

ALAGAPPA UNIVERSITY, KARAIKUDI

7.2 Best Practices

Describe at least two institutional best practices

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

The two best practices implemented by the institution are:

1. University Science Instrumentation Centre (USIC) for enhancing the quality of research
2. Intellectual Property Rights (IPR) Cell to provide rights to the innovative creations and inventions

Best Practice I

Title: University Science Instrumentation Centre (USIC) for enhancing the quality of research

Objective

University Science Instrumentation Centre (USIC) was created with the prime objective of enhancing the quality of research in basic as well as applied field of sciences. USIC is taking initiative to maximize the use of expensive/sophisticated equipment in the University through training and maintaining the equipments at the state-of-the-art level. Further, this advanced facility is also being extended to the research fraternity from nearby Institutions at a very affordable cost. State of the art instruments housed in USIC enable not only new discoveries but also help to generate intellectual properties. Centralized instrumentation facility within the campus environment enables the research scholars and faculty members to elevate their research work to the global standard.

The Context

Advanced instrumentation facilities enable the researchers to explore and attain knowledge with more precision and speed on various field of studies acclimated to the current research needs. Ever increasing complex scenario in the modern research can be answered with the development and usage of effective and novel instruments. USIC facility at Alagappa University plays a vital role in enhancing quality publications and to file patents encourage more researchers to conduct experimental research which can lead to practical applications.

The Practice

USIC facility has enabled the Alagappa University to rise as an active research oriented academic institution. Instrumentation facilities have been extended in recent time for which a new separate building has been constructed and equipped with higher end instruments. The facility is open for all the research scholars and faculty members from the institution as well as to those who belong to other institutions. A minimal amount of usage charge is collected from the researchers which ensures that the instruments are optimally used and prevents misuse. User charges for the internal users have been kept minimal in order to encourage the students, research scholars and faculty members of Alagappa University to utilize the facility entirely. The user fee collected is utilized for maintenance of the facility. These state of the art equipments are maintained under Annual Maintenance Contract to ensure that the instruments are always in working condition. This facility has been built with instruments that are essential for physical, chemical and biological sciences. This center also provides a two week internship program for the aspirants who are interested in learning various characterization techniques.

Evidence of success

Success of the USIC facility is directly reflected in the quality and quantity of publications. Researchers from Alagappa University are able to publish their work in highly reputed and high impact factor journals. This also helped the researchers and faculty members to enter into world class research which in turn helps the University to attain superior rankings at national and global level. Several most sophisticated equipments are available under one roof costing several crores of rupees. Also researchers in and around South India are being benefited with the outsourcing facility. Thus, researchers from Alagappa University as well as from other institutions are rising in their respective field of research. USIC facility has also become a key source for attracting funding from various national funding agencies and industries.

Problems Encountered and Resources Required

Maintenance of the higher end instruments needs professionals with much expertise. For each instrument, a technical in charge can be appointed to ensure the long life of the instrument and to increase the sample size and usage. Also, at regular intervals workshops and conferences can be conducted so that more researchers will be benefited by attaining technical and operational knowledge on sophisticated instruments. Fund raised through the workshops can be utilized for the maintenance of the instruments and the facility.

Best Practice II

2. Title: Financial support from the University for protecting intellectual property

Objective

The primary objectives of the IPR cell are to disseminate knowledge on types of patents, global patent regime and to encourage the research scholars and faculty members to create intellectual properties through innovative research. IPR Cell facilitates and ensures the protection of the rights for the inventions and products designed by the stakeholders of Alagappa University. Proper utilization of the IPR cell leads to increased interest in translational research. Inventions, discoveries and number of patents published and filed are one of the key criteria in NAAC accreditation, and eligible standards for an institution to enter into national (NIRF) and global (QS, THE etc) rankings. Thus, through increasing the number of patentable works, the grade of Alagappa University can be taken to greater heights.

The Context

Universities and patents benefit each other. Patents help universities to improve their ranking, establish an innovation ecosystem, incubate knowledge-based start-ups, earn additional revenue and measure research activity. For small scale business and for start up entrepreneurs, patents are extremely valuable as holding the invention rights paves way for attracting investors for acquiring the rights of the IP after paying royalty/compensation.

The Practice

Patenting can be an expensive process. With patent fees, attorney fees, and the cost of creating drawings, a patent can cost a lot. IPR cell at Alagappa University helps the inventors to file for patent with Alagappa University as Assignee/Applicant and the cost for the patent filing is paid from the University funds. Drawing of the patents which is a complex process is handled by authorized patent attorneys. IPR cell acts as a bridge between the inventors, University and the patent attorneys. IPR cell also conducts workshops to familiarize faculty members and scholars on patents, patent regime in India and abroad and registration aspects. Also provides facilities for faculty and scholars for progressively going for patentable works. The University has also come out with its own IP Policy. The IP Policy sets guidelines on ownership, commercialization, technology transfer and revenue sharing relating to IP created by Alagappa University and other Institutes, Industries and Business Organizations involved in collaborative research with Alagappa University.

Evidence of success

As of May 2020, more than 25 IDF's have been submitted for patent filing with Alagappa University as Assignee/Applicant. Out of 25, 2 patents are under the examination process, 2 are requested for examination and 12 IDF's were under application filed status. In addition, certain other IDF's that are materialized through industrial collaborative projects are under progress. Number of patents filed/published/granted has been a key factor for attaining 'A+' status in NAAC accreditation.

Problems Encountered and Resources Required

Though a number of patents have been filed, and patentable works are constantly increasing, the next step of the invention i.e., product development and commercialization is still lagging. Further action plans and steps are being taken to transform innovation to marketable materials/products. Organising workshops on regular basis for escalating the patentable work, translational research and technology transfer can resolve the aforementioned problem.