

ISSN: 2582-6433



# INTERNATIONAL JOURNAL FOR LEGAL RESEARCH AND ANALYSIS

Open Access, Refereed Journal Multi Disciplinary  
Peer Reviewed 6th Edition

**VOLUME 2 ISSUE 7**

## **DISCLAIMER**

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Managing Editor of IJLRA. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of IJLRA.

Though every effort has been made to ensure that the information in Volume 2 Issue 7 is accurate and appropriately cited/referenced, neither the Editorial Board nor IJLRA shall be held liable or responsible in any manner whatsoever for any consequences for any action taken by anyone on the basis of information in the Journal.

Copyright © International Journal for Legal Research & Analysis



IJLRA

## **EDITORIAL TEAM**

### **EDITORS**

#### **Megha Middha**



*Megha Middha, Assistant Professor of Law in Mody University of Science and Technology, Lakshmangarh, Sikar*

*Megha Middha, is working as an Assistant Professor of Law in Mody University of Science and Technology, Lakshmangarh, Sikar (Rajasthan). She has an experience in the teaching of almost 3 years. She has completed her graduation in BBA LL.B (H) from Amity University, Rajasthan (Gold Medalist) and did her post-graduation (LL.M in Business Laws) from NLSIU, Bengaluru. Currently, she is enrolled in a Ph.D. course in the Department of Law at Mohanlal Sukhadia University, Udaipur (Rajasthan). She wishes to excel in academics and research and contribute as much as she can to society. Through her interactions with the students, she tries to inculcate a sense of deep thinking power in her students and enlighten and guide them to the fact how they can*

*bring a change to the society*

#### **Dr. Samrat Datta**

*Dr. Samrat Datta Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Samrat Datta is currently associated with Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Datta has completed his graduation i.e., B.A.LL.B. from Law College Dehradun, Hemvati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand. He is an alumnus of KIIT University, Bhubaneswar where he pursued his post-graduation (LL.M.) in Criminal Law and subsequently completed his Ph.D. in Police Law and Information Technology from the Pacific Academy of Higher Education and Research University, Udaipur in 2020. His area of interest and research is Criminal and Police Law. Dr. Datta has a teaching experience of 7 years in various law schools across North India and has held administrative positions like Academic Coordinator, Centre Superintendent for Examinations, Deputy Controller of Examinations, Member of the Proctorial Board*



## Dr. Namita Jain



14th, 2019

*Head & Associate Professor*

*School of Law, JECRC University, Jaipur Ph.D. (Commercial Law) LL.M., UGC - NET Post Graduation Diploma in Taxation law and Practice, Bachelor of Commerce.*

*Teaching Experience: 12 years, AWARDS AND RECOGNITION of Dr. Namita Jain are - ICF Global Excellence Award 2020 in the category of educationalist by I Can Foundation, India. India Women Empowerment Award in the category of "Emerging Excellence in Academics by Prime Time & Utkrisht Bharat Foundation, New Delhi.(2020). Conferred in FL Book of Top 21 Record Holders in the category of education by Fashion Lifestyle Magazine, New Delhi. (2020). Certificate of Appreciation for organizing and managing the Professional Development Training Program on IPR in Collaboration with Trade Innovations Services, Jaipur on March*

## Mrs.S.Kalpana

*Assistant professor of Law*

*Mrs.S.Kalpana, presently Assistant professor of Law, VelTech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology, Avadi. Formerly Assistant professor of Law, Vels University in the year 2019 to 2020, Worked as Guest Faculty, Chennai Dr.Ambedkar Law College, Pudupakkam. Published one book. Published 8 Articles in various reputed Law Journals. Conducted 1 Moot court competition and participated in nearly 80 National and International seminars and webinars conducted on various subjects of Law. Did ML in Criminal Law and Criminal Justice Administration. 10 paper presentations in various National and International seminars. Attended more than 10 FDP programs. Ph.D. in Law pursuing.*



## Avinash Kumar



*methodology and teaching and learning.*

*Avinash Kumar has completed his Ph.D. in International Investment Law from the Dept. of Law & Governance, Central University of South Bihar. His research work is on "International Investment Agreement and State's right to regulate Foreign Investment." He qualified UGC-NET and has been selected for the prestigious ICSSR Doctoral Fellowship. He is an alumnus of the Faculty of Law, University of Delhi. Formerly he has been elected as Students Union President of Law Centre-1, University of Delhi. Moreover, he completed his LL.M. from the University of Delhi (2014-16), dissertation on "Cross-border Merger & Acquisition"; LL.B. from the University of Delhi (2011-14), and B.A. (Hons.) from Maharaja Agrasen College, University of Delhi. He has also obtained P.G. Diploma in IPR from the Indian Society of International Law, New Delhi. He has qualified UGC - NET examination and has been awarded ICSSR - Doctoral Fellowship. He has published six-plus articles and presented 9 plus papers in national and international seminars/conferences. He participated in several workshops on research*

## **ABOUT US**

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS  
ISSN

2582-6433 is an Online Journal is Monthly, Peer Review, Academic Journal, Published online, that seeks to provide an interactive platform for the publication of Short Articles, Long Articles, Book Review, Case Comments, Research Papers, Essay in the field of Law & Multidisciplinary issue. Our aim is to upgrade the level of interaction and discourse about contemporary issues of law. We are eager to become a highly cited academic publication, through quality contributions from students, academics, professionals from the industry, the bar and the bench. INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN 2582-6433 welcomes contributions from all legal branches, as long as the work is original, unpublished and is in consonance with the submission guidelines.

# THE FUTURE OF COPYRIGHT LAW AND ITS IMPACT ON SCIENTIFIC RESEARCH

*Authored By- J. JERRY BASTIN<sup>1</sup> & YUVA POORNIMA A<sup>2</sup>*

## **ABSTRACT:**

The future of copyright law is a topic of great interest to the scientific research community due to the potential impact on the availability and accessibility of research data. As new technologies and platforms continue to emerge, questions arise as to how copyright law will evolve to keep pace with these changes. This paper examines the potential impact of future copyright law on scientific research and explores the challenges and opportunities that may arise. Key issues discussed include the role of copyright in data sharing, the balance between copyright protection and open access, and the potential impact of emerging technologies such as artificial intelligence on copyright law. The paper concludes with recommendations for researchers, institutions, and policymakers on how to navigate this rapidly evolving landscape and ensure that copyright law supports the continued progress of scientific research.

**Keywords:** Copyrights in data sharing, future of copyright law, Challenges and opportunities in Copyright law, fair use, Intellectual Property, Digital Millennium Copyright Act (DMCA)

<sup>1</sup> BA LLB (Hons.) student at School of Law, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India

<sup>2</sup> Asst. Professor at School of Law, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India

## **INTRODUCTION:**

Copyright law has long been a cornerstone of the intellectual property framework that governs the dissemination of knowledge and innovation in the scientific research community. However, with the advent of new technologies and platforms, the traditional models of copyright protection are facing unprecedented challenges. As researchers seek to share and collaborate on data in increasingly diverse and decentralized ways, copyright law is being called upon to adapt to a rapidly changing landscape. This paper aims to explore the future of copyright law and its impact on scientific research. We begin by examining the current state of copyright law and its application to scientific research, including the role of fair use and open access in promoting the dissemination of knowledge. We then turn our attention to the challenges and opportunities that may arise as new technologies such as artificial intelligence and blockchain continue to transform the research landscape. Throughout the paper, we highlight key issues and trends that are likely to shape the future of copyright law in scientific research, including the tension between copyright protection and open access, the implications of data sharing and collaboration, and the role of emerging technologies in shaping the copyright landscape.

Finally, we provide recommendations for researchers, institutions, and policymakers on how to navigate this rapidly evolving landscape and ensure that copyright law supports the continued progress of scientific research.

## **CURRENT STATE OF COPYRIGHT LAW IN SCIENTIFIC RESEARCH:**

The current state of copyright law in scientific research is complex and multifaceted. While copyright law exists to protect the rights of creators and incentivize the creation of new works, it can also pose challenges to the sharing and dissemination of scientific research data. Copyright law generally grants creators of original works exclusive rights to control the use, reproduction, and distribution of those works. These exclusive rights apply to scientific research publications and data, as well as to other forms of creative works. However, there are exceptions to these exclusive rights, such as the doctrine of fair use in the United States, which allows for limited use of copyrighted works without permission in certain circumstances, such as for commentary, criticism, or educational purposes. In scientific research, copyright law is often navigated through licensing agreements with publishers and the use of open access publishing models, which allow for free and unrestricted access to research publications and

data. However, these models also raise questions about the sustainability of research publishing and the potential impact on the quality of research publications. Furthermore, copyright law in scientific research is subject to the complex and ever-changing landscape of international intellectual property law, which can vary widely by jurisdiction. This can pose significant challenges to researchers seeking to share and collaborate on research data across borders. Overall, while copyright law plays an important role in protecting the rights of creators and incentivizing the creation of new works, it also presents challenges to the sharing and dissemination of scientific research data. As the scientific research landscape continues to evolve and new technologies and platforms emerge, it is important for researchers and institutions to stay informed about the latest developments in copyright law and to navigate these complexities in a way that promotes the progress of scientific research.

## **CHALLENGES AND OPPORTUNITIES IN THE FUTURE OF COPYRIGHT LAW:**

The future of copyright law in scientific research presents both challenges and opportunities as new technologies and platforms continue to transform the research landscape. One of the key challenges is the tension between copyright protection and the need for open access to scientific research data. On the one hand, copyright law grants exclusive rights to creators of original works, including scientific research publications and data. These exclusive rights can incentivize the creation of new works, but they can also limit the sharing and dissemination of research data. On the other hand, there is a growing recognition of the importance of open access to scientific research data, which can facilitate collaboration, accelerate scientific discovery, and promote the public good. This has led to the development of new models of open access publishing and data sharing, such as Creative Commons licenses, which allow for more flexible and permissive use of research data while still providing some protection for the rights of creators. Another challenge is the impact of emerging technologies such as artificial intelligence and blockchain on copyright law in scientific research. These technologies have the potential to transform the way research data is created, shared, and used, but they also raise new questions about ownership, attribution, and accountability. However, there are also opportunities for copyright law to adapt and evolve in ways that better serve the needs of scientific research. For example, there is a growing movement towards developing more

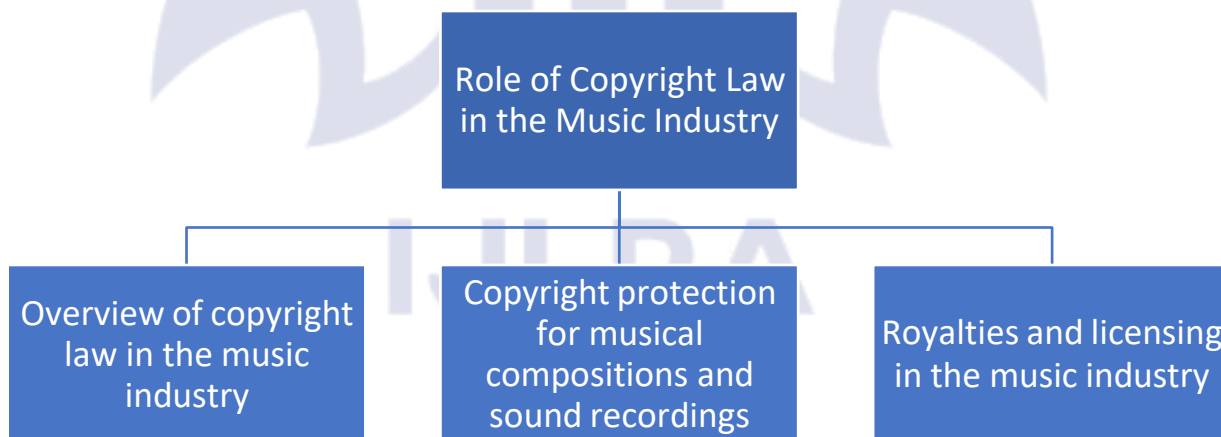
flexible and permissive licensing frameworks that balance the rights of creators with the need for open access to research data. Overall, the challenges and opportunities of the future of copyright law in scientific research will require careful consideration and ongoing engagement by researchers, institutions, and policymakers to ensure that copyright law supports the continued progress of scientific research.

## **RECOMMENDATIONS FOR RESEARCHERS, INSTITUTIONS, AND POLICYMAKERS:**

As the landscape of copyright law in scientific research continues to evolve, there are several recommendations that researchers, institutions, and policymakers can consider to promote a copyright framework that supports the continued progress of scientific research. For researchers, it is important to understand the copyright landscape and to navigate it in a way that balances the rights of creators with the need for open access to research data. This can include strategies such as seeking out open access publishing options, using Creative Commons licenses, and engaging in open data sharing and collaboration. Institutions can also play an important role in supporting a copyright framework that promotes scientific research. This can include providing resources and support for open access publishing and data sharing, developing policies and practices that promote the responsible use and sharing of research data, and advocating for copyright reform that better supports the needs of scientific research. Policymakers also have an important role to play in shaping the future of copyright law in scientific research. This can include engaging in dialogue with researchers and institutions to better understand their needs and concerns, advocating for copyright reform that promotes open access to research data, and supporting international efforts to harmonize intellectual property law and promote cross-border data sharing and collaboration. Overall, there is a need for continued dialogue and engagement among researchers, institutions, and policymakers to ensure that copyright law supports the continued progress of scientific research. By working together and embracing new models of open access publishing and data sharing, we can promote a copyright framework that better serves the needs of scientific research and the public good.

## FAIR USE:

Fair use is a legal doctrine that allows for the limited use of copyrighted materials without the permission of the copyright owner. The doctrine is intended to promote creativity and innovation by allowing for the use of copyrighted works in certain circumstances, such as criticism, commentary, news reporting, teaching, scholarship, and research. The four factors that determine fair use under US copyright law include: the purpose and character of the use, the nature of the copyrighted work, the amount and substantiality of the portion used, and the effect of the use on the potential market for the copyrighted work. These factors are evaluated on a case-by-case basis, and no single factor is determinative. Fair use can play an important role in scientific research by allowing researchers to use copyrighted materials in their work without seeking permission from the copyright owner. For example, a researcher may use a copyrighted image in a scientific paper to illustrate a point or support an argument, or may use a short excerpt from a copyrighted book or article to provide context or analysis. In general, the use must be transformative, meaning that it adds new meaning or value to the original work, and must not impact the market for the copyrighted work.



## THE ROLE OF COPYRIGHT LAW IN THE MUSIC INDUSTRY:

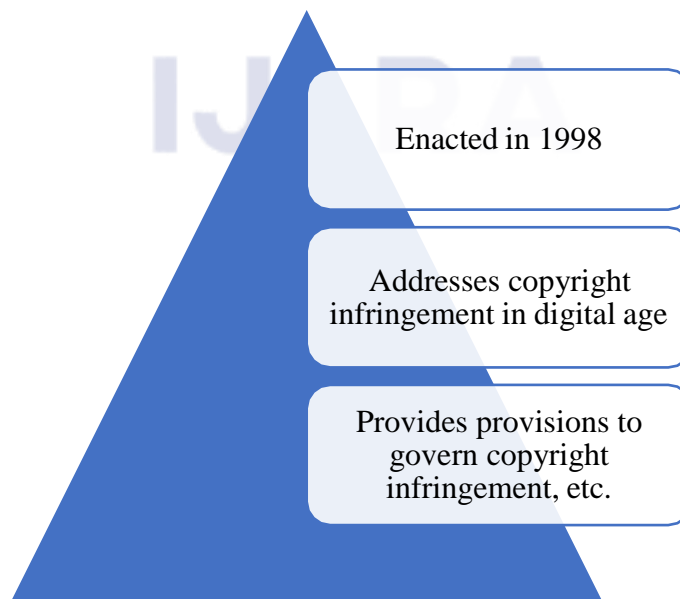
Overview of copyright law in the music industry: Copyright law plays a crucial role in the music industry by protecting the rights of creators and owners of musical works. Musical works can be protected by copyright law as both musical compositions and sound recordings, and

different legal frameworks apply to each type of work.

Copyright protection for musical compositions and sound recordings: Musical compositions are protected by copyright law as soon as they are created and fixed in a tangible form, while sound recordings require registration with the US Copyright Office to be protected. Copyright protection gives the owner exclusive rights to use and license the work, as well as the ability to seek legal remedies for infringement.

Royalties and licensing in the music industry: The music industry relies on licensing agreements and royalty payments to compensate creators and owners of musical works for their use. Different types of licenses exist for different uses, such as mechanical licenses for reproducing and distributing musical compositions, performance licenses for public performance of musical works, and synchronization licenses for using musical works in film and television. Royalty payments are collected by performing rights organizations and distributed to rights holders based on the use of their works.

## DIGITAL MILLENNIUM COPYRIGHT ACT (DMCA) AND COPYRIGHT LAW:



The DMCA is a US federal law that was enacted in 1998 to address copyright infringement in the digital age. The DMCA includes provisions that govern online service providers, copyright

management information, anti-circumvention measures, and safe harbors for online service providers. The DMCA includes safe harbor provisions that shield internet service providers (ISPs) from liability for copyright infringement committed by their users, provided that they comply with certain requirements. To qualify for safe harbor protection, ISPs must have a policy for terminating repeat infringers, designate a copyright agent to receive DMCA takedown notices, and promptly remove or disable access to infringing material when notified by a rights holder. The DMCA includes a notice and takedown procedure that allows copyright owners to request the removal of infringing material from websites hosted by ISPs. To initiate a notice and takedown request, a copyright owner must provide a written notice to the ISP that includes specific information about the copyrighted work, the location of the infringing material, and a statement that the use is not authorized. ISPs must then promptly remove or disable access to the infringing material, or risk losing their safe harbor protection.

## **COPYRIGHT LAW AND THE FILM INDUSTRY:**

Films are complex works that may incorporate multiple copyrighted elements, including screenplays, music, sound recordings, and visual effects. Copyright protection for film works is governed by a combination of copyright law, contract law, and industry customs. Filmmakers must obtain permission to use copyrighted material in their films, or risk facing legal action for infringement. Copyright clearance is the process of obtaining permission to use copyrighted material in a film. Filmmakers must identify all copyrighted elements in their films, determine who owns the rights to those elements, negotiate license agreements, and secure errors and omissions (E&O) insurance to protect against legal claims. Copyright clearance is an essential step in film production, as failure to clear rights can result in costly legal disputes and delays. Fair use is a defense to copyright infringement that allows the use of copyrighted material for certain purposes, such as criticism, commentary, news reporting, teaching, scholarship, or research, without the need for permission from the copyright owner. Filmmakers may also assert other defenses to copyright infringement, such as de minimis use, parody, or transformative use. However, these defenses are fact-specific and require a case-by-case analysis. Filmmakers should consult with legal counsel to assess the risks and potential defenses in their films.

## **COPYRIGHT LAW AND ONLINE EDUCATION:**

Online education has become increasingly popular in recent years, as technology has made it possible for students to learn from anywhere in the world. However, online education presents unique copyright challenges, as educators must navigate the complex web of copyright law to avoid infringing on the rights of copyright owners. Common copyright issues in online education include the use of copyrighted material in course materials, lectures, and assignments. Fair use and the Technology, Education, and Copyright Harmonization (TEACH) Act are two important provisions in copyright law that apply to online education. Fair use allows the use of copyrighted material for certain purposes, such as teaching, without the need for permission from the copyright owner. The TEACH Act provides additional flexibility for online educators by allowing the use of copyrighted material in online courses, provided that certain conditions are met. To avoid copyright infringement in online education, educators should follow best practices, such as using open educational resources (OER), obtaining permission to use copyrighted material, providing proper attribution, and limiting the amount of copyrighted material used. Educators should also educate themselves and their students about copyright law and its impact on online education. By taking these steps, online educators can help ensure that they are in compliance with copyright law and are providing a high-quality educational experience for their students.

## **COPYRIGHT LAW AND SOCIAL MEDIA:**

Social media platforms have become a popular way for people to share and distribute content, including copyrighted material. However, this has also led to a rise in copyright infringement, as users may share or use copyrighted material without permission from the copyright owner. Common copyright issues related to social media content include the use of copyrighted images, music, and videos. The Digital Millennium Copyright Act (DMCA) provides a mechanism for copyright owners to request the removal of infringing content from social media platforms. This is done through a DMCA takedown notice, which requires the platform to remove the infringing content or risk liability for copyright infringement. Social media platforms have established procedures for submitting DMCA takedown notices, and copyright owners can use these procedures to protect their rights. To avoid copyright infringement on social media, creators and businesses should follow best practices such as creating original

content, obtaining permission to use copyrighted material, and providing proper attribution. They should also familiarize themselves with the terms of service of social media platforms and ensure that their use of the platform is in compliance with copyright law. By following these best practices, creators and businesses can protect their own intellectual property rights while respecting the rights of others.

## **COPYRIGHT LAW AND SOFTWARE DEVELOPMENT:**

Copyright law provides protection for software code as a form of literary work. This means that software developers have exclusive rights to their code, including the right to reproduce, distribute, and create derivative works. However, copyright protection for software code can be complex, as it may involve both functional and creative elements. Open source software is typically distributed under a license that grants users certain rights to use, modify, and distribute the software. These licenses are typically based on copyright law, and they establish the terms under which the software can be used and distributed. Developers who use open source software should be aware of the terms of the license and ensure that their use of the software is in compliance with the license. Copyright infringement in software development cases can occur when one developer copies or uses another developer's code without permission. This can be difficult to prove, as it may require a comparison of the allegedly infringing code with the original code. However, copyright law provides remedies for infringement, including injunctive relief and damages. Developers who believe that their code has been infringed should consult with a copyright attorney to determine their options. Copyright law grants ownership of a work to its author or creator. However, there are some exceptions to this rule, such as works made for hire, where the employer or commissioning party is considered the author. It's important for creators to understand who owns the copyright in their work, as this can affect their ability to license or sell the work. Copyright protection typically lasts for the lifetime of the author plus a certain number of years after their death. In the United States, the duration of copyright protection for works created after January 1, 1978, is generally the life of the author plus 70 years. However, there are some exceptions to this rule, such as for anonymous works or works created by corporations. Copyright law varies from country to country, and creators should be aware of the copyright laws in the countries where their work will be distributed. Many countries are signatories to international copyright

agreements, such as the Berne Convention, which establish minimum standards for copyright protection. There are still differences in how copyright law is enforced and interpreted in different countries. Copyright registration is not required for copyright protection, but it can provide certain benefits, such as the ability to sue for infringement in federal court. In the United States, copyright registration is done through the Copyright Office, and requires the submission of an application and a copy of the work being registered.

## **CONCLUSION:**

In conclusion, copyright law plays a critical role in scientific research, providing a framework to protect the rights of creators and incentivize the creation of new works. However, the complexity of copyright law and the tension between copyright protection and the need for open access to research data present challenges to the sharing and dissemination of scientific research. As we look towards the future, it is clear that there are both challenges and opportunities in the evolving landscape of copyright law in scientific research. Emerging technologies such as artificial intelligence and blockchain have the potential to transform the way research data is created, shared, and used, while open access publishing models and data sharing platforms offer new opportunities for collaboration and discovery. To navigate these challenges and leverage these opportunities, it will be important for researchers, institutions, and policymakers to work together in a spirit of collaboration and openness. By embracing new models of open access publishing and data sharing, and advocating for copyright reform that better supports the needs of scientific research, we can promote a copyright framework that serves the continued progress of scientific research and the public good. Ultimately, the future of copyright law in scientific research will depend on our ability to balance the rights of creators with the need for open access to research data. With continued engagement and dialogue among stakeholders, we can build a copyright framework that better serves the needs of scientific research and helps to drive continued progress in the pursuit of knowledge and discovery.