



# Postgraduate Diploma

In

# **Patinformatics**

(Patent Informatics)

Offered by

## CSIR – Unit for Research and Development of Information Products (URDIP)



Under the Aegis of



Academy of Scientific & Innovative Research Set up by an Act of Parliament, An Institute of National Importance

Admission Brochure (2014-2015)



#### About AcSIR

Academy of Scientific and Innovative Research (AcSIR) was established in 2011 as an 'Institution of National Importance', by an act of the Parliament. AcSIR's mandate is to train tomorrow's leaders in Science & Technology by providing training and research opportunities in emerging areas of national and international importance not covered by institutions of higher learning in India.

The Academy has adopted a 'Hub and Spokes' model wherein the hub is responsible for centralized administrative functions, while the 37 constituent laboratories and 6 units of CSIR spread across the country serve as centres of advanced training in diverse disciplines based on their areas of specializations and expertise acquired as a result of several decades of experience . The Academy presently has about 2200 full time faculty members from CSIR Laboratories, over 2000 students enrolled in various programmes and 7 non-academic staff members.

## About CSIR – URDIP

CSIR's Unit for Research and Development of Information Products (URDIP) is a specialized unit of the CSIR, set up to help organizations meet the challenges of the new knowledge era. It provides Intellectual Property Management and Techno-commercial services critical to the project identification, selection, planning and appraisal during each phase of the project life cycle. URDIP's inputs in these areas are used by clients for research and business planning, to identify emerging technologies, new avenues for product development, new applications, technology trends, competing technologies and drive their R&D as well as business strategy, support innovation management to position themselves for competitive advantage in the high technology and global business landscape.

CSIR-URDIP provides Patent Informatics (Patinformatics) services to wide spectrum of clients including start-up companies, SMEs, Research institutes within and outside CSIR, large Indian corporate and Multinational corporations including NGOs.



## **Patinformatics**

The term Patinformatics<sup>1</sup> describes the science of searching, analysing and presenting patent information to identify relationships and trends that would not be apparent while working with patent documents on one-on-one basis. Patinformatics has been used for:

- Patent analysis
- Patent intelligence
- Patent mapping

Patinformatics output along with scientific publications databases can be used to identify emerging technologies, and technology leaders. On the other hand, the output complemented with industry and business databases, helps valuation of businesses based on their intellectual capital, identification of joint venture partners, competitors and merger and acquisition targets as well as licensing opportunities. This requires training in technolegal and economic aspects of patent portfolio creation, optimization, management and exploitation in addition to the art of patent searching and analysis.

As a part of the AcSIR's mandate to train scientific and technological manpower in areas of future importance, the Postgraduate Diploma in Patinformatics being launched by CSIR-URDIP under the aegis of AcSIR, will train young science and technology graduates not only in the art of Patinformatics by teaching patent searching, analysis and presentation techniques, but also techno-legal aspects viz. criteria for patentability, infringement analysis, and techno-economic exploitation aspects such as portfolio management, licensing and IP based M&A, so that the participants appreciate the larger role of Patinformatics by undertaking more meaningful patent searches and deliver better value to their organizations and clients.

<sup>&</sup>lt;sup>1</sup>Term coined by Mr. Anthony Trippe

## Why Patinformatics

- i. Patinformatics is fast emerging as a science due to the simple reason that there is an International Patent Classification System administrated by World Intellectual Property Organization; there is an internationally accepted system of patent families, an international standard for creation of patent databases, a movement towards harmonization of patent laws and systems all over the world and application of software tools for search, retrieval and analysis of patents. No formal training is provided in this area by the institutions of higher education in the country.
- ii. Patent Information is growing exponentially and in addition to new patents being issued worldwide, the patent issuing authorities and database producers are creating digital archives and making them available over the Internet. Searching a needle in a haystack burgeoning in volume continuously, calls for new techniques of identifying the needle based on its characteristics other than the size. Patinformatics tries to evolve new tools to identify these needles in the haystacks.
- iii. IP search and analysis requires knowledge of Patinformatics plus domain knowledge. It is a manpower and time intensive activity. Industry does not have trained manpower in this field so they prefer to get the assignments done from specialist groups. This has created market for services and demand for trained manpower. CSIR can fill this need because of its knowledge of Patinformatics and domain knowledge in different disciplines.
- Patent information finds major applications in research and business planning where patent analysis provides valuable information on technology trends and competitor's positions.

### Why CSIR-URDIP for Patinformatics?

CSIR-URDIP has been extensively involved in various patent analysis and mapping activities for more than a decade and has conducted a variety of comprehensive analysis for Indian and Foreign clients. CSIR-URDIP has been a part of different national programmes and has served the research groups with timely and useful technological information. Through this program CSIR-URDIP will share this knowledge and expertise to create trained human resources for the country.

#### **Objective of the Course**

The participants will be introduced to Intellectual Property Rights (IPR) and the importance of patent information in research and business. The course will basically focus on Patinformatics and its applications which will enable the participants to develop IP landscapes, technology scenario analysis, white space mapping, competitive intelligence studies, new product development, patentability, infringement analysis, freedom to operate studies, citation analysis, patent valuation etc. This course will thus help participants develop their skills in patent searching and analysis and use this information for research and business planning.

#### **Employment Opportunities**

The young professionals trained in this discipline will find growing job opportunities in Corporate Planning, Business Development, IP and R&D Management functions as well as in Law firms, Consultancy companies and other Knowledge processing organizations.

The previous trainees at CSIR-URDIP are currently employed in companies like Biocon, Bajaj Motors Ltd., Emcure Pharmaceuticals, Infosys, Lupin Laboratories, Mahyco, Nagarjuna Fertilizers and Chemicals Ltd., Praj Industries, Panacea Biotech, Dr. Reddy's Labs, Reliance Industries Ltd., Solvay S.A. and Tata Motors. Others have been employed by Knowledge processing organizations such as Dolcera, Pangea3, Scitech Patent Art and law firms such as Bhate and Ponkshe Associates, R.K.Dewan, Krishna and Saurashtri, Legasis as well as government research agencies like BIRAC.

## **Course Structure and Details**

The Postgraduate Diploma in Patinformatics is devised to create competent professionals in the field of Patinformatics to cater to the Industry needs for professionals trained in patent analytics and techno-legal and techno-commercial aspects of IP management.

The course will be of one year duration and will be full time. The lectures will be delivered by Scientists at CSIR-URDIP who have a decade of experience in the area of Patinformatics. It will consist of four quarters with 12 modules of theory classes and hands-on practical sessions working on databases and analytical tools including daily assignments and projects. Additional topics on criteria for patentability, infringement analysis, valuation and licensing will also be taught so that the participants appreciate the importance of Patinformatics and can deliver better value by undertaking more meaningful patent searches during the course of their practical training and also in future employment. Along with theory classes, the participants will also be required to do daily assignments and submit comprehensive projects on Patinformatics at the end of each quarter. At the end of second and fourth quarters, the participants will be required to give the examination and present their reports.

### **Course Modules (Theory)**

- 1. Introduction to IPR and Patents and Patent Legislation
- 2. International Framework
- 3. Patinformatics and Basics of Patent Searching
- 4. Searching on Patent Databases
- 5. Understanding Database Features
- 6. Advanced Patent Searching
- 7. Information Searching in various Domains
- 8. Patent Analytics & Mapping and its Application
- 9. Patent Information for Technology Planning and Management
- 10. Patinformatics for Patent Valuation
- 11. Patinformatics for R&D Planning, Strategic Patenting and Performance Benchmarking
- 12. Patinformatics for Patent Strategy and Portfolio Management

**Practicals:** The practical will involve designing effective search strategies, hands-on experience of searching using various databases, analysis exercises and applications of patent analysis.

Quarter	Modules	Credits
I	3 modules + 1 project	10
II	3 modules + 1 project	10
	3 modules + 1 project	10
IV 🧹	3 modules + 1 project	10
Hume	Total S	40

## Academic Requirements

Minimum qualification required is a Post Graduate Degree from recognized universities set up by an act of Parliament/state legislature/ approved by UGC. The candidate should have any one of the following:

- Masters degree with minimum of 60% marks in any of the life sciences, chemical sciences and physical sciences
- M. Pharm. with minimum of 60% marks and GATE qualified
- B.E (Min. 60% marks) and GATE qualified
- L.L.B with Science background (Min. 60% marks at B.Sc. and L.L.B)
- M. Lib. Sci. with graduation in science (Min.60% at each degree)

The selection will be made on the basis of an entrance examination and interview. Only limited number of candidates will be called for interview based on their performance in the entrance examination as per shortlisting criteria decided by the Admission Committee. CSIR-URDIP reserves the right of admission based on merit/experience and educational qualifications. In case of dispute, decision of Head, CSIR-URDIP will be final and cannot be challenged.

## **Number of Seats and Allocation**

- The number of seats are 30.
- The distribution of seats will be as follows:
  - o Life Sciences- Six seats
  - Chemical and Pharmaceutical sciences Ten seats
  - Engineering- Eight seats (Mechanical Engg.-2, Electrical Engg.- 2, Computer Engg./IT-2, Other branches of Engg.-2)
  - 6 Seats Others (Physical Sciences/L.L.B/ Library Science)
- If the seats for any branch are not filled, they will be filled by candidates from

other branches as per priority decided by the Admission Committee. The decision of Head URDIP will be final in all matters related to admissions.

## Admission Procedure

The applications have to be submitted online through CSIR-URDIP website (<u>www.urdip.res.in</u>). The application form should be accompanied with an application fee of Rs 1000/- (Rs.500 in case of SC/ST candidates) to be paid in the SBI Power Jyoti account.

## Admission Calendar

No.	Activity	Time	
1.	Online application submission	June 4, 2014 – June 20, 2014	
2.	Entrance examination	July 6, 2014	
3.	Interview	July 17-19, 2014	
4.	Declaration of results (on the web)	July 20-21, 2014	
5.	Last date for payment of course fees	July 31, 2014	
6.	Course begins on	August 4, 2014	

The entrance examination will be held on July 6, 2014 at four centres of Pune, Kolkata, Chennai and Delhi. The interviews will be held during July 17-19, 2014 at CSIR-URDIP, Pune.

### **Fees**

The tuition fees for the complete course will be Rs. 50,000/ - payable in advance at the time of admission.

For any further queries, email to admission@urdip.res.in