

Shri Shamrao Patil (Yadravkar) Educational & Charitable Trust's Sharad Institute of Technology College of Engineering

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An Autonomous Institute

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Department of Mechanical Engineering

ISTE and IIC Approved One week Faculty Development Program On IPR, Patents and Research Writing December 16th to December 20th, 2022 Program Proceedings

Day 1: Inauguration Ceremony Time: 10.00am to 10.30am



Department of Mechanical Engineering has arranged **ISTE and IIC Approved One week Faculty Development Program on "IPR, Patents and Research Writing**." We started our FDP with Inauguration Ceremony. Mr. P J Patil has done the introduction and welcome of all guests. Dr. S D Patil, Convener & HOD, Mechanical Engineering Department has given brief information about the FDP and he also Introduced the Resource Person. Dr.Prafulla R Hatte Sir addressed the participants regarding how this FDP will improve the knowledge about IPR and its different applications. Dr. S A Khot, Principal SITCOE addressed FDP with the application part of "IPR and **Patents and Research Writing"** Mr. Anil A. Bagane, Executive Director SITCOE motivated participants to take advantage of FDP to develop knowledge regarding IPR, Patents and Research Writing. Followed by vote of thanks by Mr. A. S. N. Husainy.



Day 1: Introduction to IPR Time: 10:30am-11:30am 11:45pm to 1:00pm 02:00pm to 3:15pm 3.30 pm to 4.30 pm

Content:

- 1) Introduction to IPR
- 2) IPR Applications
- 3) Patents: Concept, Laws and rules
- 4) Patent Types, Non patentability

Resource Person: Dr.Prafulla R.Hatte



1. Introductio to IPR:

Dr.Prafulla R.Hatte sir started his session with introduction to Intellectual Property Rights(IPR).In this introductory session he has referred IPR as these are legal rights given to the inventor or creator to protect his invention or creation for a certain period of time. It can also be defined as ideas, inventions, and creative expressions based on which there is a public willingness to bestow the status of property. IPR provide certain exclusive rights to the inventors or creators of that property, in order to enable them to reap commercial benefits from their creative efforts or reputation. There are several types of intellectual property protection like patent, copyright, trademark, etc. Patent is a recognition for an invention, which satisfies the criteria of global novelty, non-obviousness, and industrial application. IPR is prerequisite for better identification, planning, commercialization, rendering, and thereby protection of invention or creativity. Each industry should evolve its own IPR policies, management style, strategies, and so on depending on its area of specialty. Pharmaceutical industry currently has an evolving IPR strategy requiring a better focus and approach in the coming era.

Sir also told the history of IPR that laws and administrative procedures relating to IPR have their roots in Europe. The trend of granting patents started in the fourteenth century. In comparison to other European countries, in some matters England was technologically advanced and used to attract artisans from elsewhere, on special terms. The first known copyrights appeared in Italy. Venice can be considered the cradle of IP system as most legal thinking in this area was done here; laws and systems were made here for the first time in the world, and other countries followed in due course.Patent act in India is more than 150 years old. The inaugural one is the 1856 Act, which is based on the British patent system and it has provided the patent term of 14 years followed by numerous acts and amendments.

2. IPR Application Procedure:

Sir have given information related to procedure of IPR application as mentioned below,

- File the patent application and get it numbered.
- Request for publication by filing a form. If the request is not made, the patent specification will be published in the official journal after 18 months from the application date. On the other hand, by making request, patent specification can be published within one month from filing the form.
- Request for examination within 48 months from the date of filing of the patent application. Request for expedited examination of patent application can be made by paying extra fee.
- Within 12 24 months of filing a request for examination, the first examination report is issued. This report may raise substantive and procedural objections regarding the patent.
- If objections are raised, the patent applicant must comply with the statement of objections within six months from the date of the report.
- If the official objections are met in due period, the patent is granted and presented for opposition.
- The patent is open for third party opposition, if any, for a period of one year from the date of advertisement.

3. Patents: Concept, Laws and rules:

Intellectual properties rights in India are governed under the following Acts: Trade Marks Act, 1999 The Patents Act, 1970 (amended in 2005) The Copyright Act, 1957 The Designs Act, 2000 The Geographical Indication of Goods (Registration and Protection) Act, 1999 The Protection of Plant Varieties and Farmers Rights Act, 2001 The Information Technology Act, 2000

4. Patent Types, Non patentability

There are four different patent types:

- Utility patent. This is what most people think of when they think about a patent.
- Provisional patent.
- Design patent.
- Plant patent.

Non patentability:

Section 3 And 4 Of The Indian Patent Act

Section 3 and Section 4 of the Patent Act is highly debatable and deals with the list of exclusions that are non-patentable that do not satisfy the above conditions. Following are not the "inventions" under the meaning of this act:

(a) Inventions that are frivolous and contrary to natural laws.

Inventions which are frivolous or contrary to well established natural laws.

b) Inventions which go against public morality

Inventions in which the primary or intended use or commercial exploitation of which could be contrary to public order or morality (that is against the accepted norms of the society and is punishable as a crime) or which causes serious prejudice to human, animal or plant life or health or to the environment.

(c) Inventions that are a mere discovery of something that already exists in nature.

The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living or non-living substances occurring in nature.

Day 2: Patent Search (Lab Session) Time: 10:00am-11:30am 11:45pm to 1:00pm 02:00pm to 3:15pm 3.30 pm to 4.30 pm

Content:

- 1) Patent Search
- 2) Drafting Form 2
- 3) Drafting Form 1, 3 & 5 and Finalizing first draft of the patents.

Resource Person: Dr.Prafulla R.Hatte



1. Patent Search:

Sir has told that depending on the status of a patent application, a patent search can be done under two publication types: published or granted. The user can choose the desired publication type by clicking on the checkbox. The user can view many categories like

- Application Date
- Title
- Abstract
- Complete Specification
- Application Number
- Patent Number
- Applicant Number
- Patent Number
- Applicant number
- Applicant Name
- Inventor Name
- Inventor Country
- Inventor Address
- Filing office
- PCT Application Number
- PCT Publication number

2. Drafting Form:

Sir has guided us regarding the various drafting form of patent like form no.1,2,3 and 5 and Participants have taken keen interest and they themselves tried to form a draft copy for their own research point.

As this session was arranged in Computer lab so participants got the hands on experience of how to draft and what are the different ways of drafting. Some participants are new to this concept of drafting, they face some challenges regarding the same, but sir solved all their doubts.

Day 3:

Time: 10:00am-11:30am 11:45pm to 1:00pm 02:00pm to 3:15pm 3.30 pm to 4.30 pm

Content:

- 1) Introduction to Scopus and Web of Science- Relevant Perspective
- 2) How to select a suitable Journal/ conference
- 3) Types of Article and Papers

Resource Person: Dr.Rajkumar B.Patil



Day three has started with Felicitation of Guest Dr.Rajkumar B Patil by Mr.P.H.Yadav, Dean (Academics) in the presence of Mr.B.B.Sangame, Dean(Administrative), Mr. S. V. Kumbhar (Dean, Students affairs), Dr.S.D.Patil,Convener & HOD, Mechanical Engineering Department and Dr.Rajkumar B Patil Sir addressed the participants regarding how this FDP will improve the knowledge about writing a good research paper and its different components.

Introduction to Scopus and Web of Science- Relevant Perspective

Nowadays, the importance of bibliographic databases (DB) has increased enormously. They happen to be the primary providers of publication metadata, and bibliometric indicators universally used both for research evaluation practices and for carrying out daily tasks. Since the reliability of these tasks depends primarily on the data source, all database users should be able to select the best one for them. **WoS or Web of Science and Scopus are the two main bibliographic databases**.

SCOPUS focuses on independent journals in the research field of Science,

Technology, Medicine, and Social Sciences, however, SCIE indexing focuses on technical and scientific publications including natural and social sciences. Web of Science (also called as SCI - Science Citation Index) is an online subscription-based scientific citation indexing service that provides a comprehensive citation search.

How to select a suitable Journal/ conference

In order to gain an insight, start by asking active researchers and practitioners in your field about key scientific sessions. Presenting your research at a conference provides an initial platform to discuss your work, prior to official journal publication. The effort further allows scientists to engage in leading-edge research early on in their scientific career.

It is important to evaluate key reasons to attend a conference apart from its scientific credibility.

- 4) On the outset, the conference should provide visibility to you and your research work, creating an opportunity for feedback. The opinion of leading scientists in the field is vital to improve and strengthen your research prior to manuscript publication.
- 5) The academic conference should provide opportunities to network with peers and key researchers in the field. These provide a platform to develop future collaborations with fellow researchers as well.
- 6) Ensure that the conference suits your research work and coincides with your time and availability.
- 7) Re-check authenticity of the host organization to avoid predatory conferences that merely make money off researchers. For instance, established conferences in the neurosciences and cardiology may provide a general overview to existing professional platforms for research dissemination.
- 8) In addition, check whether the official journal in which you intend to publish your final manuscript is in affiliation with the professional host organization. Since the opportunity to publish is the ultimate academic goal, ensure conference attendance will actively assist the research process.

Types of Article and Papers:

Types of Articles

- Front Page.
- Editorials.
- Op-Eds.
- Letters to the Editor.
- Reviews.
- Obituaries.
- Advertisements.
- Classified Ads.

Types of Papers

- Analytical Research Paper.
- Argumentative (Persuasive) Research Paper.
- Definition Paper.
- Compare and Contrast Paper

Day 4:

Time: 10:00am-11:30am 11:45pm to 1:00pm 02:00pm to 3:15pm 3.30 pm to 4.30 pm

Content:

- 1) How to identify and focus on a certain topic for prospective manuscript?
- 2) How to prepare outline of the paper?
- 3) How to prepare literature review and writing of review paper

Resource Person: Dr. Rajkumar B.Patil



How to identify and focus on a certain topic for prospective manuscript:

Choosing a research topic is one of the first things you should work on when you decide to write a research manuscript for a peer-reviewed journal. Don't confuse a research topic with a research paper title. A title is an element of the article that describes what the study is about; a research topic is the area of your investigation, focusing on the research question you are trying to answer.

How do I know whether the topic of my manuscript is appropriate?

- Specificity
- Originality or novelty
- General relevance to a broad scientific community

How to prepare outline of the paper:

Creating an outline is a good step to take while writing your paper. It allows you to brainstorm new ideas and make sure your paper will be organized, focused, and supported. Many writers find it easier to write from an outline instead of starting from a blank page.

Writing an outline can take place at any time during the writing process. Although it is most commonly used before beginning to write or doing research, this process can also take place during or after writing your paper to make sure your points are organized and make sense. How do I write an outline?

- Identify your topic or thesis statement.
- Decide what points you would like to discuss during your paper.
- Write possible transitions between paragraphs.

Remember that your outline should serve as a rough idea of how your paper will develop; it does not have to be very formal or exact.

How to prepare literature review and writing of review paper:

Sir have guided regarding Literature Review in the following format.

A literature review is a fundamental part of your thesis writing process. It critically informs you of the relevant literature by other scholars in your research area and situates your research in the conversation. Ultimately, the literature review helps you communicate how the new knowledge you are producing contributes to existing scholarship.

The process of scanning literature in your area allows you to identify overlooked or understudied topics in your research field, and identify scholarships that support your arguments. The literature review provides the theoretical framework, methodology, concepts and problems that frame your research design.

- Define your research scope.
- Plan your research approach.
- Search strategically: be efficient but thorough.
- Manage your literature with online tools.
- Critical reading and analysis.
- Benchmark from other literature reviews.
- Assemble the texts and write.

Day 5:

Time: 10:00am-11:30am 11:45pm to 1:00pm 02:00pm to 3:15pm 3.30 pm to 4.30 pm

Content:

- 1) How to write abstract and conclusion
- 2) Writing of paper: case Studies

Resource Person: Dr. Rajkumar B.Patil.



How to write abstract:

An abstract is a 150- to 250-word paragraph that provides readers with a quick overview of your essay or report and its organization. It should express your thesis (or central idea) and your key points; it should also suggest any implications or applications of the research you discuss in the paper.

However, all abstracts generally cover the following five sections:

- Write your paper. Since the abstract is a summary of a research paper, the first step is to write your paper.
- Review the requirements.
- Consider your audience and publication.
- Explain the problem.
- Explain your methods.
- Describe your results.
- Give a conclusion.

How to write Conclusion:

Conclusions wrap up what you have been discussing in your paper. After moving from general to specific information in the introduction and body paragraphs, your conclusion should begin pulling back into more general information that restates the main points of your argument. Conclusions may also call for action or overview future possible research.

In a general way,

- Restate your topic and why it is important,
- Restate your thesis/claim,
- Address opposing viewpoints and explain why readers should align with your position,

Valedictory Function:

After that we moved towards the valedictory function, in the presence of Hon. Mr. Anil. A. Bagane, Executive Director, SITCOE, Dr. S. A. Khot Principal, SITCOE, and Dr. S D Patil, HoD Mechanical and Convenor of FDP.

Initially Dr.S D Patil introduced about chief guest of valedictory function and he focused on update of advance in technology in coming years and effective teaching learning practices. He also gave a glimpse of the activities going on in Sharad Institute of Technology college of Engineering. Hon. Mr. Anil. A. Bagane, Executive Director SITCOE said that day by day role of engineer in education goes on changing. He said that faculty should update themselves according to the need of industry. Also, he appreciated to Dr.Prafulla R Hatte and Dr. Rajkumar B Patil for conducting FDP. He motivated participants for attending such type of workshop for self-development.

In valedictory function participants shared their feedback for last five days of FDP. After this Mr.A.S.N.Husainy expressed the vote of thanks.

OUTCOME:

All the sessions were very much informative. The discussed areas are of great benefit for the participants as the topics match with the current working domain. Participants were enlightened with the most widely used advance technologies in this domain. This in turn will help in research activity and patent activity.