



KG REDDY
College of Engineering
& Technology

INNOVATIONS AND STARTUP POLICY

2021



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**INSTITUTION'S
INNOVATION
COUNCIL**
(Ministry of HRD Initiative)

Message from the Chairman



Ln. K. Krishna Reddy
 Chairman
 B.Tech. (Universität Wien,
 Austria); M.Sc. (NJIT, USA)

It is indeed a great pleasure and privilege for me to thank the Ministry of Education (previously named as Ministry of Human Resource Development) and All India Council of Technical Education, New Delhi for providing the guidelines on National Innovation and Start-up Policy for the students and faculty members of higher educational institutions and for giving us an opportunity to develop a start-up policy document that facilitates the promotion of innovation and entrepreneurship within the campus. I am delighted to share that KG Reddy College of Engineering and Technology is providing a conducive ecosystem to cater to the demands of start-ups through "CIE - Centre for Innovation and Entrepreneurship," that harbours incubation centres. The Institution's Innovation Council (KGR CET-IIC) is established as per the directions of MOE (MHRD) in 2018-19. The incubation centre, KGR - Technology Business Incubator (TBI) has been established as per the directions of MHRD with the objective to help the faculty

members and students to set-up and promote start-ups that are technology-based and to nurture their growth by providing a platform needed for establishment as successful entrepreneurs. With the initiative given by MOE (MHRD), the required policy documents at our institute have been made considering the need of promotion of entrepreneurial skills among students and faculty members of KGR CET. We look forward to working together with the other universities and affiliated institutions. With all humility, I appreciate the efforts being made by KGR CET innovation start-up policy development committee for their active contribution and support in developing this policy document to be implemented at KGR CET.

Message from the Director



Dr. Rohit Kandakatla
 Director - Strategy, Operations,
 and Human Resource
 Development
 B.Tech.; M.Tech.; Ph.D.
 (Purdue University, USA)

I am delighted to note that KG Reddy College of Engineering and Technology, Hyderabad has taken the responsibility of implementation of National Innovation and Start-up Policy (NISP) for the students and the faculty of our institute to enable all the departments to actively engage students and staff in the related activities. The Government of India has directed the higher education institutes to enunciate a policy to synergize science, technology, innovation, and entrepreneurship to create a robust innovation culture and ecosystem. With the help of Innovation and Start-up Policy, KGR CET intends to create an ecosystem for implementation of research/activities in start-ups. This document will pave the way for a 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 must go hand in hand. It goes without saying that a nation's development and prosperity is judged to a considerable extent by the status of innovations of that

nation. I strongly believe that this policy can achieve the growth of all facilities for research thirst and support and motivate all the faculty members and students toward innovations.

Experts Committee Formed at HEI to Formulate the Policy

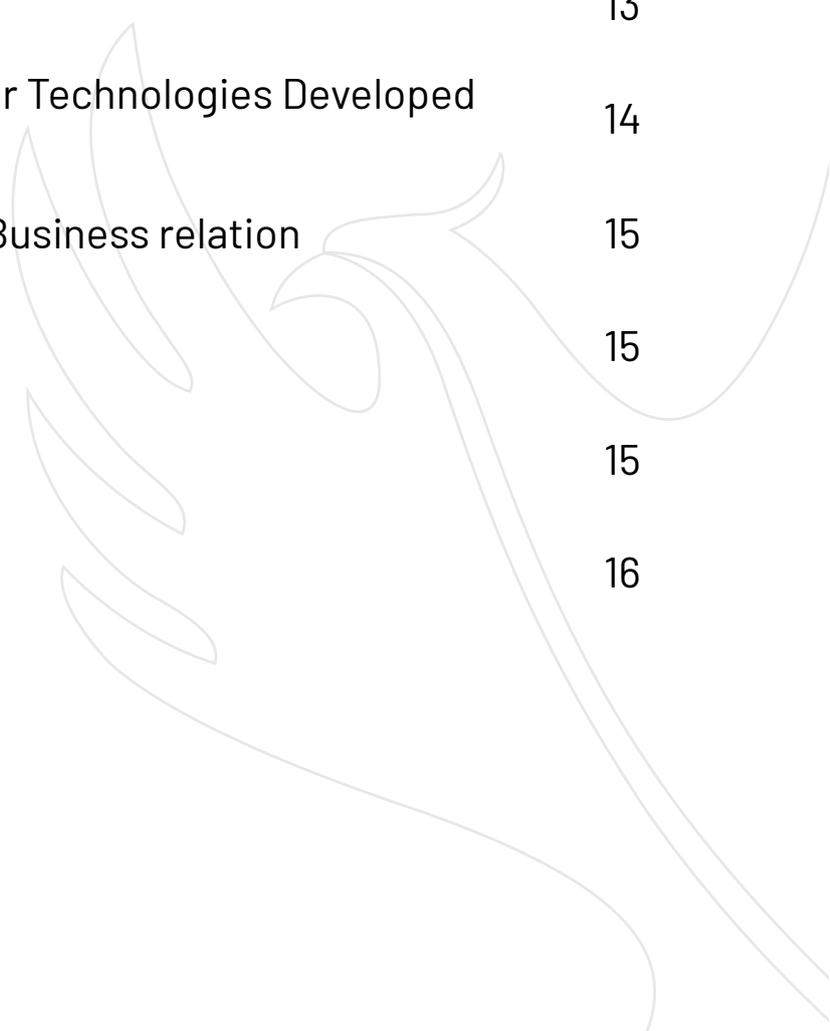
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ABSTRACT

The KG Reddy College of Engineering and Technology Innovations and Start-up Policy 2021 for students and faculty of KG Reddy College of Engineering and Technology (KGR CET) will actively engage the students, faculty and staff in innovation and entrepreneurship related activities. This framework will also facilitate KGR CET in bringing uniformity across all the students, faculty, and staff in terms of Intellectual Property ownership management, technology licensing and institutional start-up policy, thus facilitating a creation of a robust innovation and start-up ecosystem across KG Reddy College of Engineering and Technology.

PREAMBLE

In November 2016, the All India Council of Technical Education (AICTE) released a Start-up Policy document for AICTE approved institutions, to address the need of inculcation of innovation and entrepreneurial culture in higher education institutions (HEIs). The policy primarily focused on guiding the AICTE approved institutions in implementing ‘Start-up Action Plan’ of Government of India. After the release of the Start-up Policy by AICTE and further interaction and feedback received from educational institutions, a need was felt for a more elaborate and comprehensive policy guiding document, which could be applicable for all the HEIs in India. This leads to the ‘National Innovation and Start-up Policy (NISIP).’

In context to the National Innovation Start-up Policy (NISIP) – 2019, a twelve membered committee was constituted in KG Reddy College of Engineering and Technology (KGR CET) to formulate detailed guidelines for various aspects related to innovation, start-up, and entrepreneurship management. This committee deliberated on various facets for nurturing the innovation and start-up culture in KGR CET, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialisation, equity sharing, etc. After multiple rounds of meetings, KG Reddy College of Engineering and Technology Innovations and Start-up Policy was prepared for students and faculties of KGR CET. KGR CET named its incubation centre as KGR Technology Business Incubator (K-TBI).

VISION

India aspires to become 5 trillion-dollar economy by 2024. To reach the mark, it needs to evolve systems and mechanisms to convert the present demographic dividend into high quality technical human resource capable of doing cutting edge research, innovation, and deep-tech entrepreneurship. The KG Reddy College of Engineering and

- KGR CET will provide infrastructure and facilitate to promote innovation and start-ups related activities.
 - Investment in the entrepreneurial activities should be a part of the institutional financial strategy. Minimum 1% fund of the total annual budget of the institution should be allocated for funding and supporting innovation and start-ups related activities through creation of a separate 'Innovation fund'.
 - Attempts will be made by KGR CET to raise funds from diverse sources such as State and Central - DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Start-up India, Invest India, MeitY, MSDE, MSME, etc. and other non-government sources.
 - To support incubators and incubatees, KGR CET may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
 - KGR CET may also raise funding through sponsorships and donations. KGR CET will actively engage alumni network for promoting Innovation and Entrepreneurship (I&E).
 - The institute may link the start-ups with national/international fund providers and allow the start-ups to take up corporate research projects to generate revenue.
 - KGR CET will also work with industries/venture capitalist/govt. institutions to set up a **"student start-up fund"** to support outstanding start-ups. That will be accessible to all the interested students and faculty members.
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- For expediting the decision making, hierarchical barriers should be minimized, and individual autonomy to be given to each incubator and centre in KGR CET.
 - Research/activities in start-ups where microbial/animal/human subjects are involved, clearance from respective ethics committee of KGR CET should be obtained.
 - Significance of innovation and entrepreneurial agenda should be known across the institute and should be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc.
 - Institute should develop and implement I&E strategy and policy for the entire institute in order to integrate the entrepreneurial activities across various centres, departments, faculties, within the institutes, thus breaking the silos.
 - Product to market strategy for start-ups should be developed by the institute on a case-to-case basis.
 - Development of entrepreneurship culture should not be limited to within the boundaries of the institution.

PRE-INCUBATION CENTERS

- Pre-incubation centre is made to be accessible to all the students 24/7 and faculty from all disciplines across KGR CET.
- Pre-incubation Centre must conduct "ideation festivals/hackathons/coding contests/ innovation contest" at regular intervals to encourage students to generate and nurture innovation.

- Pre-incubatees must undergo training in Incubation Centres (TBI, Bio-NEST-WBIF) to understand more about innovation and entrepreneurship.
- Pre-incubation period will be for a period of 6 months.

INCUBATION CENTERS

- After completing Pre-incubation phase, Pre-incubatee must register as Incubatee in the Incubators.
- After their innovative ideas are validated, they can register a start-up company.

ELIGIBILITY CRITERIA

Students who have completed pre-incubation, Alumni of the University, regular faculty, individuals partnered with Faculty. Upon admission in the incubation centre, the following facilities will be offered to the incubate companies on chargeable basis as decided by the institute

- Office space/cubicle
- Computers
- Printer/scanner
- Internet connection
- Standard furniture as decided by K-TBI
- Basic and advanced instruments/equipment of KGR CET
- Library
- Meeting and conference rooms with tele or video conferencing facilities
- Internal support: the 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 years with extension of another 6 months, if needed

NURTURING INNOVATIONS AND START-UPS //

- Centre for I&E will provide a facilitating environment for UG, and PG, research staff, faculty (teaching and non-teaching), alumni of KGR CET and potential start-up applicants even from outside KGR CET.
- All the students must register in any of the CIE incubation centres.
- Details regarding innovation/product development related to their research/project topic should be included in their B.Tech project dissertation.
- Best Student innovation award will be decided as per the KGR CET-NISP guidelines.
- Best Mentor award for innovation also will be decided as per the KGR CET-NISP guidelines.
- Inculcate innovation and entrepreneurship knowledge across the faculty and students by awareness programs and training sessions to write proposals.
- Conducting orientation programs on success stories.
- Encouraging students and faculty to attend free international and national online programs.
- Innovator centric provision for industrial visits periodically to stimulate and the opportunity to observe the innovation and strategy coupled with the business.
- Ideas collection from all the students/faculty of the institute with an idea box.
- Conducting number of hackathons among the student community to increase the awareness on innovations and start-ups.
- KGR CET students will be given 5% grace marks and 20% attendance for every semester for student prototype/ start-up teams.
- KGR CET students may be permitted to undertake their Industrial and Project work at CIE incubator centres where additional facilities are available on payment mode.
- KGR CET student entrepreneurs working on a start-up idea from first year will be permitted to convert into their final year project for degree completion.
- KGR CET students/research scholars can avail special leave for a semester to work for a start-up on a fulltime basis.
- KGR CET students shall be given an additional 4 credits on successful development of the prototype in over and above the total program credits.
- KGR CET students/research scholars, on returning, must satisfy all norms as per the course requirement to complete the course.
- 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.
- Outstanding PG students who wish to pursue entrepreneurship can take a break of one year after 1st year, professional graduates (Engineering) can take a break after 2nd year to pursue full time entrepreneurship.
- 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.

- Thus, a student shall be given an extra 2 years to complete all the requirements of the program of study.
- Revenue generated in the start-up company of KGR CET students/research scholars incubated at KGR CET shall be shared between students/research Scholars and CIE /KGR CET in the ratio of 80 % and 20% respectively for a duration as per exit policy. (Annexure 1)

ENGAGEMENT OF FACULTY IN START-UP 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 the institute is not responsible.
- Any permanent faculty who wishes to involve themselves with the start-up on a part time basis can spend a day in a week with the start-up in addition to their teaching, research, and other official activities.
- The contract faculty/research staff who wish to involve themselves with the start-up can spend a day in the week with the start-up in addition to their teaching, research, and other official activities.
- The committee constituted for the purpose shall take decision in granting a start-up 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 start-up company of KGR CET faculty incubated at KGR CET shall be shared between faculty and CIE/KGR CET in the ratio of 70% and 30% respectively for a duration as per the exit policy. (Annexure 1)
- 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.
- Every faculty must be encouraged to mentor at least one start-up.
- In order to attract and retain the right people, the 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 start-up and vice-versa.
- Alumni start-up 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.
- Faculty/research scholars/students/Alumni shall register their company with due permission/information from/to KGR CET.

PRODUCT OWNERSHIP RIGHTS FOR TECHNOLOGIES DEVELOPED AT THE INSTITUTE

- Incubatees (students/faculty/alumni) should fill in IP declaration form of KGR CET/CIE and declare the Intellectual Property developed and already owned by the incubate company.
- In case the incubate company is desirous of using the Intellectual Property of KGR CET, like patent, software code, copyright, design registration, developed product, etc. the incubate company shall make such request in writing to KGR CET.
- The terms and conditions for such IP licensing shall be decided by the Institute based on the IPR policy of KGR CET.
- The incubate company shall inform KGR CET if any student has contributed for technology development to be used in the product(s) development.
- The incubate company shall inform to KGR CET 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.
- The incubate company shall inform and acknowledge, if any KGR CET infrastructure (hardware, testing setup, instrumentation, computing resources, processes) has been used in developing the IP or technology that will go into the product(s).
- The incubate company shall make agreement with KGR CET before commercialisation is done using the infrastructure/goodwill of CIE/KGR CET.
- The entrepreneur would have option of first purchasing the rights of IP from KGR CET and then being incubated or assigning equity to KGR CET in lieu of direct payments to KGR CET.

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 KGR CET. Also, any IP developed during the stay would be maintained in the register.

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

COLLABORATION, CO-CREATION, BUSINESS RELATION ///// ////

- A. Stakeholder engagement should be given prime importance in the entrepreneurial agenda of the institute. Institutes should find potential partners, resource organisations, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies, and entrepreneurs to support entrepreneurship and co-design the programs.
- i. To encourage co-creation, bi-directional flow/exchange of knowledge and people should be ensured between institutes such as incubators, science parks, etc.
 - ii. Institute should organize networking events for better engagement of collaborators and should open the opportunities for staff, faculty, and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
 - iii. Mechanism should be developed by the institute to capitalise on the knowledge gained through these collaborations.
 - iv. Care must be taken to ensure that events DON'T BECOME an end goal. The first focus of the incubator should be to create successful ventures.
- B. The institute should develop policy and guidelines for forming and managing the relationships with external stakeholders including private industries.
- C. Knowledge exchange through collaboration and partnership should be made a part of institutional policy and institutes must provide support mechanisms and guidance for creating, managing, and coordinating these relationships.
- i. Through formal and informal mechanisms such as internships, teaching and research exchange, programmes, clubs, social gatherings, etc., faculty, staff and students of the institutes should be given the opportunities to connect with their external environment.
 - ii. Connect of the institute with the external environment must be leveraged in the form of absorbing information and experience from the external ecosystem into the institute's environment.
 - iii. Single Point of Contact (SPOC) mechanism should be created in the institute for the students, faculty, collaborators, partners, and other stakeholders to ensure access to information.
 - iv. Mechanisms should be devised by the institutions to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.
 - v. Knowledge management should be done by the institute through development of innovation knowledge platform using in-house Information and Communication Technology (ICT) capabilities.

ACKNOWLEDGEMENT

We thank the National Innovation and Start-up Policy (NISIP) Implementation Team for this initiative and for guiding us throughout the process. We express our sincere thanks to our Honorable Chairman Sri. K Krishna Reddy garu for his encouragement and support to develop KG Reddy College of Engineering and Technology Innovations and Start-up Policy 2021 (KISP). We thank all the members of the committee for their endeavours in contributing for the preparation of the policy document for students and faculty of KGR CET. Our special thanks to Dr. Rohit Kandakatla, Director, KGR CET for his valuable suggestions. We thank Assistant Innovation Officer Mr. Dipan Sahu, New Delhi for his valuable insights and recommendations to enable formulation of these guidelines for preparing KG Reddy College of Engineering and Technology Innovations and Start-up Policy 2021.

Dr. Manisha G
NISIP Coordinator

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ANNEXURE 1

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 high growth 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:

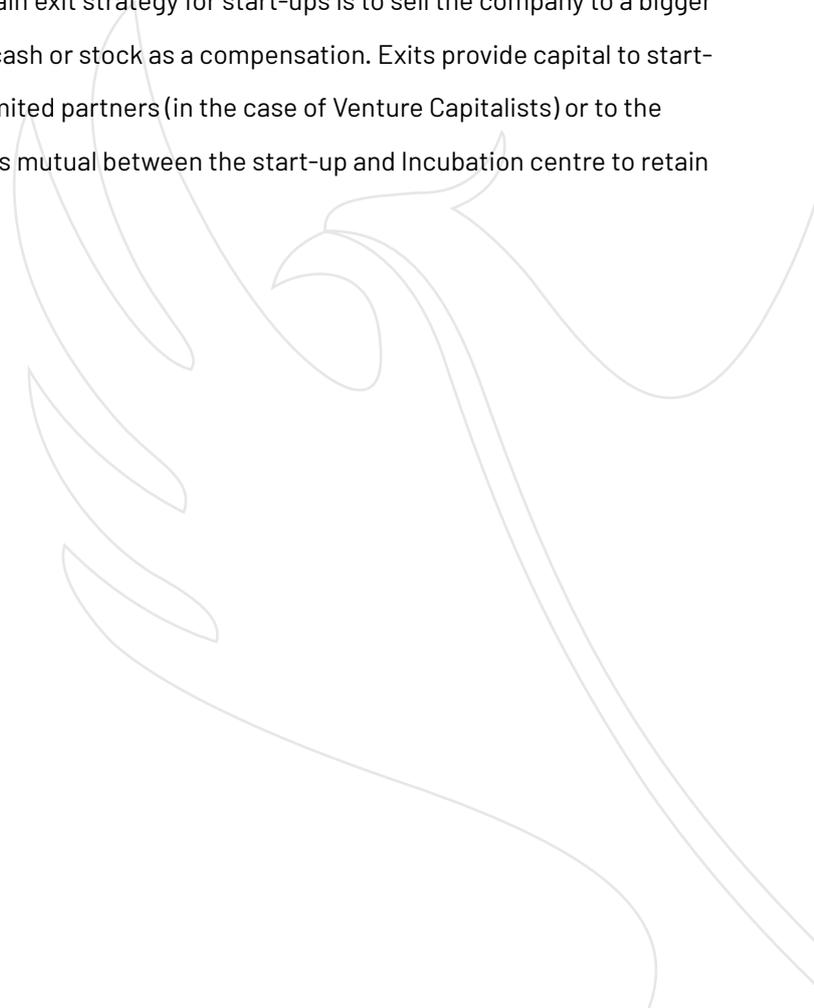
An Incubate company will leave the incubator under the following circumstances:

1. Completion of two years stay (depending upon the student's course year when applied)(if no extension granted)
2. Underperformance or non-viability of business proposition as decided on a 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 reorganisation 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 centres. In exchange for the space, seed capital, managerial and technical advice and network of contacts, the incubation centre gets an equity stake in the start-up. How much equity the incubator takes depends on the services and value it provides, the stage of development of the start-up and, usually, the bargaining capacity of both parties. One of the objectives of incubation is to utilise 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 incubate and guide the company on product develop. 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 several 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 start-ups is to sell the company to a bigger one for a profit. The buyer takes over the start-up using cash or stock as a compensation. Exits provide capital to start-up 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 start-up and Incubation centre to retain the equity or encash it at the time of accusation.



ANNEXURE 2

TECHNOLOGY READINESS LEVEL (TRL)

