

IIT Kharagpur Lab to Market Policy

IIT KGP LAB to MARKET Cell: Innovation and Startup Policy

Innovation Initiative of IIT KGP aims to foster consistent approach to build bridges from Laboratory to Market and Bench to bedside of research findings to envisage the reality.

1. INTRODUCTION

1.1 PREAMBLE

Indian Institute of Technology Kharagpur (hereafter referred to as 'IITKGP'), the first institute of IIT chain, academic Institute having motto of dedicated to service of the nation, is providing excellent service of teaching, research and IPR activities. IITKGP is now envisioning entrepreneurial activities from Lab to Market Cell based on generated IPs, and patents, copyrights etc. The activities are centered around faculty members, scientific and technical staff members, students, project staffs, supporting staffs, visitors based on knowledge gained by intellectual exercise. With the current era of technology domination, values and perceptions are changing abruptly, IITKGP, in particular, have urge to preserve the fundamental spirit of academics on one hand and have to march ahead, on the other hand, accepting changing realities of business economy based on knowledge generated, protected and disseminated under the intellectual property regime. In the evolving scenario of the world today, with increasing awareness of the 'knowledge asset', an Intellectual Property Rights (IPR) Policy is needed not only to preserve the interest of the institute, but also to make IITKGP faculty, students, project and supporting staffs aware of 'knowledge asset and its impact on the society'.

The present policy facilitates protection of the right of the Inventor(s) of IITKGP i.e. faculty, students, project and supporting staffs of IITKGP through the option of Intellectual property protection on a novel work or to keep it in public domain as they may deem fit. In alignment with the Vision and Mission of IITKGP, the policy favours outreach of the novel technologies developed at IITKGP. At the same time, it motivates the faculty, students and researchers to initiate technology transfer using the intellectual property rights gained over novel technologies. Notably for attracting and retaining young talents, the Institute will develop academic and non-academic incentives and reward mechanisms for all who would actively

contribute and support entrepreneurship agenda and activities through innovation with high TRL level and a dynamic startup ecosystem.

A large number of R&D activities are being carried out by faculty members with active participation of students and technical staffs in several cutting-edge interdisciplinary and trans-disciplinary domains of fundamental science, engineering and technology development areas. In today's knowledge based economy, Artificial intelligence, energy storage, alternative and renewable energy, bio and health care based sectors are fast emerging and are also being promoted by IITKGP. In the present context, Faculty members at IIT Kharagpur are continuously engaged in knowledge generation and dissemination. IIT Kharagpur is bridging the gap through generation of cutting edge well trained manpower with trans-disciplinary expertise, conducting training and workshops, participation in industry and multi-institutional sponsored projects, developing IPs. Further, IIT Kharagpur is now proactive in translating these research outcomes into development of process, commercially viable products and prototypes for benefiting the society at large.

IIT Kharagpur, like several other premier institutes in the globe, encourages interested faculty members, student and staffs to participate in innovation and startup activities envisioning self-sustainable ecosystem development. The businesses will be the direct outcome of the research and development activities of the faculty member of IIT Kharagpur. The faculty members could be on the board of such startup activities in the capacity of a Director, Chairman, Promoter or any such role, subject to the terms and conditions of the Faculty Entrepreneurship Policy. It is also expected that the faculty members will make all efforts to preserve their daily academic responsibilities while assuming the above role and will respect the adherence of this Policy.

1.2 Definitions:

- i. **“IIT Kharagpur”** or the **“Institute”** shall mean “Indian Institute of Technology Kharagpur”.
- ii. **“LtM Policy”** means Lab to Market Cell (LtM) Policy
- iii. **“I&E”** Policy means innovation and entrepreneurship (I & E) Faculty, staff, student startup or Entrepreneurship Policy of Indian Institute of Technology Kharagpur.
- iii. **“Faculty Member”** shall mean a faculty of Indian Institute of Technology Kharagpur.

- iv. **“Promoter”** means a promoter as defined under Section 2(69) of Companies Act 2013.
- v. **“Executive capacity”** shall mean a role as a Director or a Chief Executive Officer, Chief Operating Officer or Manager or any person, enjoying similar role, by whatever name called, in the Company, having executive power(s) in the Company
- vi. **“Equity”** shall mean ‘liability free’ equity shares (fully paid up), having voting rights, of the Company.
- vii. **“Company”** shall mean a start-up Company, having at least one Faculty member from IIT Kharagpur in Executive or in Non-Executive Capacity in the company or as mentor.

2. Objectives:

Our institute is well aware of National Innovation and Startup Policy (NISP) for Students and Faculty that is released by the Government of India in 2019 as a guiding framework for Higher Education Institutions (HEI). The policy aims to enable the institutes to actively engage students, faculties and staff in innovation and entrepreneurship (I&E) related activities through Lab to Market Cell (LtM). IIT Kharagpur already has many initiatives aimed at encouraging I&E objectives and technology transition. The objective of the LtM initiative is to synchronize these various initiatives and mould the rules and procedures of IIT Kharagpur to fit the NISP framework, thus enabling creation of a robust policy under LtM towards innovation and startup ecosystem.

While innovation is wide, multifaceted, interdisciplinary and transdisciplinary in nature in the context of current emerging opportunities, this is referred to as research and innovation that envisage the reality through technology transition by the process of technology conceptualization, technology development, technology benchmarking, IPR protection, while achieving high TRL of the innovation, technology transfer, technology licensing, and other related entrepreneurial ventures.

Specific aims of LtM cells are as follows -

- To protect and preserve the IPs and know how
- Developing Technology Transition Ecosystem
- Technology Licensing, Technology outreach program
- Making strategies for effective business, technology valuation
- Promoting faculty, staff and students to improve the TRL level by rewarding on time

grant

- Facilitating product agreement, product validation and product benchmarking
- Encouraging startups, entrepreneurial activities

3. Bindings for LtM activities

IIT Kharagpur encourages and prioritizes the initiatives which are eligible under this “Policy” is a technology transition through technology transfer, licensing startup which must pursue businesses that are a direct result of the research and development activities of the faculty members of the institute. In such cases, the faculty member(s) and student(s), staffs, if applicable, will be known as a founding member(s)/Promoter(s) in a Non-Executive position of the entity.

Initiatives not eligible under this Policy:

A faculty member cannot associate, either as a Promoter or in an “Executive Capacity”, with:

- a. Companies involved in Teaching and/or development of educational content.

On the other hand, companies developing innovative technology platforms that facilitate delivery of contents with significant teaching/learning via alternative path may only be permissible.

- b. Companies whose business will be to provide consultancy services only.

- c. Such class of Companies that may be prescribed and notified by IIT Kharagpur from time to time.

- d. The startup may have the right to do sublicensing the IPs; however, all the right of the institute will be preserved for such IP licensing. Specifically, the institute shall have the proportionate share of the royalty received by the startup.

- e. The original faculty inventor should have involvement or consent for such sublicensing.

- f. The faculty inventor may have the active role in R&D activities with prior permission from competent authority of the institute without jeopardizing the right of the background IP of the institute and without hampering the regular academic activities of the institute

4. Governance

An LtM cell will operate through active council members for the different activities. LtM council will be empowered to form different adhoc bodies following a common formula of committee members consisting a faculty-in-charge (chair) with four additional faculty members of different disciplines and at least one of the R&D executives to facilitate the activities –

- Innovation and Entrepreneurial (I&E) council
- MOU committee

- Patent review committee
- Technology transfer committee
- Proposal review committee for OTG

R&D executives will also be member in every bodies. LtM council will be the main body governed by DD (as chair), Dean R&D, Dean Academic, STEP MD, and few faculty members. LtM council will handle all innovation and startup-related decisions at the Institute level. The Institute will provide the LtM council with the necessary administrative support. I&E Council is responsible for monitoring and periodically reporting innovation related activities to the Senate.

5. Lab to Market cell Activities:

- **Formation of adhoc bodies for related activities:** Innovation and Entrepreneurial (I&E) council, MOU committee, Patent review committee, Technology transfer committee, Proposal review committee for OTG, Ethical committees– these members will meet time to time at least four times in a year or quarterly basis depending on the consignment.
- **Funding:** One time grant to faculty members through assessment to improve the TRL level with additional study for achieving product close to market readiness; Additional funding may be awarded to any faculty members who have invention with low TRL level of the existing patent or IP. The fund will be awarded the IIT fraternity to improve the TRL level where Patent of addition may be exercised.
- MOU related to research and tech transfer vis-à-vis licensing
- **Technology transfer committee will be responsible for** IP rights valuation, licensing terms, Branding of patents and connecting with the customers

Lab to Market cell governing body: DD, Dean R&D, STEP MD, S Dhara

MOU committee: Chair: Prof. Saswata Chakraborty, Legal: Sumit Chatterjee, JR, Dean R&D, Tapas Bandyopadhyay,

Innovation and Entrepreneurial (I&E) council: S Mukhopadhyay, Padma M'am, Entrepreneur school Head, Assc. Dean R&D

Patent review Committee: S Dhara, Padma M'am, Tapas Bandyppadhyay, Niharika Sahoo Bhattacharya, Debarati M'am,

Technology transfer committee: VG SOM, HSS, Entrepreneurial school, RGSOIPL, Dean R&D, Assc. Dean

6. Innovation Fund

- LtM activities are a part of the institute's financial strategy for research, innovation, technology transition towards self-reliance. Institute will invest at-least z% of its total annual budget to fund and support LtM related activities through a separate 'Innovation fund'; a fund wholly managed by the Institute towards one time grand for improving TRL level, IPR and other related activities including conducting workshop. This fund will also be augmented by bringing in external funding through government (state and central) such as DST, DBT, MOE, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, NGO, PRISM and other Public, Private and Government Entities including alumni funds.
- Private and corporate sectors can support technology incubation/incubators by contributing to the Institute Innovation Fund. Such contributions can be treated as Corporate Social Responsibility (CSR) contributions as per Section 135 of the Companies Act 2013.
- Institute's Innovation Fund can also be supported through sponsorships and donations.
- Fund utilization for I&E programs will be at the discretion of the Institute's I&E Council.

In order to attract and retain talent, the Institute will develop academic and non-academic incentives and reward mechanisms at different capacity for all who would actively contribute and support technology transition, entrepreneurship agenda and activities through innovation with high TRL level, or exercising a startup ecosystem.

7. Revenue generation route by LtM

- By engaging faculty members, staffs and students through consultancy projects and related industry sponsored semi pilot scale or pilot scale projects, prototyping with upto 50% projects overhead depending on the infrastructure involvement and man hour
- Technology licensing, Improving TRL level for existing patents
- Promoting faculty members towards joint initiatives, startups and entrepreneurship activities with other existing known players in the field
- Promoting interns, students and faculty innovators for startups activities based on the idea or know how and IPR generated by them during their stay in the institute; in case of IPR, know-how may be licensed exclusively for limited period and further validity may be extended based on progress of activities. For licensing period and its extension are based on a one time fees (OTF) and /or equity along with royalty fees based on revenue generation upto 8%.

8. Innovation & Startup policy

8.1. Motivation & Pathway

IIT KGP encourages interested faculty members to incorporate startups to engage in the businesses that are direct result of the research and development activities of the faculty member of IIT KGP.

For a faculty driven startup, the startup is required to be incubated in the Institute at its incubators (STEP). However, in exceptional cases, the institute may allow a faculty member to open/operate/incubate the Company outside the institute if sufficient justification is provided.

8.2. Types of Engagements with Startups

The role of the faculty in startups could be of four kinds:

- [Role-A] Faculty as promoter (ownership)
- [Role-B] Faculty on the board of a startup (holding shares without promoter)
- [Role-C] Faculty as mentor (volunteer service)
- [Role-D] Faculty as a consultant (paid service)

8.3. Binding for faculty and staffs

This engagement maybe single or together with other faculty or together with student(s) of home Institute; the faculty startup norms apply to all these scenarios.

- The Faculty member has to take prior permission from the Institute before associating with any business venture or starting a new venture. Once approved by competent authority of the institute for incubation, a faculty member is expected to form a startup company.
- Such a startup must pursue businesses that are a direct result of the research and development activities of the faculty member of IIT KGP. The startup company may have liberty to carry out further research based on background patent and may file new patent or patent of addition where IIT KGP will be a joint owner especially for patent of addition where foreground patent is based on institute owned background patent.
- The faculty member(s) will be known as a founding member(s)/ promoter(s) of the Company. Faculty member may have share or equity upto 100 percent.
- In this startup, the faculty may engage in technology development and improvement of technology where faculty is innovator or improving of other technologies where institute has no ownership or IP.

- The startup has primary intention to improve TRL level of the IP, technology commercialization and scaling-up activities of the institute.
- If the startup is keen to use institute infrastructure and facility for such activity, institute may also charge additional fees for such activities with a separate MOA.
- In the early stages of the startup, the faculty member is also allowed to hold executive position like Director only upto three years. However, this role has to be in the form of a consultant or advisor or honorary employee (not as salaried employee).
- Consultation income from IIT KGP incubated startup is not subjected to standard IIT KGP industrial consultancy norms during the incubation period of the startup. The consultancy assignment under startup should have significant research and improvement from the state of the art
- Faculties are allowed to spend up to 20% of their working hours on their start-up activities. Any faculty who would like to spend more than 20% of their working hours for startup-related activities are required to obtain appropriate approval from the competent authority in advance.

8.4. Usage of Institute Resources

As stated earlier, the faculty members are only allowed to incorporate startups whose business objectives build upon the technologies developed at IIT KGP. Here, it is imperative that the Institute recovers the expenses involved in development of the technology by tracking the usage and involvement. However, from practical perspective, such categorization of day-on-day research activities is near impossible. Hence, an additional equity model is adopted here. As the IP and know-how is developed by (partial) use of Institute resources, the startup may seek exclusive licensing by paying an additional equity to the incubator. If a startup gives X% equity to the Incubator for incubation, a faculty-startup is expected to give X%+Y% equity to the Incubator. It is understood that the additional Y% equity is towards the engagement of Institute resources only. IP will be licensed to startup on one time license fee with additional royalty basis depending on the type of engagement. Having thus paid additional value, the startup may be permitted to use the laboratory and other such facilities to which the founding faculty member(s) is entitled. The startup may also use other facilities of the Institute on payment basis as per the prevailing norms. For Incubation at STEP, the values of X% and Y% currently stand at 3% for X and 0.5 to 3% range for Y depending on the level of engagement. Faculty innovator may not have any share for royalty if engaged in technology transition especially innovator has the equity.

8.5 Equity

For using the Institute brand and providing support, Institute can stake a share in the startup equity held by its faculty. Total equity held by the Institute in any company will be at-most 6%. This equity will be held and managed by Science Technology Entrepreneurship Park (STEP). In such case, spirit of entrepreneurship activity should be the priority and any arbitration or legal action against startups will not be applicable to the institute anyway.

- For Staff/Faculty, the Institute will take 3% equity/stake that a faculty owns in a startup/company only for incubation at STEP and additional stake for additional engagement.
- Equity held by the Institute in any company through a faculty will be at-most 6% (3% for the time faculty spends with the startup; additional equity upto 3% may be charged for the services and additional usage of infrastructure. Innovator cum entrepreneur will not claim any royalty due to equity share in the startup.

8.6. Best Practices to avoid Conflict of Interest

- Faculty must separate and clearly distinguish on-going project and research work at the Institute research from work being conducted at the startup.
- Faculty must limit engagement for the company to a maximum of 20% of the office time.
- Faculty must make all efforts to balance their academic responsibilities while assuming the entrepreneurial role.
- It is expected that the startup is involved in technology development. Merely providing consultancy services is permitted and such activity must be taken up through Technology and Consultancy norms of R&D section.
- Faculty must not involve research staff or other permanent staff of institute in activities at the Startup and vice-versa.
- While a student may choose to work on the research part of Startup activities, a Faculty must not involve students in the non-research part of the company activities. If a student wishes to participate in the wider activities of the startup, it may be channeled via Startup options for students.
- At all times, the faculty member must ensure that, the startup/company they are associated with, is compliant with all the norms of the Government of India. Non-compliance by the faculty member shall have no bearing on IIT KGP.
- To avoid any conflict of interest, the faculty must not engage in activities like internal/external committees related to the objective of the startup. A disclosure is to be flagged where a possibility of overlap exists.
- Once the startup is formed, scenarios may arise where there is an overlap between the goals of sponsored research taken up by the faculty and the startup objectives (by the same faculty), the following recommends are made:
In case the faculty takes up private or govt. sponsored research whose aims overlap with the startup activities, the faculty shall take necessary precautions to avoid IP contamination and conflicts of interest. In specific cases, if the sponsor agency agrees to assign the IP resulting from such activities to the startup, the parities may enter into a

- separate IP licensing agreement.
- In case of grant-in-aid projects where the sponsor allows IIT KGP to retain the IP rights, this IP can also be licensed to the startup within the Y% additional equity framework elaborated in the section on IP.
 - In case, if startup or any other company is involved along with government funding for a project, IP right will be based on the multi-institutional MOU of the said project as per the govt. or funding agency policy.

8.7. Incentives for Participating Members

In order to attract more participation, institute should develop academic and non-academic incentives and reward mechanisms for all stakeholders that actively contribute and support entrepreneurship agenda and activities. 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. With active participation of faculty, one time grand may be awarded based on committee evaluation only for improving the TRL level. In those projects, Institute may ask for additional share or benefit during technology transfer exercise.

9. Intellectual Property Rights

As stated in the preamble, faculty members of IIT Kharagpur are only allowed to incorporate Companies whose business objectives can only be fulfilled by using the know-how and/or technologies developed at IIT Kharagpur. Thus it is critical that there is clarity vis-à-vis policy of usage of institute resources, know-how developed using institute resources and IP Rights.

The Institute will allow licensing of Intellectual Property Rights (IPR) from the institute to start up as per the Institute's IPR policy and LtM policy. Ideally such a startup should be initiated by students/staff/faculty based on the technology developed or co-developed by them or the technology owned by the institute and based on the Institute's IPR policy and LtM policy.

- a. In the event, the Company uses any "know-how" for business purpose, which has not been secured through any IP prospects, the Faculty member has to disclose the source and origin of such "Know-how".
- b. In the event the faculty member(s) would want to use an existing Intellectual Property developed at IIT Kharagpur and protected by filing/grant of patent where institute is an applicant or joint applicant & the Faculty member is an inventor, the Faculty member(s)

may request for an exclusive license of the IP from the Institute to the Company, the grant of which may be guided by the policy stated below:

- i. The faculty member would submit an application for the same to the office of Dean, Research & Development and LtM.
- ii. Upon obtaining permission, the Company may initiate the process of getting the IPR licensed to it.
- iii. The exclusive license may be given to the company on a perpetual basis till the time the company is in the business and/or the IPR is within its protected period based on one-time payment. Inventors' team will not claim any royalty.
- iv. In case the Company agrees to sublicense the "licensed IPR(s)" to any other entity, then the licensing revenue generated by the Company will be distributed among the other inventors (who are not involved in business with their proportionate amount) and the Institute, as per the extent IPR policy of the Institute.
- v. In any case, IIT Kharagpur reserves the "First Right of Refusal" for any IPR generated in the Institute.

The Company may be permitted to use the laboratory and other such facilities to which the founding faculty member(s) is involved on payment basis. The Company may also use other facilities of the Institute on payment basis as per the prevailing norms. The Company will have to pay for office space, if provided, as per prevailing norms.

IIT KGP provides exclusive, worldwide, sub-licensable, irrevocable, and transferable license to the startup. It may be noted here that as the technology transfer is happening to the inventor-associated Startup, the royalty sharing model of the IP policy does apply case to case basis and all the revenue share will also belong to the Institute as well. Also, if there are any co-inventors in the IP who are not part of the Startup, it is the responsibility of the Startup to obtain a NoC from them on terms mutually worked out between Startup and Co-Inventor.

In case of sponsoring of fund for promoting startup activities, or joint projects with startup company where startup also contributed some funds for project work, a separate MOU may be done as per the terms of sponsoring agency and institute following the governing rule case to case basis.

10. Disclosure and Compliance

Financial and non-financial disclosure agreement will be signed as per the existing Institute norms. Also, a separate Conflict of Interest Disclosure Statement will have to be furnished twice a year or every six months by the Company. At all times, the faculty member(s) must ensure that the Company/Companies they are associated with are compliant with all the norms of the Government of India. Non-compliance by the faculty member(s) shall have no bearing on IIT Kharagpur.

11. Governing Laws and Dispute Resolution

11.1 Applicability and Governance

This policy is applicable to all full-time faculty, staffs, and enrolled students of IIT Kharagpur. The academic related matters will be handled by the Dean Academics. The IP licensing and matters related to usage of Institute resources will be handled by Dean Research & Development along with LtM. Startup registration and equity holding will be handled by MD, STEP for Incubation, Innovation & Startups.

11.2 Startup Definition

For an entity to be considered a Startup under this policy, it must conform to the description of Startup as defined by Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry.

11.3 Incubation Agreement

In addition to the terms mentioned in this policy, the engagement of student/faculty/startup with incubator in the pre-incubation or incubation or other programs will be guided by respective agreements between the mentioned parties. The respective norms for selection will also applicable for applicants wishing to pre-incubate/incubate. As a norm, the startup may choose to incubate from any of the incubators available at IIT Kharagpur. However, in exceptional cases, Director, IIT Kharagpur may allow to open/operate/incubate the startup outside the institute if sufficient justification is provided. Maximum of Three years may be incubated within the institute entrepreneur park.

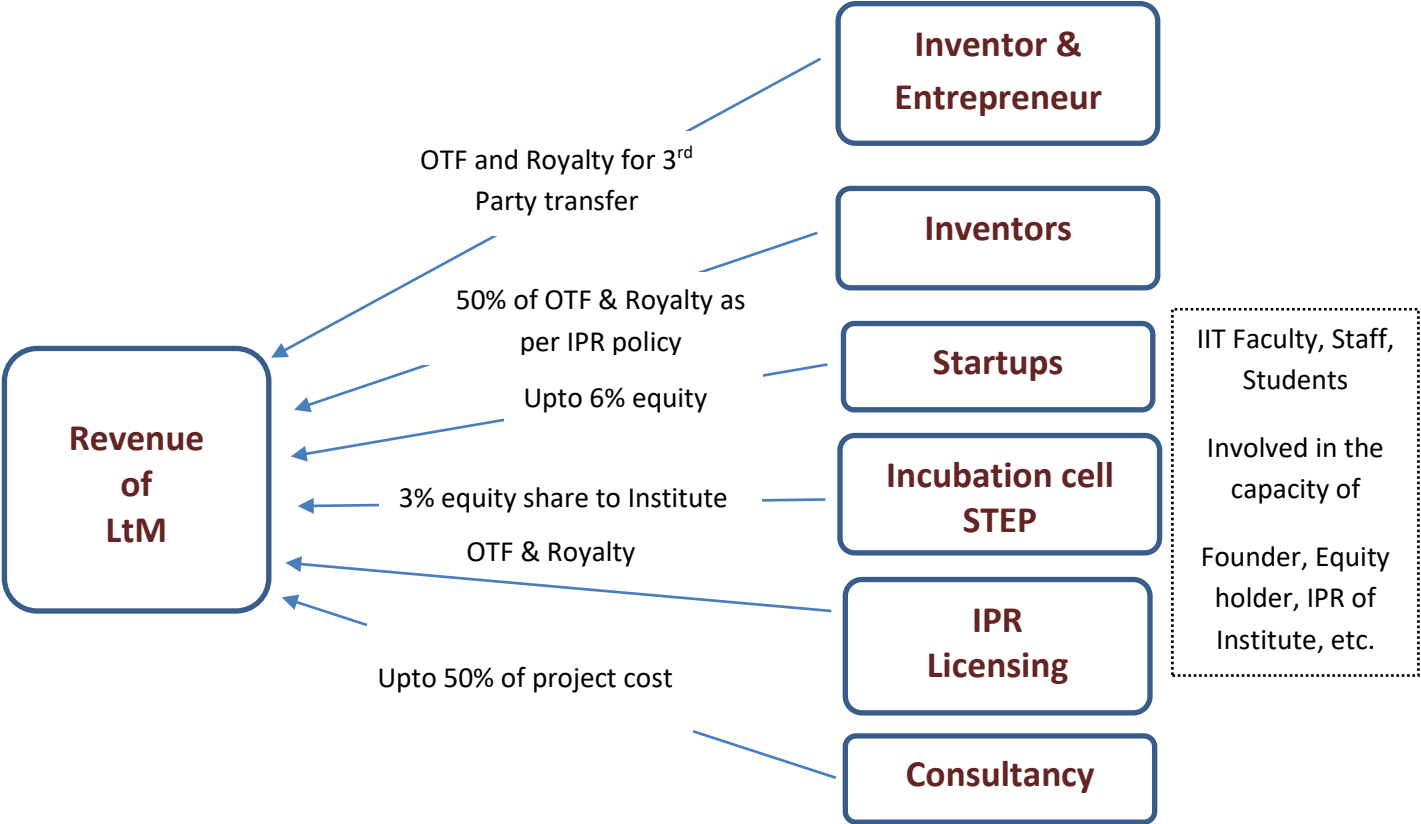
11.4 Dispute Resolution

Clarification on the applicability, interpretation and implementation of any of the clauses contained herein may be obtained from Faculty-in-Charge, Incubation, Innovation & Startups. In case of any disputes arising from the administration of this policy or any matters connected therewith or incidental thereto, conciliation would be attempted under the directions and aegis of the Director to settle the same in the best interests of the parties and in sync with the credo of IIT KGP. Director, IIT Kharagpur may also establish an independent committee to investigate further. Resolution of disputes that remains unresolved even after conciliation efforts, maybe attempted by arbitration under the provisions of Arbitration & Conciliation Act, 1996. As a policy, all agreements to be signed by the Institute will have the jurisdiction of the courts in Kolkata, West Bengal and shall be governed by appropriate laws in India by their own cost.

11.5 Effective Date

This policy will come into effect from _____ and all Faculty Startup enrolments henceforth will be guided by this policy. The Startups already enrolled will have an option of choosing between (a) the new equity transfer model or (b) earlier model of IP licensing from IIT KGP to an external entity via a IPEC (Intellectual Property Evaluation Committee). These prior stakeholders should express their choice within six-months of the date of effectiveness of the policy. If no explicit preference is expressed within the six-month timeline, the terms and conditions of the present policy will be applicable.

IIT KGP LtM
Revenue generation model



OTC: one time fees & Royalty: upto 8% of revenue