

**INDIAN INSTITUTE OF SCIENCE
BANGALORE – 560 012**

INTELLECTUAL PROPERTY POLICY OF IISc

1. OBJECTIVES:

The *current and stated* Intellectual Property Policy of the Indian Institute of Science (IISc) *aims to facilitate the protection and valorization of intellectual properties generated during the scientific pursuit in the Institute and offer scope for wealth generation, alleviation of human sufferings and betterment of human life. IISc urges all faculty, staff and students to document their IP, so that they can be protected and applied to the gain of the country, the institute and the concerned inventors.* IISc is keen to facilitate *faculties and staff of IISc* in a proactive *manner in the generation, protection and transaction of Intellectual Properties which offer potential and scope for shared benefits* to both institute and *inventors*. Through this policy, a system will be in place to bring order into the process of knowledge generation and commercial exploitation.

2. FOR WHOM IS THIS MEANT?:

This policy covers all staff, faculty members, students and also persons engaged in sponsored schemes and projects, from *CSSP, CSIC, SID, CCE, ABETS, TDM and any other initiatives of the Institute* as well as visiting scientists/professors/personnel who participate in the research work being carried at the Institute.

3. WHAT CONSTITUTES INTELLECTUAL PROPERTY?

3.1 Intellectual Property (IP) is *an* intangible *knowledge* product *resulting from* the intellectual output of the inventors, namely faculty, staff and students of the Institute. IP thus is an outcome of the in-house or sponsored research, industrial consulting or other forms of collaborative R & D.

3.2 Any product of the human intellect *which is* unique, novel and unobvious *and qualifies for protection under the relevant acts of the Government governing patent, copy right etc. and developed at the IISc belongs to* the Institute. IP can be of the following forms: know-how, and other proprietary concepts, solutions, processes, including an invention, scientific or technological development, and computer software, genetically engineered microorganisms and business models *and other forms as the need arises.*

3.3 The above forms of IP can be protected, under domestic and international patent office, if protection of IP is seen necessary both by the Inventor and the Institute. It can then be protected within the country or *abroad.* The office of the Intellectual Property Cell (**I P Cell**) deals with all activities relating to Intellectual Property of the Institute.

3.4 The product of the intellect can have potential for faculty entrepreneurship. Such activities will ensure that the intangible IP reaches a

tangible form that can be marketed. When this is the case, the Guidelines for Faculty Entrepreneurship shall be followed. The office of Technology Licensing and Entrepreneurship (TOTLE) at Society for Innovations and Development (SID) handles all activities related to entrepreneurship of any faculty.

4 OWNERSHIP:

4.1 IN-HOUSE RESEARCH :

All rights in respect of investigations carried out at the Institute shall vest in and be the absolute property of the Institute except in respect of the activities carried out jointly *with other institutions or agencies or under a sponsorship by an agency, in which case the ownership will be decided and agreed upon mutually.*

4.2 SPONSORED RESEARCH :

Intellectual Property Rights (IPR) of inventions arising out of research projects undertaken on behalf of the sponsoring agencies shall be taken jointly in the name of the Institute and sponsoring agencies; *when the* sponsoring agencies bear the cost of filing and maintaining of the IPR equally. Where the sponsoring agencies, are not forthcoming for filing joint IPR application, the Institute at it's discretion may file the application with the absolute ownership and institute will meet the entire cost of filing and protection of IPR.

4.3 **COLLABORATIVE RESEARCH:**

All intellectual property jointly created, authored, discovered, invented, conceived or reduced to practice during the course of collaborative research undertaken jointly by Institute with Collaborating Institutions, shall be jointly owned; and the Collaborating Institutions will *be requested to* bear the cost of filing and maintaining of the IPR. In case the Collaborating Institutions are not forthcoming to bear *fully* the cost of filing and maintaining, if considered expedient by the Institute, the Institute will *share* the cost *equitably* with the Collaborating Institutions. Where the collaborating Institutions are not forthcoming for filing joint IPR application, the Institute at its discretion will *meet the entire cost of filing and protection of IPR*.

4.4 **COPYRIGHT:**

4.4.1 IISc shall be the owner of work, including software created by the IISc personnel with significant use of IISc resources.

4.4.2 If the institute foresees a gainful return from copyrights, it may initiate steps to file and protect such copyrights and share the financial benefits with the inventor on terms and conditions of the institute.

4.4.3 IISc shall be the owner of copyright on all teaching material developed by IISc personnel as part of any of the academic programmes at IISc. The authors shall have the right to use the non-funded technical material in his/her professional capacity. If the technical material is prepared by the author on behalf of a funding agency, then the copyright will be equally shared between the institute and the funding agency. As a traditional exception, IISc shall not claim ownership of copyright on books and publications authored by IISc personnel.

4.5 Any IP generated when an Inventor from the institute works in a university or company abroad/in India on EOL/Sabbatical leave/earned leave, will be jointly owned by IISc and the University/Company.

5 TECHNOLOGY TRANSFER

5.1 The Intellectual Property of the Institute either held in the name of IISc or jointly with other Institutions/Industry will be marketed for commercial exploitation *under agreements involving* technology transfer, licensing and revenue sharing *models*.

5.2 The IP Cell shall identify potential licensee(s) for the IP to which IISc has ownership. In case of joint ownership, the Organization/Industry which has sponsored the activity, will have the first right to commercially utilize and exploit Intellectual Products emanating from the collaboration activity, whether or not the same have been formally protected by patent(s). The licensing to commercially exploit would involve technology transfer fee and also royalty payment from the first date of such commercial exploitation for a period that will be as mutually agreed upon.

5.3 In the event of the other collaborating organization/industry not undertaking the commercial exploitation within a reasonable period of two years from the first date of development of the technology. IISc reserves the right to transfer the said know-how to a Third Party for its commercial exploitation and use. In such instance, however, IISc shall share the net

proceeds from such commercial assignments, in equal measure with the collaborating organization/industry in the ratio 1:1.

5.4 IISc would endeavor to exploit the IP by commissioning a Technology Management Agency and thereby bring to a favorable light the IP produced by its Inventor(s). The Inventor(s) may seek IISc to assign the rights to them after a certain holding period.

6 **REVENUE SHARING**

6.1 The revenue arising out of licensing of IP and royalty would be shared in the appropriate ratio (currently, this ratio is 60:40) between the inventor(s) and the Institute. Where IISc reassigns the right of the IP to its investor(s), the inventor(s) shall reimburse all the costs incurred by IISc, which include protection, maintenance, marketing and other associated costs

7 **INFRINGEMENTS, DAMAGES, LIABILITY AND INDEMNITY**

7.1 As a matter of policy, IISc shall, in any contract between the licensee and IISc, seek indemnity from any legal proceedings including this, but not limited to manufacturing defects, production problems, design guarantee, upgradation and debugging obligation.

7.2 IISc shall also ensure that IISc personnel have an indemnity clause built into the agreements with licensee(s) while transferring technology or copyrighted material to licensees.

7.3 IISc shall retain the right to engage in or desist from or not in any litigation concerning patent and license infringements.

8 CONFLICT OF INTEREST

8.1 The inventor(s) are required to disclose any conflict of interest or potential conflict of interest.

8.2 If the inventor(s) and/or their immediate family have a stake in a licensee-company, then they are required to disclose the stake they and /or their immediate family have in the company, and license or an assignment of rights for a patent to the licensee- company in such circumstances, shall be subject to the approval of the IP Management Committee.

9 DISPUTE RESOLUTION

9.1 In case of any disputes between IISc and the Inventor(s) regarding the implementation of the IP policy, the inventor(s) may appeal to the Director of IISc. Efforts shall be made to address the concerns of the inventor(s) *by developing and instituting an arbitration mechanism and arrangement*. The Director's decision in this regard would be final and binding on *both institute and inventor*.

10 JURISDICTION

As a policy, all agreements to be signed by IISc will have the jurisdiction of the courts in Bangalore and shall be governed by appropriate laws in India.

OPERATING GUIDELINES FOR I P POLICY OF IISC

PREAMBLE

- 1 Indian Institute of Science (IISc) is a premier institution devoted for postgraduate education in engineering and advanced research in all branches of *science and engineering*. The fundamental focus of research at IISc is in creating an environment of open dissemination of research results and free exchange of information amongst academicians and scholars.. IISc, along with its role as a pioneer in generation of fundamental *knowledge in science and technology in India, undertakes also programs of social and economic relevance to the country*.. It is necessary therefore, to have in place, systems and mechanisms *to structure the process of generating and developing applied knowledge and link their commercial exploitation under the provisions of IPR regimes in the country*.
- 2 The Intellectual Property could be protected in the form of : patent, industrial design, trademark, copyright, confidential information, technical know-how, mask works, process, plans, specifications, guidelines, graphics, training materials, software programs, records, drawings, instruction guides, student materials, new techniques, algorithms, concepts etc. The intangible product of the intellect must have potential for industrial application or potential for augmenting the S&T knowledge base if it must be protected by the Indian Institute of Science.

2.1 **A patent** is granted for any invention capable of commercial application. For it to meet the requirements of patentability, there has to be Novelty, Utility *and Non-obviousness*. There must be an inventive step, which under law, is one, which is *not obvious to the person skilled in the art. The invention may relate to a new product or an improvement of an existing product or a new process of manufacturing an existing or a new product.*

2.2 **Design** protection is available for any prototype, which influences consumer's choice by appealing to the aesthetic sense of the consumer. In other words, design protection is available for "the look of the article", appearance and other visual features. There is no design protection for functional features.

2.3 **Copyright** : Patent seeks to protect the applied and extension research, the law of copyright seeks to protect pure or basic research. The requirements of copyright law are: Originality, meaning its origin to the author. Unlike patents, copyright law does not demand compulsory registration. Under the copyright, the form of the expression can only be protected and not the idea itself. Copyright subsists in any original work specified in the Copyright Act which are (i) a literary, dramatic and musical or artistic work, (ii) a cinematograph film and (iii) a sound recording. Literary works include computer programs, tables and compilations including computer databases.

2.4 **Know-how** and **confidential information** can be protected only so long as the owner is able to keep them secret and takes action against unlawful use of such information by others by an action of breach of confidence or contract.

3 **PROCEDURE FOR IP PROTECTION:**

All applications for patents will be forwarded to Chairman, I P Cell, irrespective of whether the inventions have resulted from the in-house projects, or projects under CSIC/ SID/ CSSP/ Part II B activities. And the same will be managed by the IP Management Committee of the Institute, *duly constituted by the Director, IISc..*

4. **WHEN SHOULD FACULTY APPROACH I P CELL TO DISCUSS A POSSIBLE PATENT?**

IISc has constituted an exclusive IP cell. Any faculty, who believes to be in possession of a potential intellectual property generated while in service of the IISc may approach and set up discussions with Chairman of the IP Cell at any mutually convenient time. In any case, the chosen time for discussion should be sufficiently in advance of maturation of the idea into a process or product. When the invention is only at the *conception* stage, it is still possible to file a provisional specification, which has to be followed up with a complete specification within 12 months. If it is not done, the patent application is deemed to have been abandoned. On the other hand, if the inventor has at his hand an inventive product, which can be marketed immediately, then complete specification can be lodged straight away.

5. INTELLECTUAL PROPERTY EVALUATION COMMITTEE:

The application for patent shall be scrutinized/examined by a Committee consisting of the following:

- (i) Chairman, I P Management Committee ... Chairman
- (ii) Chairman of the Division of the Inventor
- (iii) Two expert members from the Institute to
be identified by the Chairman
- (iv) Chairman, I P Cell ... Member-Secretary

The inventors will be requested to make a presentation of their case before the **IP Evaluation** Committee. In case, the Committee recommends for filing of patents, the Chairman, I P Cell will then process the application through one of the approved attorneys from the panel maintained at IP Cell.

6 ASSISTANCE IN FILLING THE PROFORMA

Once the Evaluation Committee approves protecting the Intellectual output, the I P Cell shall provide an Patent Attorney for drafting the IP application. The following aspects need to be adopted to prepare the patent papers:

- Objective of the invention: What is the problem one is trying to solve? What are the issues involved?

- What prior art searches have been made? Which databases? Search strategies adopted? Did searches cover gray literature – advertisements, pamphlets, knowledge already available to public either published or unpublished.
- How does the present invention differ from the known prior art? It is important to establish that the invention is not an obvious extension of the prior art to prove non-obviousness. Are there any unexpected findings in the present invention? What are those aspects of the invention that previous workers have not been able to find solution for? *What are the potentials for commercial applications of the new Intellectual Property in relation to the previous products in the same area, if known?*
- To establish usefulness of the invention, one should highlight technical value of the invention and illustrate where and how the solutions obtained over the prior art can be applied with distinction. One might consider savings in the cost, materials, manpower, energy, durability, efficiency, time etc.,
- The boundary conditions of the parameters under which this invention works effectively and beyond which the invention may not work. Also outline several other applications of the invention if any.
- Furnish all the information in the proforma which can be collected from office of I P Cell or through e-mail.

If information on the format (each extending to at least a couple of pages) is given to the attorney, then the attorney will be in a position to prepare a draft claim. In order to ensure good protection, it is necessary that the attorney understands the invention. A good patent specification should have synergetic efforts of the inventor and the patent attorney.

7 FILING OF APPLICATIONS FOR IPR AND SUPPORT

7.1 All applications for IPR shall be filed by the Registrar in the name of the Institute as owner of the IPR. Inventor's name will be filled in the application at appropriate places. All applications will be filed in India. *Inventors will assign the exclusive right of ownership to the institute in order to facilitate the institute to file, secure and commercialize the IPRs without any encumbrance.*

7.2 PATENT CO-OPERATION TREATY (PCT) APPLICATION :

Any patent which needs protection outside India, the procedure would be *to* first file a provisional patent in India and within 12 months, file a PCT application along with *an application for filing an Indian patent and this would be based on* the recommendation of the IP Evaluation Committee. The PCT route is *preferred*, efficient and economical.

7.3 The IP Cell, would meet the expenses of IP to the stage of filing i.e. the statutory fee and patent attorney's fee. If there are no takers for the technology within 30 months from the date of filing, IISc shall not assume the responsibility of further payments. In case the inventors need more time to identify the potential technology takers, they may approach the IP Management Committee to extend this time frame. In case the inventors are interested, IISc may *re-assign* such rights *back* to them to sustain such IP on

condition that the inventor(s) pay IISc one and half times the initial expenses incurred by IISc for filing the IP. For the IP, where IISc has already *incurred costs*, the renewal *of IPR protection* is subject to the condition *that every renewed IPR is actively used by at least one IP user. Otherwise, the IISc may decide to offer to the inventors re-assignment of the IP under the same clauses as specified above namely the inventor pays IISc 150 % of the costs incurred by the institute in securing the IP.*

7.4 If IISc opts not to undertake such protection in any specific country requested by the inventor(s), IISc may assign rights of the IP in that country to the inventor(s) for the purpose of such protection.

7.5 A decision on annual renewal of IP rights will be taken by the IP Evaluation Committee. If IISc decides not to renew the IPR in any country, then it may assign the rights of the IP in that country to the inventor(s) upon a request to that effect from the inventor(s). In case of patents, the process of re-assignment will be completed in a period of three months before the due date for its renewal.

7.6 If an inventor decides *to abandon or withdraw the application for a patent at some mid- stage of processing, prior approval of the IP Management Committee of is required.*

INTELLECTUAL PROPERTY CELL

1. The cell shall have the following structure and Committee to guide and carry out its responsibilities.

1.1 STRUCTURE

1	Chairman of IP Cell	Appointed by the Director
2	Two Associate Faculty members	One nominated by Chairman, IP Management Committee, Another jointly Nominated by Chairman of CSIC, CSSP, CCE, TDM, ABETS and SID
3	IPR Legal Adviser/ Consultant :	A well known practicing patent attorney on a retainer ship basis to be appointed by the IP Management Committee. The Adviser/Consultant would render the necessary advice to IP Cell to provide information on most vulnerable Patent Rules and regulation – in the wake of Patent Co-operation Treaty (PCT) and so on. He shall also assist in drafting and evaluating all MOUs.
4	Office Staff	LDC/UDC, Helper

1.2 RESPONSIBILITIES OF IP CELL:

The Cell shall inter-alia have the responsibilities for the following:

- ***IP COUNCILING: IP Cell will council and interact with inventors of potential Intellectual Products and assist the institute in identifying the IPR potentials***

- ***IP MANAGEMENT:*** Filing, Maintaining and Monitoring ***and managing*** of Patents and coordination between attorneys, faculty (inventor(s)), and IISc authorities.
- ***IP TRANSACTIONS:*** Advising, drafting and monitoring all **MOUs** of IISc with special reference to IP relating matters. All the MOUs emanating from various Centres/Units of IISc shall be vetted by the IP Cell.
- ***IP POLICY FORMULATION:*** Framing **IISc I P Policy and amendments** from time to time for consideration of the Institute authorities.
- ***PROMOTING IP – AWARENESS:*** *The IP Cell will undertake such measures which promote awareness of IP rights and strive to develop an IP culture* within IISc fraternity
- ***CAPITALIZATION OF IP ASSETS:*** The Cell shall periodically recommend patentable technologies to potential licensing agencies, CII, and other Financial Institutions to invest in venture capital towards the new technologies. The Cell shall identify specific industries and direct marketing of these technologies and promote advertising in-house technologies of IISc via electronic media/news paper and magazines, and publish in the CSIC News letter. On the advice of IP Management Committee, the IP cell would also enlist the services of reputed Management Consultants for ***capitalization and*** commercialization of patented ***technologies owned by IISc***. The IP Cell will interact with the faculty members, patent attorneys, financial institutions and industries and follow-up on royalty payments from industries.
- ***ASSISTANCE IN TECHNOLOGY TRANSFER :*** The Cell shall handle all technology transfers generated through Technology Development Mission (TDM), CSIC, CSSP, SID, ABETS and other Centres/Units from IISc. This is

because the protocols for patent commercialization and direct technology transfer are identical and IISc could expedite the process if taken under one umbrella.

- **REPORTING ON IP ASSETS AND IPR MANAGEMENT:** IP Cell will submit periodically reports on *IP assets and current status on IPR Management to the Council of the Institute for consideration and advice*

2. IP Management Committee :

The composition of the IP Management committee shall be as follows:

1. Chairman appointed by the Director ... Chairman
2. Chairman, IRC
3. Chairman, CSIC
4. Chairman, CSSP
5. Chairman, CCE
6. Chief Executive, Society for Innovation & Development
7. Chief Executive, ABETS
8. Chief Coordinator, TDM
- 9-10 Two Divisional Chairman appointed by the Director
11. Registrar
12. Financial Controller
13. Deputy Registrar, Unit IA
14. Chairman of IP Cell ... Member – Secretary
15. The Committee may co-opt additional members as may be necessary

The IP Management Committee is essentially a policy formulating and think tank committee. Whereas executive actions will be carried out under the activities of IP

cell, the IP policy and Management Committee will formulate guidelines and policies for adoption by IISc after due process of approval by the Council of the institute.

The Committee may seek expert advice from renowned financial consultants, including experts from the financial / business institutions such as FICCI, CII, IDBI, ICICI, etc.

The Committee shall meet at least twice in a year.

2.1 The Committee among other things, will have the following responsibilities:

1. Develop institutional policy covering all aspects of Intellectual Property / Patent / Copyright/Technology Transfer/Material Transfer, disclosure policy, ownership, exploitation, benefit sharing etc.
2. *Devise methodologies for the promotion of* culture of patenting of technology and organize Awareness programs for faculty/students/administrative personnel periodically.
3. Appointment of IP Adviser/consultant
4. Appointment of a panel of attorneys for processing / filing of applications for patents etc.
5. *Approve periodical* patent / Intellectual Property audits *through professional experts*
6. *Recommend terms of* payment of annuity retention fees *for professional services*

7. *Advice such proactive* measures *which will* promote commercialization of patents, including exhibition of patents, Industry meet etc.
8. *Advice on all such and other matters as are appropriate for securing the protection and management of IPs in the interests of the country, institute and the inventors.*

3 FINANCE:

IP Cell is expected to pay for about 30 Indian patents and 5 US/foreign patents per year up to sealing stage. An amount of Rs.50.0 lakhs would be required for these purposes. It is envisaged that in a period of 5 years at least two or three major technologies would fructify which can *contribute additionally to soundness* the of the financial health of IP Cell. *There will be a charge levied on all commercialized IP products for services provided by the IP cell at a minimum of 10% of the sale proceeds of the IP or at a specified rate. Such revenue in the course of time is expected to render IP management activities self reliant and supporting. Until such time the IP cell becomes self supporting, the institute will need to provide budgetary support with the approval of the council of the institute.*