be promoted. This Institute level policy will enable the provision for suitable compensation and rewards to appreciate the contributors.

8. Organization Capacity, Human Resources and Incentives:

8.1. Faculty and departments of the institutes have to work in coherence and cross-departmental linkages should be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.

8.2. Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills to up-skill the students and faculty members on thrust areas and latest technologies. A minimum of 10 up-skilling programmes or hands-on sessions per semester to be organized by different departments and clubs.

8.3. Faculty and staff should be encouraged to do courses on innovation, entrepreneurship management and venture development.

8.4. **Reward System:**

College will develop an academic and non-academic incentives and reward mechanisms for all staff members and stakeholders who are actively contribute, involve and support entrepreneurship agenda and activities in the campus.

10.4.1. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.

10.4.2. The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships, etc\

10.4.3. A performance matrix will be developed and to be followed for evaluation of annual performance.

9. Milestones:

Milestones:

1. Establishing E Cell in the campus with at least 500 students
2. Creating a mentor network of at least 25 from alumni, start up founders and NGOs who are ready to contribute
3. Develop a Co-working space of a minimum of 3000 square meters for incubation and maker's space.
4. File for at least 10 patents this year (2021) from the IPR Cell
5. Commercialization of at least 2 products in 2021 from the Start ups

10. Key Performance Indicators (KPIs)

1. Number of students in Entrepreneurship Cell activities is **at the minimum of 500**
2. Number of students participating in National Level Innovation events : a minimum of **100 students and 25 Mentors** (minimum of 25 Teams of Size 4 students and 1 mentor)
3. Number of faculty as mentors for students projects: **75% of the Total faculty members**.
4. Number of faculty who take up courses in Innovation and Entrepreneurship: **50% of the total faculty members** of the college.
5. Number of Campus companies / Start up : **Minimum 10 per Academic year**
6. Commercialization of projects and joint ventures with Industry : **5 per academic year**