

## National Conference on IPR in Health Sciences March 22 to 23, 2017

## Report

# Submitted to Indian Council of Medical Research New Delhi



## Submitted by

Amity Institute of Microbial Technology Amity University Uttar Pradesh Sector 125, NOIDA, 201313

## **Compiled by:**

### **Convener (National Conference on IPR in Health Sciences)**

Prof. (Dr.) Abha Agnihotri Head, Centre for Agricultural Biotechnology Amity Institute of Microbial Technology Block E-3, 4th Floor Amity University Uttar Pradesh Sector 125, Noida - 201313 (NCR), India Tel: +91-120- 4392418, +91-97-171-70892

Email: aagnihotri@amity.edu

## March 22 to 23, 2017

#### **CONTENTS**

1. Genesis	1-2
2. Organizers	3-4
3. Technical Program	5-6
4. Technical Report	7-14
5. Recommendations	15
6. Conference Brochure	16-17
7. List of participants	18-20
7. Conference photographs	21-28

March 22 to 23, 2017

#### **GENESIS**

The Trade Related Intellectual Property Rights makes patents available in all fields of technology, including biotechnology and health sciences, provided they are new, capable of industrial application, and involve an inventive step. Therefore, it is of utmost importance to understand the importance of IPRs and take necessary measures to protect the IP being generated by young researchers/ scientists and faculty working in various fields of research and development for its future licensing and commercialization.

During recent past, Amity Institute of Microbial Technology (AIMT), Amity University Uttar Pradesh has organized national/international workshops in this area (2008, 2009, 2013 & 2014). The series of such events were sponsored by national and international agencies such as NAAS, DBT, ICMR and USPTO with a focus on issues related to plant sciences.

The first workshop organized by us on 'IPR Management in Indian Agriculture under changing R&D Scenario – Implications of WTO, PVP&FR & Biodiversity Acts', was sponsored by National Academy of Agricultural Sciences and held on 17th Oct, 2008 at Amity University Uttar Pradesh, Noida.

The second in series 'Indo-US Sponsored International Congress-cum-Workshop on IPR' was organized during Oct 5 to 7, 2009 with more than 100 participants from India and abroad. The participants from academic research institutions, industry, law firms, government and non government organizations deliberated on important issues including fundamentals of IP, Public Private Partnership, Technology Transfer, Traditional Knowledge, Agriculture and Biotechnology. The deliberations of the congress have been published in the book entitled "Protecting Intellectual Property in Life Sciences; Ed. Dominic Keating, Ajit Varma, Abha Agnihotri".

The workshop on 'Intellectual Property and Commercialization in Biotechnology' sponsored by BIO, was organized on 13 Nov, 2013 that explored the basics of patent protection and commercialization, the role of technology transfer offices in universities, and the effect of existing and proposed laws and regulations on the innovation ecosystem in the biotechnology area in India and USA. Followed by this Indo- US Conference-cum- workshop on IPR', Jan 29-31, 2014 was jointly organized by USPTO and AIMT- Amity University, and sponsored by DBT and ICMR. Intensive deliberations on IPR were held under five technical sessions covering twenty four presentations by invited speakers who deliberated on diverse issues on IP protection in life sciences domain in India and abroad. During the conclusion and recommendation of the Indo - US IPR conference 2014, it was emphasized that;

- 1. There is a need to hold more such workshops at regular intervals at diverse locations for better awareness and understanding of IP issues by scientists and researchers, especially those working in remote areas. This culminated in organization of National Conference on IPR in Bio Sciences for Scientists from North- East Indian States organized by Amity Institute of Microbial Technology, Amity University in collaboration with University of Science and Technology, Meghalaya, July 21-23, 2015, sponsored by ICAR and ICMR.
- 2. Since the workshops mentioned above were mainly in the area of plant sciences, a need was felt for wider awareness generation of IP protection in the field of Health Sciences. In view of this the present conference "National Conference on IPR in Health Sciences", was organized, March 22 23, 2017, sponsored by ICMR.

The lead and plenary lectures were delivered by senior scientists/ technocrats from Universities/ Research Organizations and legal experts with specific time slot for interactive discussions. The workshop was attended by 85 participants including graduate students, research scholars, faculty members, scientists, government officials, policy makers, members of print and electronic media, R&D organizations, corporate and patent attorneys, which are involved in generation of IP and its application for economic growth.

March 22 to 23, 2017

#### **ORGANIZERS**

#### **PATRON-IN-CHIEF**

**Dr. Ashok K Chauhan**Founder President RBEF

#### **PATRONS**

Dr. Atul Chauhan

Chancellor Amity University Uttar Pradesh

Dr. (Mrs.) Balvinder Shukla

Vice Chancellor Amity University Uttar Pradesh

#### **CHAIRPERSON**

Prof. (Dr.) Ajit Varma

Distinguished Scientist & Professor of Eminence Amity Institute of Microbial Technology Amity University Uttar Pradesh, Noida

#### CONVENER

Prof. (Dr.) Abha Agnihotri

Head, Center for Agricultural Biotechnology & Professor, Amity Institute of Microbial Technology Amity University Uttar Pradesh, Noida aagnihotri@amity.edu **Mob**: 9717170892

#### **ORGANIZING SECRETARIES**

Dr. Kshitij Kumar Singh

Assistant Professor Amity Institute of Advanced Legal Studies Amity University Uttar Pradesh, Noida kksingh@amity.edu, **Mob**: 8826843264 Dr. Amit C Kharkwal

Dy. Director Amity Institute of Microbial Technology Amity University Uttar Pradesh, Noida ackharkwal@amity.edu, **Mob**: 9350266595

March 22 to 23, 2017

#### **Local Organizing Committee**

Chairperson

Prof. (Dr) Ajit Varma

Convener

Prof. (Dr.) Abha Agnihotri

**Registration & Finance** 

Dr. Menaka Devi Salam Ms. Uma Singhal Ms. Monika Gupta Ms. Manpreet Kaur Attri

Mr. Veer Singh

**Hospitality** 

Dr. Vivek Kumar Dr. Manoj Kumar Mr. Narendra Kumar

**Technical Presentations and Photography** 

Mr. Anil Chandra

Mr. Hemesh Joshi

**Rapporteurs** 

Ms. Supriya Kumar Ms. Surbhi Dabral **Organizing Secretaries** 

Dr. Amit C Kharkwal Dr. Kshitij Kumar Singh

**Transport** 

Dr. Ram Prasad Dr. Manoj Nath

Hall Arrangements, Compeering and Reception

Dr. Swati Tripathi Ms. Jaagriti Tyagi Ms. Shradha Nirwan Ms. Anupriya Chatterjee Ms. Diksha Bhola

**Student's Coordination** 

Dr. D.K. Chaudhary

Mr. Mohnessh Kalwani (Student Volunteer) Mr. Anup Kumar Sinha (Student Volunteer) Mr. Jyotirmay Srivastava (Student Volunteer)

#### Sponsored by



## **Technical Program**

## National Conference on Intellectual Property Rights (IPR) in Health Sciences On Day - One, 22 March, 2017

Venue: F-1, Seminar Hall

09:00 - 09:30 a.m.	Registration		
Inaugural Ceremony			
09:30 - 09:40 a.m.	Arrival and Welcome of the Guests at F-2 Foyer, Move to F-1 Seminar Hall		
09:40 - 09:45 a.m.	Welcome address by Prof. (Dr.) Abha Agnihotri		
<u>Techni</u>	ical Session I: Pharmaceutical Patents and Access to Medicine		
09:45 -10:30 a.m.	Patents, innovations, and Access to New Pharmaceuticals Dr Neeti Wilson, PhD Partner, Anand & Anand, Patent, Design, Plant Variety Protection and Contentious (IPO & IPAB)		
10:30 - 11:00 a.m.	Tea		
11:00 - 11:10 a.m.	Arrival of Chief Guest and Invocation		
11:10 12:00 p.m.	Key Note Address by Chief Guest		
_	<b>Dr. Sadhana Srivastava,</b> Scientist E, IPR Unit, Indian Council of Medical Research, Department of Health Research, New Delhi		
12:00 12:45 p.m.	Patenting of Pharmaceutical Products in India Dr Anushri Gupta (Ph D Biotechnology & LLB), Founder Member, Anushri Gupta & Associates, Intellectual Property Attorneys		
12:45 - 12:55 p.m.	Interactive Session		
12:55 - 01:00 p.m.	Felicitation		
01.00 - 01.10 p.m.	Some Thoughts by the Founder President, RBEF*		
01:10 - 02:00 p.m.	Lunch (By Invitation)		
Technical Session	on II: IP Protection to Tools & Technologies in Regenerative Medicines		
	& Stem Cell Research		
02:00 - 02:45 p.m.	Intellectual Property Rights in Stem Cell Research, Therapy & Regenerative Medicines Prof (Dr) Bhudev C Das, Chairman & Chair Professor, AIMMSCR & H.G. Khorana, Chair Professor, Maity Institute of Molecular Medicine & Stem Cell Research (AIMMSCR)		
02:45 - 03:30 p.m.	IPR in Regenerative Medicines Dr. Jyoti Yadav, Head, Planning, Monitoring and Evaluation, CSIR – Institute of Genomics and Integrative Biology, Delhi		
03:30 - 04:15 p.m.	Role of Patent on Affordability and Accessibility of Drugs, Vaccines, Diagnostics in Order to Control Malaria and Tuberculosis Dr. Tarakanta Jana, Head, Patent Informatics, SCIR – National Institute of Science Communication and Information Resources (NISCAIR)		
04:15 - 04:30 p.m.	Interactive Session		
04:30 - 04:35 p.m.	Felicitation		
04:35 - 04:45 p.m.	Tea		

<sup>\*</sup> Subject to availability

## **Technical Program**

### National Conference on Intellectual Property Rights (IPR) in Health Sciences On Day – Two, 23 March, 2017

Venue: F-1, Seminar Hall

Technical Session III: IP protection to Traditional Medicines		
09:30 - 10:00 a.m.	Challenges & opportunities in patenting Herbal Medicine (09.30 to 10)	
	Prof (Dr) Abhimanyu Kumar	
	Director, All India Institute of Ayurveda, Ministry of Ayush, Govt of India	
10:00 - 10:30 a.m.	Challenges in generating evidence for intellectual property in homeopathy	
	(10-10.30)	
	Dr. Kushal Banerjee	
	Dr. Kalyan Banerjee's Clinic, Chittaranjan Park, New Delhi	
10:30 - 11:00 a.m.	IP Protection on Traditional Medicines: challenges and way forward	
	(10.30-11)	
	Dr. Deepa K. Tiku	
	Partner and Patent Attorney, K&S Partners   Intellectual Property	
	Attorneys	
11:00 - 11:10 a.m.	Interaction	
11:10 - 11:15 a.m.	Felicitation	
11.15 - 11.30 a.m.	Tea	
<b>Technical Session IV: Regulatory Perspectives of Health Sciences and Medical Devices</b>		
11.30 - 12.00 p.m.	Regulation in IP tools and technologies in health sciences: An overview	
	(11.30-12)	
	Dr. R. Saha	
	IPR Consultant (Former Director TIFAC, Govt. of India), Noida	
12.00 - 12.30 p.m.	IP and Regulatory Issues relating to Personalised/Precision Medicines in	
	India	
	Dr. Kshitij Kumar Singh	
	Amity Institute of Advanced Legal Studies, Amity University, Noida	
12.30 - 12.35 p.m.	Felicitation	
12.35 - 12.55 p.m.	Valedictory & Summing Up	
	Panelists:	
	<b>Dr. R. Saha</b> , IPR Consultant (Former Director TIFAC, Govt. of India),	
	Noida- Chairperson	
	Dr. Suchita Markan, BCIL	
	Dr. Abha Agnihotri, AIMT	
	Dr. Pankaj Sharma, AIB	
	Dr. Kshitij Kumar Singh, AIALS	
12.55 – 01.00 p.m.	Vote of Thanks by <b>Dr. Amit C Kharkwal</b>	
01.00 p.m.	Lunch (By Invitation)	

#### **Technical report**

The technical sessions during the conference addressed four thematic areas:

- Pharmaceutical Patents and Access to Medicine
- IP protection to tools and technologies in Regenerative Medicines and Stem Cell Research
- IP protection to Traditional Medicines
- Regulatory Perspectives of Health Sciences and Medical Devices

The Key note address and lead lectures were delivered by senior scientists/ technocrats from Universities, Research Organizations and Legal Experts with interactive discussions. The primary objective of the proposed conference is to sensitize the participants in understanding the importance of IPRs and take necessary measures to protect the IP being generated by young researchers/ scientists and faculty, specifically in the area of Health Sciences for its future licensing and commercialization. The objectives of the conference were met through participation of 85 registered delegates including Scientists, Faculty and students. The list of registered delegates is enclosed. In addition 130 UG and PG students of Amity University participated as complimentary participants. The conference was successful in terms of meeting the expected learning outcome of the conference i.e., to provide a forum to the participants to deliberate on various forms and issues related to IPRs; its application and procedures, and to understand IP protection systems, intra/ inter-national technology transfer and its role in economic growth and development.

**Key Note Address: Intellectual Property Rights and Access to Health Care: Some Critical Issues and Concerns** 

**Dr. Sadhana Srivastava,** Scientist E, Intellectual Property Rights Unit, Innovation & Translation Research Unit, Indian Council of Medical Research, New Delhi (Chief Guest).

Dr. Srivastava discussed about how to uplift health of common people and communities at large. She discussed about the global disease burden and its tools, global IPR regimes like TRIPS. The main highlights of the talk were Indian Healthcare Scenario, the need for emphasis on research and development in health sciences, Indian patent system and its harmonization with TRIPS. She also talked about Gleevac case. She summed up her address with emphasis on the evident dual disease burden and the need to first go for protection of IP before any publication of data on public forum.

#### **TECHNICAL SESSION I**

#### **Pharmaceutical Patents and Access to Medicine**

Wednesday, 22 March 2017

#### Patents, Innovations and Access to New Pharmaceuticals

**Dr Neeti Wilson**, PhD Partner, Anand & Anand, Patent, Design, Plant Variety Protection and Contentious (IPO & IPAB)

Dr. Neeti Wilson talked about patents and innovations in pharmaceutical industry, she stressed on the fact that innovations and scientific progress through IPR leads to public benefit. Patents grant a legal right which is meant to offer incentives to innovators. She gave a background about International System of Patenting, and informed about Indian Patent Act with main focus on section 3(d), compulsory licensing and type of flexibilities. She concluded by saying that infrastructure is very important for reliable health system and supply system.

#### **Patenting of Pharmaceutical Products in India**

**Dr Anushri Gupta** (Ph D Biotechnology & LLB), Founder Member, Anushri Gupta & Associates, Intellectual Property Attorneys

Dr. Gupta focused on patent laws and its status in India, various scenarios were discussed from 1947-1970 and she told about how government changed its policies and stressed on self production and research so that the country can progress. She also discussed the present situation and opined that by 2020 India would be among top 3 countries in pharmaceutical market. Different sections related to pharmaceutical patents and their types were discussed, flexibilities available under TRIPS and its use by Indian government to secure access to essential medicines was the main highlight of the talk. Dr. Gupta also discussed about some landmark judgments of pharmaceutical patents in India.

**To the query by** Dr. Kshitij Kumar Singh whether there are any easy going procedure for pharmaceutical patents, Dr. Anushri Gupta informed that both economic importance and industrial application are important but these two qualities are not related to inventiveness, for a process or patent to be effective 3 basic criteria of NUN need to be fulfilled.

#### **TECHNICAL SESSION II**

#### IP Protection to Tools & Technologies in Regenerative Medicines

#### & Stem Cell Research

Wednesday, 22 March 2017

Intellectual Property Rights in Stem Cell Research, Therapy & Regenerative Medicines

**Prof (Dr) Bhudev C Das,** Chairman & Chair Professor, AIMMSCR & H.G. Khorana, Chair Professor, Maity Institute of Molecular Medicine & Stem Cell Research (AIMMSCR)

Dr. Das discussed about stem cells, what and why to patent. He told about induced pluripotent cells and their applicability. He also discussed about NAC and IC, the two committees which monitor stem cell research and informed about the permissible, prohibited and restricted areas of stem cell research. He also emphasized on the controversy regarding use of stem cells as regenerative medicines. IPR laws in Canada and USA were also discussed. He recommended

establishing central hub for accessing global stem cell registry to explore options, hub for networking and licensing.

#### **IPR** in Regenerative Medicines

**Dr. Jyoti Yadav**, Head, Planning, Monitoring and Evaluation, CSIR – Institute of Genomics and Integrative Biology, Delhi

Dr. Yadav highlighted about the regenerative medicines and the current intellectual property laws associated with them. Dr. Jyoti Yadav told about WARF patents, some cases were also discussed like Brustle vs. Greenpeace case, Diamond vs. Chakraborty case. She described the main criteria about patentability and how to prepare a patent application.

**To the query by** Dr. Abha Agnihotri whether the embryonic cells isolated from model animals be patented, Dr. Jyoti opined that it is very controversial issue and depends on the situation and how you present your case and convince the authority. In USA it is possible but in India it is still controversial. Embryonic stem cells have immense therapeutic value and they are very helpful, their method of creation can be patented but the details are very critical. Dr. Sharma informed that the embryonic cells *per se* cannot be patented but their application can be.

## Role of Patent on Affordability and Accessibility of Drugs, Vaccines, Diagnostics in Order to Control Malaria and Tuberculosis

**Dr. Tarakanta Jana**, Head, Patent Informatics, SCIR – National Institute of Science Communication and Information Resources (NISCAIR)

Dr. Jana spoke about invention and innovation. He emphasized on innovation chain and discussed about patenting trends in India. He introduced some models based on his research in tuberculosis and malaria keeping in account academics, industry and funding agency. The conclusion of the talk was that there is need of developing aggressive business models.

**To the comment by** Dr. Amit Kharkwal that for a company profit is the only business model, Dr. Jana replied that this is not applicable for all companies since for many companies value is

also important. Dr. Jyoti Sharma substantiated that while a company can make business models, there must be a value chain where in every step can be monitored and you can add some new to it so that societal impact can rise. Dr. Sharma also pointed out that in case of tuberculosis all patterns have been considered but western countries are not interested as it is a poor man's disease. Business model is important to reduce the price.

#### TECHNICAL SESSION III

#### **IP** protection to Traditional Medicines

Thursday, 23 March 2017

#### **Challenges and Opportunities in Patenting Herbal Medicines**

#### Prof (Dr) Abhimanyu Kumar

Director, All India Institute of Ayurveda, Ministry of Ayush, Govt of India

Dr. Kumar talked about the challenges and opportunities in patenting herbal medicine. He also pointed out that WHO estimated that 80% of the population uses Ayurvedic medicines to cure diseases. He also discussed the history of Ayurveda and traditional medicines. He stated that India possess rich heritage of valuable fauna, 16 agricultural zone, 45,000 plant species. He informed about the Nature article published in 2006 where system is moving from system to technology. He also told about traditional knowledge of haldi (turmeric) case which was patented by USA, but revoked after India filed application. He discussed about herbs with extended potential research like piperin and about the patenting problems being faced in India.

**To the query** raised by Dr. Tuteja if there is any patented homeopathy medicine, Dr. Abhimanyu said that the number of patented homeopathy medicine is low as compared to others. Dr. Abha commented that earlier there was not much awareness, but now since the processes are in place, we should protect our traditional knowledge about homoeopathic medicines also.

#### **Challenges in Generating Evidence for Intellectual Property in Homeopathy**

Dr. Kushal Banerjee, Dr. Kalyan Banerjee's Clinic, Chittaranjan Park, New Delhi

Dr. Banerjee focused on homeopathy for allergic rhinitis which is also known as hay fever. He said that his aim was to conduct well design research. He discussed about the challenges faced in his study including low research motivation, biases in capitals and effort versus impact, difficulty in publishing in good scientific journals, finding persons interested in funding/ facilitating research, homeopathy institute, Central Council for Research in Homeopathy, pharma companies etc. He also informed that in order to set up research, homeopathy trained research methodology is needed to raise enough IP.

#### IP Protection on Traditional Medicines: Challenges and Way Forward

**Dr. Deepa K. Tiku,** Partner and Patent Attorney, K&S Partners | Intellectual Property Attorneys

Dr. Tiku's talk focused on TK (traditional knowledge) and TKDL (traditional knowledge digital library). She discussed about the traditional knowledge, what can be patented, and concerns regarding misuse. She also emphasized on the features of traditional knowledge including dynamic and held collectively, the system for protecting TK and increasing awareness of its value. She was concerned that the documentation and awareness about TK is low and that TKDL is not open to public for prior art search.

Some queries were raised by Law students and faculties about the presence of many tribal people in Himalayan region with good know how about herbs. Pharma companies are approaching them for their knowledge and being innocent they share their secrets with them. Companies use their ideas, patent it and make profit, but the local people are not getting any benefit. The students said that the law firms may file the case against these companies to stop exploitation.

#### **TECHNICAL SESSION IV**

#### **Regulatory Perspectives of Health Sciences and Medical Devices**

Thursday, 23 March 2017

Regulation in IP Tools and Technologies in Health Sciences: An Overview

Dr. R. Saha, IPR Consultant (Former Director TIFAC, Govt. of India), Noida

Dr. Saha elaborated on IP tools, technology and different types of IP rights. He emphasized on the right of public, which included compulsory licencing, pre-grant opposition. According to Dr. Saha patent agent and trade mark agent should be science graduates. The researchers must follow good laboratory practice (GLP), good clinical practice (GCP) and good manufacturing practices (GMP). He also discussed about end to end process which included discovery and development, preclinical and clinical research, and post marketing safety monitoring.

IP and Regulatory Issues relating to Personalised/Precision Medicines in India

**Dr. Kshitij Kumar Singh,** Amity Institute of Advanced Legal Studies, Amity University, Noida

Dr. Singh talked about personalized and precision medicine. He said that the precision medicines are more targeted medicine and informed about functioning of precision medicine and the potential barrier. He also discussed patentability of biomarkers and diagnostic methods. The potential challenges for precision medicine including affordability and accessibility of precision medicine, unorganized health and insurance sector, uncertainty in IP policies, fragmented research structure were highlighted. Dr Singh also talked about National health policy 2017: to achieve the highest possible level of good health.

**To the query raised by** Dr. Abha Agnihotri about patenting of biomarker which is used for therapeutic and diagnostic purpose, Dr. Tiku informed that biomarker as a tool can be patented. Biomarkers are naturally occurring molecules of body. If we discover a novel biomarker in a body and discover novelty in process, utility of biomarker, its expression, then we can get patent.

#### **VALEDICTORY FUNCTION**

Thursday, 23 March 2017

#### Chairperson

Dr. R. Saha, IPR Consultant (Former Director TIFAC, Govt. of India), Noida

#### **Panelists**

Dr. Suchita Markan, BCIL

Dr. Abha Agnihotri, AUUP

Dr. Pankaj Sharma, AUUP

Dr. Kshitij Kumar Singh, AUUP

#### Valedictory and Summing Up

Thought provoking discussions were held during interactive sessions held at the end of each Technical Session and also during Valedictory Session, chaired by Dr R. Saha, Former Director, TIFAC, Government of India. **Dr. Suchita Markan gave a presentation on medical devices and the issues related with its patenting.** She focused on 'Make in India' initiative. According to her it is the right time to develop innovative medical devices.

The key learning points from the sessions were to develop and protect innovative technologies. Dr. Suchita Markan raised an important point along with Dr. Saha that nothing can be done alone, meaningful collaborations will be helpful in the coming future. In industry one patent granted cannot lead to the product, effective research is the need of hour. Dr. Kshitij shared his thoughts about developing regulatory IP regime emphasizing on being progressive, being watchful to the new developments related to the field, and most importantly patent examiners should be trained. Dr. Pankaj Sharma said biomedical research is an emerging technology and why there are still questions on patents related to cord blood and embryonic stem cells, questions of morality and violation of privacy are persistent.

To the questions whether non-living or living things can be patented; Dr. Saha replied it cannot be patented until and unless any modification is done. One student asked about the medical device sector, why there are technology gaps in this field, how can these gaps be filled on which Dr. Saha justified his statement by saying business models are the best answer to this and research is to be done in right manner, regulatory aspect need to be strengthen and guide lines have to be followed properly. India needs to make its own regulations in case of medical devices. The message is that business models are very important for start-up companies to bring the product to market and then to people. According to Dr. Amit Kharkwal and Dr. Saha section 3(d) should be applied in more progressive manner. There was elaborate discussion on section 3(d). Dr. Abha Agnihotri said that a lot has been talked about health sciences, stem cells, patenting in drugs etc, the outcome should not be restricted to papers but it should be applied. Good suggestions came from Dr. Deepa and Dr. Banerjee. Dr. Deepa said time has come to protect our domestic industry, we have to follow innovation pathway. It is the responsibility of Indian government to provide medicines at affordable rates and patented medicines should reach consumers at subsidized rates. Dr. Banerjee said there is need of more funds for validation of claims so that base for future is set, government should promote traditional medicines and AYUSH should write to ICMR for collaborations. Based on deliberations it was proposed that a combination of Ayurveda, homeopathy and allopathy can work best for better research. Lastly, it was concluded by Dr. Saha that these type of conferences should be organized frequently and patent should be included as a subject in University with credits of 0.5 or 1. Based on the deliberations, the recommendations being forwarded for consideration by ICMR are given on the next page.

#### RECOMMENDATIONS

- 1. Conduct of regular awareness programmes for the stakeholders in the area of IPR in Health Sciences to sensitized Healthcare researchers
- 2. In order to encourage IP protection and commercialization, ICMR may consider initiating a Patent Protection Scheme for supporting grass root innovations being conceptualized/ developed at academic institutes/research labs. Such scheme should be a stand-alone scheme and should be applicable/ eligible to all academic innovations in health sciences and not only to ICMR funded projects
- 3. Incentives to increase patent filing in the area of Health Sciences by the Indian Pharma companies both in India and at International level
- 4. Given the potential value of personalized/precision medicine in health care, specific guidelines should be prepared for predictive and preventive healthcare and the health research should keep the regulatory requirements in focus
- 5. There is a need to pay more attention to medical devices research including bio-markers and other diagnostic tools. It is also desirable to have a regulatory framework for medical devices
- Indian Genomic Databases should be created and facilitated for Research and Development
- 7. The regulatory position over Ayurveda and Homeopathy should be substantiated so that research and innovation in the concerned field would be promoted through patents or other IPR
- 8. In the field of alternative medicine, specifically homeopathy along with AYUSH, encourage and facilitate research into basic homeopathic drugs to validate claims made in the *Materia Medica*
- The ICMR should initiate a movement to make the TKDL open access for scientists to avoid repetition of research while taking advantage of lead available in TKDL for new drug discovery

March 22 to 23, 2017

Considering the importance of IPR in the area of health sciences, the above mentioned conference is being organized by Amity University Uttar Pradesh, Noida. The primary objective of the proposed conference is to unfold the fundamental aspects and applications of IP at global level for its benefit to all stakeholders, with special reference to those working in the area of Health Sciences. The technical sessions during the conference will address four thematic areas:

- Pharmaceutical Patents and Access to Medicine
- IP protection to tools and technologies in Regenerative Medicines and Stem Cell Research
- IP protection to Traditional Medicines
- Regulatory Perspectives of Health Sciences and Medical Devices

The lead and plenary lectures will be delivered by senior scientists/ technocrats from Universities/ Research Organizations and legal experts with specific time slot for interactive discussions. The workshop is expected to be attended by about 150 participants including graduate students, research scholars, faculty members, scientists, government officials, policy makers, members of print and electronic media, R&D organizations, corporate and patent attorneys, which are involved in generation of IP and its application for economic growth.

#### **KEY DATES**

\*Abstract Submission : 07 March, 2017 Registration : 12 March, 2017

\*Submission of Abstract is not mandatory for Registration and Participation

#### **REGISTRATION FEES**

Scientists and Academicians : Rs. 1,000/-Delegates from the Industry : Rs. 2,000/-Students : Rs. 500/-

Fees include Abstract of presentations, Lunch, Coffee/Tea and Snacks during the conference

#### FOR REGISTRATION & OTHER DETAILS

Visit: http://amity.edu/aims/

Write to: iprhealth2017@amity.edu with cc to aagnihotri@amity.edu

#### PATRON-IN-CHIEF

Dr. Ashok K Chauhan

Founder President RBEF

#### **PATRONS**

#### Sh. Atul Chauhan

Chancellor Amity University Uttar Pradesh

#### Dr. (Mrs.) Balvinder Shukla

Vice Chancellor Amity University Uttar Pradesh

#### **CHAIRPERSON**

#### Prof. (Dr.) Ajit Varma

Distinguished Scientist & Prof. of Eminence Amity Institute of Microbial Technology Amity University Uttar Pradesh, Noida

#### **CONVENER**

#### Prof. (Dr.) Abha Agnihotri

Head, Center for Agricultural Biotechnology & Professor, Amity Institute of Microbial Technolog Amity University Uttar Pradesh, Noida <a href="mailto:aagnihotri@amity.edu">aagnihotri@amity.edu</a>
9717170892

#### **ORGANIZING SECRETARIES**

#### \*Dr. Kshitij Kumar Singh

Assistant Professor Amity Institute of Advanced Legal Studies Amity University Uttar Pradesh, Noida kksingh@amity.edu 8826843264

#### \*Dr. Amit C Kharkwal

Dy. Director Amity Institute of Microbial Technology Amity University Uttar Pradesh, Noida ackharkwal@amity.edu 9350266595

#### \* Contact for poster presentation

\*\* Contact for advertisement/exhibition

#### List of Participants (National Conference on IPR in Health Sciences) March 22 to 23, 2017

S.No.	Name of Participants	Organization
1	Ms. Tarini Mehra	Amity Institute of Advanced Legal Studies
2	Mr. Shiv Prabal Kaushik	Amity Institute of Advanced Legal Studies
3	Ms. Himadri Haksar	Amity Institute of Advanced Legal Studies
4	Ms. Ankita Thapa	Amity Institute of Advanced Legal Studies
5	Ms. Mamta Thapa	Amity Institute of Advanced Legal Studies
6	Ms. Atipra Aich	Amity Institute of Advanced Legal Studies
7	Ms. Namrata Khurana	Amity Institute of Advanced Legal Studies
8	Mr. Prashant Kumar Sharma	Amity Institute of Advanced Legal Studies
9	Mr. Rohit Nema	Amity Institute of Advanced Legal Studies
10	Ms. Balaji Anusha	Amity Institute of Advanced Legal Studies
11	Neha Gupta	Amity Institute of Physiotherapy
12	Meenakshi Singh	Amity Institute of Physiotherapy
13	Ms. Shikha Saxena	Amity Institute of Pharmacy
14	Ms. Shikha Baghel Chauhan	Amity Institute of Pharmacy
15	Mr. Ankit Nanda	Amity Institute of Pharmacy
16	Mr. Nitin Singh	Amity Institute of Pharmacy
17	Mr. Sumit Gupta	Amity Institute of Pharmacy
18	Mr. Siddhartha Mukherjee	Amity Institute of Pharmacy
19	Ms. Pooja Dey	Amity Institute of Pharmacy
20	Ms. Jyoti	Amity Institute of Pharmacy
21	Ms. Seema Kher	Amity Institute of Pharmacy
22	Mr. Namrata Malik	Amity Institute of Pharmacy
23	Ms. Deepali Verma	Amity Institute of Pharmacy
24	Mr. Ibrahim Makintamil	Amity Institute of Pharmacy
25	Mr. Hazhar Faisal Abdullah	Amity Institute of Pharmacy
26	Mr. Atul Verma	Amity Institute of Pharmacy
27	Dr. Alok Verma	Amity Law School
28	Dr. Shefali Raizada	Amity Law School
29	Ms. Pooja Mahapatra	Amity Institute of Biotechnology
30	Dr. Nidhi Choudhary	Amity Institute of Biotechnology
31	Dr. Madhumita P. Ghosh	Amity Institute of Biotechnology
32	Dr. Anubha Sharma	Amity Institute of Biotechnology
33	Dr. Sarvesh Raghav	Amity Institute of Biotechnology
34	Ms. Neetu Jabalia	Amity Institute of Biotechnology
35	Dr. Sunita Singh	Amity Institute of Biotechnology
36	Mr. Tarun Kohli	Amity Institute of Biotechnology
37	Prof. Girish Sharma	Amity Institute of Biotechnology

38 Ms. Sonali Bhatia Amity Law School 39 Ms. Arushi Anthwal Amity Law School 40 Mr. Tanishq Panwar Amity Law School 41 Mr. Ashish Amity Institute of Organic Ag	
40 Mr. Tanishq Panwar Amity Law School 41 Mr. Ashish Amity Institute of Organic Ag	
41 Mr. Ashish Amity Institute of Organic Ag	
, , ,	
12 De Diavyo Dealeach Marial Amita Latitute & E.	griculture
42 Dr. Biswa Prakash Nayak Amity Institute of Forensic Sc	cience
43 Mr. Pawan Sharma Amity Law School	
44 Mr. Sudhir Kumar M/s Biosync Teknology	
45 Mr. Pankaj M/s Bhanu Biotech Private Li	imited
46 Mr. Shakti Lac Zene Biosciences	
47 Dr. Smita Sahu Amity Institute of Biotechnology	ogy
48 Dr. S.K. Rajput Amity Institute of Pharmacy	
49 Dr. Nitesh Malhotra Amity Institute of Physiothera	apy
50 Mr. S.P. Dubey Amity Institute of Virology &	z Immunology
51 Mr. Anil Dubey Media Department, AUUP, N	loida
52 Preeti Gaur Media Department, AUUP, N	Ioida
53 Dr. Harsha Kharkwal AIP&P & ACCR, AUUP, No	oida
54 Dr. Ajit Varma Amity Institute of Microbial 7	
55 Dr. Narendra Tuteja Amity Institute of Microbial 7	Гесhnology
56 Dr. Amit C. Kharkwal Amity Institute of Microbial 7	Гесhnology
57 Dr. Abha Agnihotri Amity Institute of Microbial 7	Гесhnology
58 Dr. D.K. Choudhary Amity Institute of Microbial 7	Гесhnology
59 Dr. Vivek Kumar Amity Institute of Microbial 7	Гесhnology
60 Dr. Manoj Kumar Amity Institute of Microbial 7	Technology
61 Dr. Ram Prasad Amity Institute of Microbial 7	Technology
62 Ms. Manpreet Kaur Attir Amity Institute of Microbial	Гесhnology
63 Ms. Uma Amity Institute of Microbial 7	Гесhnology
64 Ms. Monika Gupta Amity Institute of Microbial 7	Гесhnology
65 Ms. Jagriti Tyagi Amity Institute of Microbial 7	Гесhnology
66 Ms. Shradha Nirwan Amity Institute of Microbial 7	Гесhnology
67 Ms. Diksha Bhola Amity Institute of Microbial 7	Гесhnology
68 Mr. Hemesh Joshi Amity Institute of Microbial 7	Гесhnology
69 Ms. Anupriya Chatterjee Amity Institute of Microbial 7	Гесhnology
70 Ms. Supriya Kumari Amity Institute of Microbial 7	Гесhnology
71 Ms. Surbhi Dabral Amity Institute of Microbial	Гесhnology
72 Dr. Menaka Salam Amity Institute of Microbial 7	Гесhnology
73 Ms. Shikha Mishra Amity Institute of Microbial 7	Гесhnology
74 Ms. Himanshi Suri Amity Institute of Microbial 7	Technology
75 Ms. Ravinsha Taneja Amity Institute of Microbial 7	Гесhnology
76 Ms. Krati Amity Institute of Microbial 7	Гесhnology

S.No.	Name of Participants	Organization
77	Ms. Muskan Panwar	Amity Institute of Microbial Technology
78	Ms. Varnika Sharma	Amity Institute of Microbial Technology
79	Ms. Nikita	Amity Institute of Microbial Technology
80	Ms. Harshita Jindal	Amity Institute of Microbial Technology
81	Ms. Kritika Bansal	Amity Institute of Microbial Technology
82	Ms. Sumati Kalani	Amity Institute of Microbial Technology
83	Dr. Manoj Nath	Amity Institute of Microbial Technology
84	Dr. Swati Tripathi	Amity Institute of Microbial Technology
85	Ms. Simpy Karnwal	Amity Institute of Microbial Technology

#### **PHOTOGRAPHS**



Lighting the lamp: Dr. Anushri Gupta, Dr. Sadhana Srivastava (Chief Guest, ICMR);
Dr. W. Selvamurthy, Dr. Ajit Varma



Keynote address by Dr. Sadhana Srivastava, IPR Unit, ICMR, Ministry of Health & Family Welfare, Government of India, New Delhi



Dignitaries on the Dias: Dr. Abha Agnihotri, Dr. Anushri Gupta, Dr. Sadhana Srivastava and Dr. Ajit Varma



Participants and delegates attending the conference



Dr. Neeti Wilson delivering a lead lecture in Technical Session I



Dr. Anushri Gupta delivering a lead lecture in Technical Session I



Dr. Ajit Varma, Dr. Neeti Wilson, Dr. Kshitij Kumar Singh, Dr. Kushal Banerjee and Dr. Narendra Tuteja



The Speakers of Technical Session II- Dr. Jyoti Yadav, Dr. Tarakanta Jana, Dr. Kushal Banerjee- flanked by Dr. Abha Agnihotri and Dr. Amit C Kharkwal



Dr. Sadhana Srivastava being felicitated by Dr. Kushal Banerjee



Dr. Kshitij Kumar Singh felicitating Dr. Anushri Gupta



Dr. Abhimanyu Kumar delivering a lead lecture in Technical Session III



Dr. Deepa K Tiku delivering a lead lecture in Technical Session III



Dr. R Saha delivering a lead lecture in Technical Session IV





Valedictory session: Dr. Abha Agnihotri, Dr. Suchita Markan (BCIL), Dr. R. Saha (Chairperson), Dr. Pankaj Sharma and Dr. Kshitij Kumar Singh



Vote of Thanks by Dr. Abha Agnihotri and Dr. Amit C Kharkwal

## AMITY UNIVERSITY - INDIA'S #1 RANKED NON-PROFIT PVT. UNIVERSITY

Amity University is India's top ranked non-profit pvt. University established through state legislature, with powers to award degrees as per the sections 2f and 22(1) of the UGC Act. As a leading University of the country, Amity University's institutions including those of Management, Law, Engineering, Biotechnology, Insurance, Telecom, Fashion, Mass Comm., Hospitality etc., have been ranked amongst the top in India's most respected surveys by India Today, Business Today, Economic Times, Outlook etc.

A testimony to Amity's quest for world-class education are the various prestigious national and international recognitions. Besides this, Amity University has been awarded the coveted 'A' rating by National Assessment & Accreditation Council (NAAC, the apex accreditation body of UGC) - a distinction awarded to only 10% of Indian Universities. Further, Amity has received IET (UK) Accreditation for its B.Tech. programmes, premier status from ASIC (UK) and ACBSP (USA) for its Management programmes.

#### **AMITY EDUCATION GROUP**

- 100,000 Students
- 4,500 Faculty
- 1,000 Acres of Campuses
- 5 Universities
- 10 Campuses overseas London, Singapore, Dubai, Mauritius, New York, California, China, Abu Dhabi, South Africa & Romania
- 150+ Institutions & Centres
- 17 Schools & Preschools
- 47,000 On-campus Placements over the last years
- 25,000 Students on scholarship

## AMITY INSTITUTE OF MICROBIAL TECHNOLOGY

Amity Institute of Microbial Technology (AIMT) was established in 2004 to nurture brilliant scientists and researchers and pursue path-breaking research in different areas of microbial sciences. The Institute has the privilege of having highly experienced faculty with long years of research and teaching experience at prestigious academic institutions in India and abroad. AIMT has published 28 books, 191 research publications and filed 19 patents.

AIMT has academic collaborations with Universite' Laval, Canada; Johannes-Gutenberg University, Germany; University of Jena, Germany; Der George-August-University, Germany; University of Turin, Italy; Cleveland University, USA; Geneva University, Switzerland; University of Lisbon, Portugal; University of Murcea, Spain; University of Dundee, Scotland; CSIR, ICAR, DRDO, IITs and many more.

AlMT has hi-tech research labs for carrying out research projects in the areas of Microbial, Molecular and related Life Science disciplines. AlMT is currently running M.Sc, M. Phil and Ph.D programs in Microbial Technology.

#### AMITY'S UNIQUE ACHIEVEMENTS IN RESEARCH

520 patents filed by faculty in the last years
700 management case-studies developed by faculty and bought across 47 countries
300 Govt. funded research projects conducted by faculty
Research partnership with 80 International Universities, Laboratories & Research Centres
Recognised as a Scientific & Industrial Research Organisation (SIRO) by DSIR, Ministry of Science & Technology, Govt. of India
Ph.D. and Post Doctoral Fellowships for over 2,000 scientists in diverse areas



#### AMITY INSTITUTE OF MICROBIAL TECHNOLOGY

Amity University, Sec-125, Noida (New Delhi NCR) - 201313, India | **Tel**: +91-120-4392270, 4392418 **Fax**: +91-120-2431268, 2431870 | **E-mail**: ipramity2014@amity.edu | **Website**: www.amity.edu/ipr2014