

## **Annual Report 2015-16.**

**Report of the Activities of Dr Rekha Chaturvedi, MHRD IPR Chair (Technical) at Cluster Innovation Centre, University of Delhi, for the period April 2015 to March 2016.**

### **1. IP Education & Awareness:**

#### **(a) IPR Training Events Organized:**

- IPR workshop was organized at Cluster Innovation Centre, DU, on 14<sup>th</sup> Dec. 2015 titled "IPR workshop for Researchers, where 110 participants comprising research scholars and a few faculty members participated. The resource persons were drawn from IPR experts, Patent office officials, IPR Chair and patent firms.
- An IPR program of "Training the Trainers" has been organized for training the college teachers at Miranda House on 15<sup>th</sup> Jan 2016.
- An Outreach program has been organized on IPR for MSMEs on 17<sup>th</sup> March 2016 at Faridabad in collaboration with PHD Chamber of Commerce, Laghu Udyog Bharti and Ministry of MSME.
- Consultations and guidance on IPR matters provided to DU students and faculty from time to time.

#### **(b) Delivered lectures on IP issues:**

- Delivered lectures on IPR and Patents during the IP event organised on 11<sup>th</sup> Feb. 2015 at Deen Dayal Upadhyay College, University of Delhi.
- Delivered a lecture on "Managing IP Tech-transfer in the Universities and Research Institutes in India", during the IV Annual IP Teaching Workshop 14<sup>th</sup> and 15<sup>th</sup> February, 2015 Organized by National Law University, Delhi
- Delivered a talk titled, "Issues & Challenges for IPR & Tech-Transfer Management in Universities and Research Institutes in India", at PHD Chamber of Commerce, New Delhi, during the 2<sup>nd</sup> National Workshop on Citation Analysis, Impact factor,

Patent and Copyrights for Maximizing Research Impact” held on 27<sup>th</sup> Feb 2015.

- Delivered lead lecture on “IPR Management in Indian Universities” during “IPR Management in Life Sciences & Agriculture” under the aegis of Geographical Indication, IPR & Organic Facilitation Cell at UPCAR, Lucknow, held during 1-2 June 2015 at Amity University, NOIDA (UP).
- Delivered 2 talks titled below in the workshop Training the Trainers held at Miranda House on 15<sup>th</sup> Jan. 2016:

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- ✓ Patentability and Ethical Issues in Biotechnology Patenting,
  - ✓ Invention Disclosure and Patentability Assessment.
- Invited talk delivered titled: Use of Patent Searches in Research Paper Writing, at PHD Chamber of Commerce, New Delhi at PHD House on 26th Feb. 2016 during the Workshop on, “Assessing Impact of Research: Developing Better Research Skills”, organised by PHD Chamber of Commerce.
  - Issues and Challenges for Patenting in MSMEs, Lecture delivered during the Outreach Program on IPR, organized on 17th March 2016, by Delhi University (under the aegis of MHRD IPR Chair) in collaboration with PHD Chamber of Commerce, Laghu Udyog Bharti and Ministry of MSME in Faridabad, Haryana.
  - A talk titled: Patenting - Scientist’s Perspective: Common Mistakes and Challenges Faced by Scientists” delivered on March 18, 2016 during IPR awareness workshop organized by the IP law firm K&S Partners, Gurgaon.

## **2. Participation in the IP events:**

- Participated in the IV Annual IP Teaching Workshop 14<sup>th</sup> and 15<sup>th</sup> February, 2015 Organised by National Law University, Delhi In association with CASRIP, University of Washington School of Law, Seattle.
- Participated in the a panel discussion entitled ‘Intellectual Property and Innovation – Unlimited Potential’, on 18<sup>th</sup> Feb. 2015 at Hotel Tajpalace organized by the U.S. Chamber of Commerce’s Global Intellectual Property Center (GIPC).

- World IP Day-2015 "IP as Frontline Tool for 'Make in India'" on 29 April 2015, Venue: FICCI, Federation House, Tansen Marg, New Delhi,
- Expert panelist for the Session on "Revenue Sharing Model, IPR Manageability, Copyright and Legal Issues" in the Brainstorming Meet on E-Textbooks: Access for Distance Learners" organized by the School of Open Learning on 15th October, 2015 , at the event of Partnership with publishers for sharing digitalized content on e-text book platform.
- Participated in the interactive Symposium "Innovate or ©opy paste?" – A debate on innovation and intellectual property in the health sector on 17 November 2015 organized by the Ambassador of Switzerland at the Multipurpose Hall, India International Centre, New Delhi.
- 21st Technology Summit & Expo; 17-18 December 2015, organized by Confederation of Indian Industry (CII) at Hotel The Lalit, New Delhi.
- Invited to participate in the IP event: "Innovation and Intellectual property Rights – Infinite possibilities for India", organized by Global Intellectual Property Centre, under the aegis of US Chamber of Commerce (Strategic Partnership Group, SPAG), on 16th Feb. 2016 at Hotel Taj Palace, New Delhi.

### **3. IPR Cell Management:**

- Consultation and guidance on IPR issues is provided to faculty and students.
- Nine Invention Disclosures received from DU faculties have been examined and analysed for patentability assessment (list enclosed as Enclosure 1).
- Handling the earlier filed patent applications and interacting with the attorney firms.
- Updating and management of patent database of DU.
- Patent drafting and filing of (3 patents specifications) two Indian complete and one provisional Indian patent applications has been done as detailed in Enclosure 2.
- Regular liaison with the patent lawyers and Indian patent Office regarding patent issues,

- Advice rendered on tech-transfer issues.

#### **4. Preparation, updation & Maintenance of the Portfolio of Delhi University Patents.**

Thorough searches and scanning of the freely available Indian, European, US and WIPO patent databases has been carried out to search for the patents of Delhi University and its faculty. The current status of patents were also ascertained and a detailed database table of active patents and applications has been prepared. The patent portfolio of DU is displayed on the DU website.

#### **5. Preparation of non-disclosing abstracts of the DU patents:**

Non-disclosing abstracts of the inforce granted patents have been prepared and are ready for uploading on DU website. These abstracts would be useful to attract potential licensees/ upgradation for University Intellectual Property . Another benefit would be for attracting fruitful collaborations with industry and aother prestigious research organizations.

#### **6. Engagement of Research Staff:**

Two candidates have been engaged as Junior Research fellows wef 1st Jan 2016.

#### **7. Consultation provided to DU:**

- Advice for various MoUs & MoAs of Delhi University Departments from time to time has been provided on IPR issues (including Collaborative Research and Tech-Transfer Agreements) through Reserch Council of DU and for industry sponsored projects.
  - Providing consultations from time to time on copyright issues and Plagiarism issues to Delhi University faculty & students, directly or through Research Council of DU.
  - Provision of information on patents from time to time to CPIO towards replies to relevant RTI questions.
  - Consultation provided to DU students and faculty from time to time on IPR matters including copyright and plagiarism issues.
8. Nominated as a member of Delhi University committee for “IPR Cell & Patent Fund”.

#### **9. Consultation provided to MHRD:**

- (1) Provided comments to DIPP regarding the Utility Model Patent legislation.

(2) Provided comments on to MHRD on the first draft of the “National IPR Policy” .

#### **10. Research Activity:**

1. Research work on the topic “Access to Medicines to the Indian Public” has been taken up where issues of Compulsory Licence and Section 3 (d) of Indian Patent Act on access to medicines by the Indian Public have been researched.

**Outcome:** 2 research papers published in peer reviewed journals.

2. Research work on IPR Issues on Use of Patented Research Tools by Biologists has been taken up:

**Outcome:** One Publication in peer reviewed research journal.

#### **Research initiated on the topics:**

2. Comparative Analysis of IP Law & Competition Law.
3. Patent Landscape Analysis: Antifungals.
4. Impact of Flexibilities and Limitations under TRIPS for copyright issues..

#### **11. Papers published:** Three Research articles published during the year in the peer reviewed journals:

1. Amanpreet Kaur and Rekha Chaturvedi, 2015, “Compulsory Licensing of Drugs and Pharmaceuticals: Issues and Dilemma” Journal of Intellectual Property Rights, Vol 20, September 2015, pp 279-287.
2. Rekha Chaturvedi, 2015, “Intellectual Property Rights Issues For Research Tools In Biotechnology Research”, Journal of Proteins and Proteomics 6(3), 2015, pp. 225-236.
3. Shalini Arora and Rekha Chaturvedi, 2016 “Section 3(D): Implications and Key Concern for Pharmaceutical Sector”, Journal of Intellectual Property Rights, Vol.21(1): 16-26.

**Enclosure 1:**

**INVENTION DISCLOSURES EXAMINED FOR PATENTABILITY  
ASSESSMENT DURING 2015-2016**

1.	In vivo radio protective efficacy of DMA	Vibha Tendon, Vinod Tiwari	Department of Chemistry, University of Delhi	Invention is not patentable due to prior disclosure in the poster by authors.
2.	Sustainability audit criteria for electronic products	Sushma Goel, Lalit Das and Bhawana Chanana	Department of resource management and design. Lady Irwin college. University of Delhi	Invention was found to be non-patentable.
3.	Peptides to combat human papillomavirus induced cervical cancer and applications thereof.	Alo Nag, Suman Kundu, Vaibhav Chand, Abhijeet Kapoor	Department of biochemistry, UDSC	<b>Invention found patentable. Provisional Indian patent application drafted and filed.</b>
4.	Versatile table top SPR setup for studying optical properties of materials in liquid and thin film form, temperature and gas sensing.	Vinay Gupta, Monika Tomar, Anjali Sharma, Ayushi Paliwal	Department of Physics and Astrophysics, University of Delhi	Not patentable
5.	A convenient route for the synthesis of ortho, meta and para substituted diphenylphosphinoamines.	Sushil Kumar, Ram Kishan, Rajeev Gupta	Department of chemistry, University of Delhi	<b>Invention found patentable. Complete Indian patent application drafted and filed.</b>
6.	Solar farmer's jacket	Sushma Goell, T. G. Rupa, Ruchira Agarwal	Dept. of Resource Management and Design application. Lady Irwin College	Invention was found to be non-patentable
7.	Solar toddler tricycle	Sushma Goel, T.G. Rupa, Ruchira Agarwal	Dept. of Resource Management and Design application. Lady Irwin College ,	Invention was found to be non-patentable
8	Solar garden/ outdoor table	Sushma Goel, T. G. Rupa, Ruchira Agarwal	Dept. of Resource Management and Design application. Lady Irwin College	Invention was found to be non-patentable
9.	Sensitive CNG/PNG sensor having integrator microheater and nanocatalytic clusters loaded $\text{SnO}_2$ layer.	Vinay Gupta, Monika Tomar, Anjali Sharma, Avneet Singh	Department of physics and Astrophysics, University of Delhi	<b>Patent under drafting</b>

**Enclosure: 2**

PATENT APPLICATIONS DRAFTED AND FILED					
S. No.	Title of Invention	Inventor	Application Number	Application Date	Department
1.	A device for measuring trigonometric functions.	Pankaj Tyagi; Kamal Ranjan; Vikas Tomar; Jyoti Sharma; Raghvendra Tripathi.	1068/DEL/2015	16-04-2015 Provisional	Cluster Innovation Centre
2.	Peptides to combat human papillomavirus induced cervical cancer and applications thereof.	Alo Nag; Suman Kundu; Vaibhav Chand; Abhijeet Kapoor.	201611003939	11-02-2016 Provisional	Department of Biochemistry UDSC
3.	A convenient route for the synthesis of ortho, meta and para substituted diphenylphosphinoamine .	Rajeev Gupta; Sushil Kumar; Ram Kishan.	201611008186	9-03-2016 Complete	Department of Chemistry