



IPR CELL

Newsletter

January 2022 - December 2022

Insights of the Issue

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Intellectual Property Rights Cell
Bharathiar University
Coimbatore – 641 046





Published by

IPR Cell
Bharathiar University
Coimbatore - 641 046.
Phone : 0422-2428128
E-mail : ipr@buc.edu.in
Website : www.b-u.ac.in

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Coimbatore - 641 046, Tamil Nadu.

Opinions in this Publication are those of
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Printed at

Thannambikkai Printers,
No. 15, Sastri Street No. 1,
P.N. Pudur, Coimbatore - 641 041.
Mobile : 98650 10414

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The rights to claim ownership of intellectual property have been gaining universal recognition by all developed and developing countries. It is anticipated to be a vital influence for accelerating ideas and innovation. Although there is a lot of knowledge and discussion surrounding the rights granted to intellectual property owners, very little is being said and understood about the duties that belong to the owners of the intellectual property. The rights can be legally granted only in the event of the claimant (owner of the intellectual property) fulfilling obligations regarding the assertion of rights. The obligations of the duties should not only be legal but also ethical and moral. The owner should make sure that the intellectual property they are claiming will attain its full potential and perform to realise its economic and commercial values, contributing to the growth and development of the country. The transformation from Intellectual property to a knowledge asset or knowledge capital is achieved through the optimal performance of these rights. The IPR Cell of our institution has been acknowledged to have comprehended this attitude in the intended regard from the point of initiation and has been promoting and ensuring that the intellectual properties created in the University are of the highest value and are in turn effective intellectual assets. The University is anticipated to take the lead in producing intellectual property in the upcoming years and the owners of which will benefit proportionately from the nation's organic growth and development.



Dr. C.A. Vasuki

Member, Vice Chancellor Committee



In order to promote innovation, Intellectual Property Rights are a crucial instrument. When carefully managed, they strike a balance between individual freedom and public necessity that incentivizes innovation overall. It is commonly known that IPR encourages R&D, marketing, and product distribution, therefore advancing product development. In protecting the innovations and investments, R&D financiers are advised in obtaining IP rights. The central goal of this system is the stimulation of inventions by fostering their utilisation and protection in turn optimizing the industry growth supporting technological progress, transfer and dissemination of technology and the utmost utilisation of advantages offered by the patent system. It is only in the event of authenticity and true value of the intellectual property that the protection and optimal security provision be of service. This initiation is not on the terms of discouraging non-performing intellectual properties, but rather the elucidation of the capital resource invested in the protection of the intellectual wealth of both the individual and the country. Attempts to protect these intellectual properties would involve an immense capital flow. The IPR Cell of Bharathiar University comprehending this notion is vibrant in fostering information sharing and cross-fertilization of ideas among researchers, delegates of business, farmers, and industries with similar objectives. The youth being the institutions' future are expected to have a clear vision of the above mentioned IP rights in order to accomplish greater achievements for the country.

Dr T. Parimelazhagan

Director, IPR Cell, Bharathiar University

The BU-Intellectual Property Rights (IPR) cell is responsible for managing and protecting the intellectual property generated by the university's researchers and faculty. The IPR cell plays an important role in the promotion and commercialization of innovation and research, and is essential for the overall growth and development of our University.

Here are some of the key functions of an IPR cell in our university which includes being responsible for identifying potentially patentable inventions and creative works generated by our university's faculty and students. This cell evaluates the novelty and commercial potential of these inventions and works, and files patent applications or other forms of IPR protection as appropriate.



The BU-IPR cell manages the licensing of university-owned IP to external entities for commercialization. This includes negotiating licensing agreements with commercial partners, managing the legal and financial aspects of IP commercialization, and ensuring that the rights of the university and inventors are protected. The BU-IPR cell is also responsible for raising awareness of IPR among the university's faculty and students. This includes providing information and training programs like seminars, workshops on the importance of IPR, and promoting best practices for identifying, protecting, and managing intellectual property.

So far, the intellectual property Rights Cell of Bharathiar University has been vibrant enough to secure 13 patents out of 31 patents filed so far. Also, 17 copyrights have been registered by the cell. The grievances in the time of application, scrutiny meetings and other proceedings are well supported by the authorities of the Indian Patent Office, Chennai and Kolkata. Diligent efforts are taken by the cell to achieve cent percent patenting and registering of copyrights. Periodic monitoring of the renewal of the patents is also taken care by the cell. The IPR cell also owns an independent IPR policy that governs the functioning and proceedings of the cell through which every legal and official aspect that arises during filing a patent or registering a copyright is addressed. As IPRs provide royalty for the innovations that are turned into viable and commercial product, the claimant of ownership and sharing of the same is systematically organized into a working structure such that avoiding any unforeseen legal dispute.

The IPR cell works closely with industry and government agencies to promote the transfer of technology and knowledge generated by the university's researchers. This includes establishing partnerships with companies to commercialize university-owned IP and securing funding from government agencies to support research and development efforts, which is the ultimate futuristic perspective of the cell.

Overall, the IPR cell plays a critical role in managing and commercializing the intellectual property generated by a university's faculty, staff, and students. By protecting and commercializing IP, the IPR cell can promote innovation, technology transfer, and economic growth, while also generating revenue to support further research and development efforts.



A NOVEL WATER QUALITY MONITORING SENSOR SYSTEM

The global demand for water quality monitoring sensors was valued as US\$ 5.06 billion in 2021 and expected to grow at 7.8% (US\$ 9.23 billion) CAGR from 2022 to 2029. These sensors can detect the water's important constituents, such as chemical concentrations and solids directly. Among the important constituents, pharmaceuticals, flame-retardants, pesticides, nanomaterials, personal care products and water resistant plastics and coatings are classified as contaminants of emerging concern (CECs) found spreading in the environment continuously. In addition, Tamil Nadu Pollution Control Board (TNPCB) reported highly toxic Ammo-Nitrogen conductivity (chemicals and heavy metals) in Adyar and Cooum rivers during March-September 2022. Therefore, on-site monitoring of these CECs is crucial to protect the environment and living beings.

For on-site monitoring, paper based electrochemical sensors (ECs) are highly suitable due to their low-cost, portability, simplicity, rapidity and low sample volume requirement. Enzymes modified paper based electrochemical sensors using photolithography and screen printing technologies for the sensor strip preparation and colorimetric sensors have been utilized earlier for the detection of some CECs especially microplastics and nanoplastics. However, interference effects, presence of natural organic materials on the electrode or electrode passivation are at lag in the present reported ECs. In addition, achieving the required selectivity and sensitivity and being able to perform in situ, without or with a minimum sample pre-treatment step is still not achieved as expected. Even though significant advances in enhancing the detection sensitivity and portability have been achieved with the use of 2D, 3D, and layered materials and advanced manufacturing techniques, most of the ECs are still in the "proof-of-concept stage" and their practical usage in real environmental scenarios has a long way to go.

Among many 2D nanomaterials, MXene possesses high surface area, excellent thermal resistance, good hydrophilicity, unique layered topology, high electrical conductivity, and environmentally-friendlier properties. Applications including catalysis, energy storage, electronics, and environmental sensing and remediation have been utilizing MXene based composites extensively. However, till date, there are no ECs reported for multiplexed detection of CECs on a single platform including MXene modified electrodes. Hence, herein, a working electrode of the sensor strip will be developed using MXene nanocomposite inks prepared using a scalable hydrothermal method. Metal oxides such as Fe₂O₃, SnO₂, MnO₃ and ZnO nanoparticles will be synthesized using hydrothermal methods and decorated with the prepared MXene via grinding and sintering. The metal oxides decorated MXene nanocomposites will be utilized as multiple working electrodes for each CEC capture. Ag/AgCl and carbon inks as reference and counter electrodes respectively will be pasted on bagasse plates along with the working electrodes printed on a single paper substrate. The paper sensor strips will be cured at 30°C and attached to a portable potentiostat and demonstrated for rapid, accurate and multiplexed detection of CECs at optimal pH from the aquatic real samples with high accuracy.

Dr. K. Preethi, Assistant Professor,
Department of Microbial Biotechnology

MY JOURNEY TOWARDS “PATENT DRAFTING FOR BEGINNERS” – AN ONLINE COURSE

With the intention and enthusiasm in attaining a patent, I started my research on pigmented marine Actinomycetes. Fortunately, I obtained the brown pigment Pheomelanin from *S. spinoverrucosus*. Owing to the methodology being anew and absence of publications in the purification process, I decided to apply for a process patent for compound purification. The process of writing the abstract, inclusion and exclusion of the right data, and understanding the significance of the figures and tables were a little perplexing. On receiving a lot of assistance from the IPR Cell, BU I attempted the development and submission of the patent procedures. In 2018, I applied for a patent, and my patent was granted in 2022. I was quite inquisitive and eager to learn more about patents and the application procedure. While stepping into the study, I came to know that there are many essential components like prior art, abstract writing, tables, figures, description etc in the procedure and so I decided to learn in-depth by enrolling myself for the online course on “Patent Drafting for Beginners” offered by the NPTEL platform. I gained more knowledge about drafting a patent and information on how to start the process, and I thank Swayam NPTEL and also IPR Cell, BU for motivating me to complete the course successfully.



Dr. M. Sumathy

Professor & Head, Department of Commerce



INNOVATION THROUGH INTELLECTUAL PROPERTY RIGHTS IN SOCIAL SCIENCES

Intellectual Property Rights (IPR) refer to the legal rights granted to individuals or organizations over their creations of the mind, such as inventions, literary and artistic works, designs, symbols, and images. The primary aim of IPR is to encourage innovation, creativity, and invention by giving creators exclusive rights over their creations for a certain period.

In social science, Intellectual Property rights are crucial for several reasons. They provide an incentive for researchers and scholars to invest time, effort, and resources into generating new ideas and innovations. Without the protection of Intellectual Property Rights, individuals and organizations may not see the value in investing in research and development, as they may not be able to reap the benefits of their discoveries. The importance of IPR in commerce cannot be overstated. IPR encourages innovation by protecting the investments of creators and incentivizing them to create new products and services. The protection of IPR also provides businesses with a competitive edge, as they can protect their unique ideas and creations from being used by their competitors.

Similarly, copyrights provide the exclusive right to the creators of literary and artistic works, such as books, music, and films, to control the use and distribution of their works. Copyright protection not only incentivizes creativity but also ensures that creators can earn a fair return on their investment in their work. Trademarks, on the other hand, protect distinctive signs and symbols used by businesses to identify and distinguish their products and services from others. This protection provides businesses with a competitive edge, as they can prevent others from using their trademarks to mislead consumers into buying inferior or counterfeit products.

In conclusion, IPR is essential for promoting innovation, creativity, and economic growth. The protection of IPR encourages creators to invest in their ideas and creations, and it gives businesses a competitive edge by protecting their unique ideas and brands. Therefore, individuals and organizations must understand the importance of IPR and take steps to protect their intellectual property. Intellectual Property Rights play a critical role in social science by promoting innovation, protecting the rights of creators, and ensuring fair competition. As such, they are essential for driving progress and addressing the complex social issues that face our world today.

Dr. M. Dhanabhakym, Professor
Department of Commerce



RELEVANCE OF COPYRIGHT IN THE ACADEMIC FIELD

Copyright is an important legal concept that provides exclusive rights to creators of original works. One of the main benefits of copyright protection is the ability to protect intellectual property from being copied, distributed, or sold without permission. This helps to encourage creativity by providing creators with the assurance that their work will be protected from infringement. Copyright also provides economic benefits to creators and society by allowing creators to profit from their work, stimulating economic growth and job creation. Additionally, copyright helps to preserve cultural heritage by protecting works of art, literature, music, and other creative works, allowing for the preservation of important cultural traditions and knowledge. Finally, copyright law ensures that creators receive credit for their work and that the public has access to accurate information about the origins and authors of creative works. In summary, copyright protection provides creators with exclusive rights, encourages creativity, supports economic growth, preserves cultural heritage, and ensures access to information.

Copyright is highly relevant in the academic field as it is crucial for protecting the intellectual property of academic authors. Academics produce a wide range of works, including research papers, articles, books, and educational materials, all of which are often subject to copyright protection. Copyright law provides legal recourse against infringement and unauthorized use of their works, ensuring that academic authors receive recognition and compensation for their work, which supports the production of new scholarly works. Fair use is an exception to copyright law that allows academics to use copyrighted materials in certain circumstances without seeking permission from the copyright owner, while licensing and permissions provide a framework for obtaining permission to use copyrighted materials. Open access is a movement that seeks to make scholarly works more widely available to the public, and copyright law enables academic authors to choose the terms of access to their works, such as through the use of Creative Commons licenses.

While copyright protection is essential in the academic field, there have been instances where it has been misused. One common example is when publishers charge high fees for access to academic works, making it difficult for students and researchers to access the information they need. In some cases, publishers may also require authors to transfer their copyright ownership, which limits their ability to freely share or use their own works. Furthermore, copyright can be misused to academic research or criticism, as copyright holders may use their rights to prevent others from using or reproducing their works. This can have alarming effect on academic freedom and the advancement of knowledge. Overall, while copyright is essential in the academic field, it must be used responsibly to ensure that it supports, rather than hinders, the dissemination of knowledge and the advancement of scholarship.



STRUGGLES OF SOCIAL SCIENCE IN CENTURY OF KNOWLEDGE

Being in the century of knowledge, innovations hold a special place in nations development with an ability to transfer knowledge into wealth and social good. Intellectual property rights help in protecting the rights of the individuals' ideas by providing rights to owners who have converted knowledge to product. In social science patents become an elusive dream for scholars as social scientists do not hold any products while converting their knowledge. Even though patents in social science are increasing in the last two decades, with an ideology of mixing some social knowledge with computer-based software brings a novel product that acts as subject matter of patent.

Gowtham K

Ph.D. Research Scholar, Department of Botany

SIGNIFICANCE OF PATENTING IN ACADEMIC CUM RESEARCH INSTITUTIONS

Patents are a form of intellectual property protection that can provide researchers with legal rights over their inventions. Patents are granted by the government and they give the inventor the right to exclude others from making, using, selling, or importing the invention for a limited period of time, usually 20 years from the date of filing. Patents can be valuable for researchers who have developed new processes, products, or technologies that have potential commercial applications. By obtaining a patent, researchers can protect their intellectual property and prevent others from copying or exploiting their invention without permission.



However, obtaining a patent can be a complex and time-consuming process, and it requires a thorough understanding of patent law and the patent application process. Researchers may need to work with patent attorneys or agents to draft and file their patent application, and they may need to provide detailed descriptions and drawings of their invention.

In addition, researchers should be aware that the patent process is public, and their invention will be disclosed in the patent application. This means that their inventions are made visible to others for study and perusal, which could lead to competitors attempting to design around the patent or develop similar technologies.

Despite these challenges, patents can be a valuable asset for researchers, particularly if they plan to commercialize their invention or license their technology to others. Patents can also enhance the reputation of the researcher and the institution with which they are affiliated, as they demonstrate a commitment to innovation and intellectual property protection.

Akhila Johnson, Ph.D. Research Scholar,
Department of Sociology & Population Studies

INTELLECTUAL PROPERTY RIGHTS: UNDER-REPRESENTATION OF WOMEN IN SOCIAL SCIENCES

Contributions by women have the capability to transform the world, yet they are under-represented in intellectual property rights. There has been a dramatic increase in the use of patent citation data in social science research (Jaffe & De Rassenfosse, 2017). Though copyrights have been increasingly filed by women in STEM, the same is not evident among women in social sciences at least in India. Out of the 1,683 copyrights registered in India in the first three months of 2023 (Department for Promotion of Industry and Internal Trade, 2023) only a handful of women have copyright in their names.



Benedict Mathews P

Ph.D. Research Scholar, Department of Botany



IPR: AN IMPERATIVE COMPONENT OF RESEARCH

Intellectual property (IP) rights are an important consideration in academia, as researchers and scholars often create new knowledge and inventions that may be subject to legal protection. There are various types of intellectual property, including patents, trademarks, copyrights, and trade secrets. In the context of academia, IP rights may arise in a number of ways, such as through research papers, inventions, software, and other types of creative works.

These IP rights can be important for researchers, as they can help to protect their work and ensure that they receive recognition and compensation for their contributions. One important consideration for researchers is the issue of ownership of intellectual property. In many cases, universities and research institutions may claim ownership of IP created by their employees, students, or other affiliates.

However, this can vary depending on the specific policies of the institution and the nature of the work being created. Another important consideration is the use of intellectual property in research and teaching.

For example, researchers may need to obtain permission to use copyrighted materials in their work, or they may need to ensure that their own work does not infringe on the IP rights of others. Overall, intellectual property rights are an important consideration in academia, and researchers should be aware of the various types of IP and the potential implications for their work.

It is also important for universities and research institutions to have clear policies and procedures in place for managing IP rights, in order to ensure that the interests of all parties are protected.



SIGNIFICANCE OF WOMEN REPRESENTATION IN IPR

UNESCO data reveals that less than 30% of the world's researchers are women, and the remaining are men (2023). It is high time to lay importance on protecting the unique insights and perspectives of women scientists through IPR rather than focusing on the cause of gender disparity at this point in time.

This will certainly improve the quality of work done by women scientists and enhance the necessary standards to obtain copyright protection. The importance of IPR among women researchers in respective field's aids in advocating for themselves thereby ensuring the recognition they deserve for their creativity and originality.

Aparna J

II M.Sc. Botany, Department of Botany

IPR: PROTECTION FOR YOUR PROPOSITION

Not every Creation and Innovation turns out to be good and beneficial. To conceive such ideas, one has to work hard and think smart and it is more important to protect them. The latter is taken care of by Intellectual property rights (IPRs).

It protects and stimulates the development and distribution of new products and the provision of new services based on the creation and exploitation of inventions, trademarks, designs, creative content or other intangible assets.

This is especially important for start-ups and SMEs, as IPRs provide them with powerful tools to compete with incumbent or larger companies.

As people who will soon be joining the workforce, it is important for students to understand the nuances of IPR and its benefits. Providing IPR awareness will encourage students to look at the world and think of ways to make things quick and improved.

As a student opting for research as a primary goal, I find protecting and managing the research results the most significant benefit of IPR. I have learnt that it is also essential to know about the rights related to authorship in connection with research publications and the right way to protect R&D innovations, through IPR classes. I am sure now that with the right expertise, I can safeguard my research and hard work.





IPR AND TOOL FOR RETHINKING AND REDEFINING THE FRONTIERS OF ACADEMIC FUNCTIONS

The Academic ecosystem is the only ecosystem where extraordinary focus is invested on improving knowledge and knowledge systems. There is inconveniently a truth factor that insulates the academics from understanding the nuances of the commercial archetypes. The primary function of an academic ecosystem is to deplore and explore into the existing knowledge systems and expand the frontiers by discovering as well as developing new tools as well as enhancing the utility of the existing known tools to solve problems.

It is understood that academic functions are typically teaching, learning and evaluating, while the Research and inventions that are functions of generating new knowledge has taken a back-stage. It is to be noted that the very functions of Inventiveness and creativity are lost and remain defused between the boundaries of academics and the industries. The clear line has to be drawn between the academic and industrial functions, the responsibilities and ownership should be assigned to each of them. There may be overlaps and crisscrossing sections, which is the area where collaboration needs to be encouraged and competition reduced yet competitiveness enhanced. However, much of the human talents and potentials measured in terms of man-hours of expertise spent is lost in the process of standard administrative exercises and accreditation exercises which mandate the governance of the academic ecosystem. If there is a rethinking and redefining of the academic functions and objectives, a powerful economic engine can be developed with the Industry-academia partnership. IPR in this context is the tool, in fact the only tool, which can be the platform to mastermind this functionality. It becomes the interface between the industries and the academics.

The idea of an economic development or an industrious growth happens only when there is a process in which human beings are engaged in doing (Production or Manufacturing) things from which knowledge is generated (Research) latter curate and structured with an objective of solving problems and offering solutions (Creativity), which is bundled in order to be transferred to the required extent of offering solutions (Teaching and Training). Some of these processes need to be tested, evaluated and certified, in order to ensure safety and security to humans, plants and the environment.

If what is said above is destined to be a typical function, there has to be a rigorous drill in re-imagining, rethinking and redefining the entire process which shall be founded on the nation's origin of the culture and heritage and shall never be aped. It is this aping that leads to the confusion and bias. However, aligning the order with the rest of the world, shall be considered. Therefore, using the IPR as the tool and platform, the academics shall align to devise original plans of Inventive Research (for Publications) and Applied Research (for Protection of IP). Therefore, the protocol shall be followed in order to not publish before protection. Publish, Productize and Monetize (Commercialize and License) should be the strategy. Plan for the Research to be protected and then Published latter Productized before it is taken to Market strategies. Define and package Functional Invention (Technology+ Know how) to be transferred.

It is the Product (Solution), Process (Technology), People (Human Resources) which is the organic core of an enterprise. Only when these align the Market and Funding, they become critical to give the holistic outcome of business of the enterprise and the enterprises commercial relevance in the economic sector. Undoubtedly, the academics should take the ownership of the Technology part and the skilling part. This will form the basis of redefining the academic functions and objectives.

Mr. D. Thiyagaraja Guptha

Deputy Controller of Patents & Designs,
Indian Patent Office, Kolkata

PATENT FILING SCENARIO IN 2021-2022

Total number of patent applications filed in 2021-22 is 66440 showing an increase of 13.57% over the filing figure of 58503 in 2020-21. Domestic filing is 44.41% of the total applications filed as compared to 41.58% during last year. Out of total number of ordinary applications filed by Indian applicants during 2021-22, Tamil Nadu occupies the first position while Maharashtra and Uttar Pradesh occupy second and third place, respectively. This year, Tamil Nadu showed remarkable leap in filing of patents compared to last year and occupies first place in the list with 5262 applications followed by Maharashtra with 4566 applications and Uttar Pradesh with 3622 patent applications. Total number of patents granted during the year was 30073, of which 6397 were granted to Indian applicants.



PATENT TITBITS

- 1) M. Jagadesh Kumar, chairperson of the University Grants Commission has announced on 3rd Aug. 2022, that the government will soon launch a scheme to fund 10,000 patent applications every year from educational institutions and under this scheme, faculty members and students from higher education institutions can seek government funding to patent their innovations. The higher education regulator will invite applications from students and faculty members in universities and colleges. The upcoming amendments in the PhD regulations will also be recommending students and faculty to patent their work.
- 2) Intellectual Property Rights Division (IPD) has been created in the High court of Madras to deal with all matters relating to Intellectual Property Rights on 5th April 2023. This is the second such division following the IPD of the Delhi High court. The IPD is a distinct and specialised division that was set up to exclusively adjudicate matters pertaining to intellectual property (IP). Apart from obvious advantages that stem from specialist judges, the IPD is also very progressive in terms of procedure. On April 4 2021, the Intellectual Property Appellate Board (IPAB) was abolished and subsequently as a replacement, IPD's are being created in the respective High courts.
- 3) "All recognized educational institutions, whether in India or abroad, will get an 80% reduction in patent application fees" as announced by Commerce and Industry Minister, Piyush Goyal. This facility was earlier provided to innovations coming out of government institutions only.

(Source : Patent Office Annual Report; Times of India)

**Recent Achievements of Bharathiar University**

Bharathiar University has been accredited by NAAC with A++ grade with the CGPA of 3.63 and ranked by MoE-NIRF, TIMES Higher Education, UK, QS Ranking, UK, University Ranking by Academic Performance and UI GreenMetric Ranking etc. The Internal Quality Assurance Cell of our University is used to collect, compile and submit most of the data in-time to all ranking agencies. In 2022 – 23, the University has achieved top status in all these rankings with the hard work of all the faculty members, staff, research scholars and students. It reflects our strategic approach in teaching and research excellence, our commitment towards students and emphasis on providing a high-quality learning and student experience. Our administration is

the backbone of all these achievements. They always encourage the IQAC team to do more quality initiatives in the campus. Based on that we have attained the following rankings from various national and international agencies.

1. National Institutional Ranking Framework - MoE – NIRF 2022
15th Rank Among Indian Universities
122nd Rank in the Research Category
24th Rank in the Overall Category
2. TIMES Higher Education [2023]
801-1000 Rank among World Universities
18th Rank among Indian Institutions
251-300 Rank for World Emerging Economies University Rankings
251-300 Rank for World Young University Rankings
251-300 Rank for World University Rankings (ASIA)

Subject Rankings among World Universities

- 501-600 Life Sciences
- 601-800 Physical Sciences
- 601-800 Computer Sciences
3. QS Rankings [2023]
205th Rank in the World University Rankings (ASIA)
36th Rank in South Asia
4. University rankings by Academic Performance (URAP) [2023]
1222nd Rank among World Universities
29th Rank among Indian Institutions
5. UI GreenMetric World University Rankings
725th Rank among World Universities
29th Rank among Indian Institutions
6. The Week-Hansa Research Survey 2022
10th Rank among all Multidisciplinary Universities in India
4th Rank among Multidisciplinary Universities in the South Zone
7. India Today-MDRA Best Universities Ranking 2022
11th Rank among General Universities Ranking 2022
8. District Green Champion Award by MGNCRE, Gol

(Source: IQAC, Bharathiar University)

Patents Granted

Sl. No.	Title of the Patent	Inventor(s)	Patent No.	Date of Grant
1	Purification process for pheomelanin from the culture supernatant of streptomyces spinoverrucosus	Dr. K. Preethi Dr. P. Satheesh	387540	27.01.2022
2	Novel method for the detection of Adulteration in Expensive Aromatic Rice by Cheaper Non-Aromatic Rice using PCR-RFLP	Dr. R. Sathishkumar Dr. S. Balamurugan Dr. S. Balamurugan Dr. Inchakalody, P. Varghese Dr. M.C. Harish	392785	24.03.2022
3	Method to Produce Graphene Quantum Dot Sheet and its Applications	Dr. D. Nataraj Dr. K. Senthilkumar Dr. G. Bharathi	397923	27.05.2022
4	Method of <i>in vitro</i> Culturing of a Mycobiont in a Fungal-Algal Symbiosis	Dr. P. Ponmurugan Dr. R. Kalidoss Mr. K. Arun Prasath	408182	30.09.2022

Copyright Registered

Sl. No.	Title of the Patent	Copyright Author	Registration No.	Date of Registration
1	Employee Grievance Management in Indian IT Companies	Dr. M. Dhanabhakayam	L-110265/2022	10.01.2022
2	Remote Working and Paradigm Shift in the Human Resource Management	Dr. M. Dhanabhakayam	L-114671/2022	25.04.2022
3	Interconnecting both advertiser and influencer together in a software application for advertising – (AdSow360 – Best Way for Advertising)	Mr. Mithun Lakshman. S.M Mr. Mathan Ram. S.M	L-117408/2022	07.09.2022
4	Assessment Model - Moderated Mediation Effect on Consumer Behaviour Towards Organic Products	Dr. M. Sumathy Dr. G. Anitha Rathna	L-117503/2022	21.09.2022
5	Ethical Hacking	Dr. M. Punithavalli Dr. Nisha Varghese	L-117872/2022	28.09.2022



*“You Think,
We Protect”*