

## Applied Research

One of the important part of the vision of Majmaah University is to meet the expectations of needs of the community pertinent to development. In order to achieve this mission Majmaah University is funding all types of research projects and social initiatives that contribute in achieving the sustainable development. The focus of the Majmaah University is to encourage the faculty to do applied research. Applied research is more useful to fulfill the needs of the community.

Applied research is designed to answer specific questions aimed at solving practical problems. New knowledge acquired from applied research has specific commercial objectives in the form of products, procedures or services. Applied research refers to scientific study and research that seeks to solve practical problems. Applied research is used to find solutions to everyday problems. Applied Research is usually conducted for industries or governments by universities or by specialized research laboratories or institutions.

Applied Research is always for development purposes. It is generally referred to as Research and Development (R& D). Hence, applied research is designed to solve practical problems of the modern world, rather than to acquire knowledge for knowledge's sake. One might say that the goal of the applied scientist is to improve the human condition. Some scientists feel that the time has come for a shift in emphasis away from purely basic research and toward applied science. This trend, they feel, is necessitated by the problems resulting from global overpopulation, pollution, and the overuse of the earth's natural resources.

Characteristics of Applied Research:

1. Applied research is solution-specific and addresses practical questions.
2. It involves collection and analysis of data to examine the usefulness of theory in solving practical educational problems.
3. It can be explanatory but usually descriptive.
4. It involves precise measurement of the characteristics and describes relationships between variables of a studies phenomenon.

## Research Funding Agencies

### National Level

1. King Abdul Aziz City for Science and Technology  
<https://www.kacst.edu.sa/eng/Fund/Pages/landing.aspx>
2. King Abdullah University of Science & Technology  
<https://www.kaust.edu.sa/>

### International

3. The Natural Sciences and Engineering Research Council of Canada (NSERC)
4. Research & Innovation - European Commission : [ec.europa.eu/research/](http://ec.europa.eu/research/)
5. The Scientific and Technological Research Council of Turkey
6. U.S. Department Of Agriculture.
7. The Research Council ,Sultanate of Oman :  
<https://home.trc.gov.om/tabid/161/language/en-US/Default.aspx>
8. Qatar National Research funds : <http://www.qnrf.org/en-us/>
9. National Research Foundation, United Arab Emirates [www.nrf.ae/nrfteam.aspx](http://www.nrf.ae/nrfteam.aspx)
10. Department of Science and Technology (DST) India
11. Department of Biotechnology ( DBT) India
12. Department of Non Conventional Energy Sources ( DNES) India
13. National Information System for Sci.& Technology, Department of Scientific & Industrial Research, Technology, India
14. Science & Technology for Weaker Sections (STAWS). Science and Society Related Programs, India
15. National Academy of Agricultural Sciences (NAAS), India
16. Bahrain Centre for Studies and Research, Bahrain (BCSR)  
<http://www.eldis.org/go/home&id=4442&type=Organisation>
17. The French National Research Agency : <http://www.agence-nationale-recherche.fr/en/>
18. The Australian government : Grants and other Funding Opportunities for African Researchers
19. National research foundation of Korea

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# **GUIDENCE & SUPPORT FOR INNOVATIVE PATENT SUBMISSION**

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## **Basic Information:**

### **What is a Patent?**

A patent is an intellectual property right granted for new technology you have invented. It is legally enforceable and gives you the exclusive right to commercially exploit your invention for the term of the patent. You can also obtain patent protection overseas.

### **Seek Professional Advice**

Patenting and commercializing an invention can be costly, time-consuming and requires a range of skills you may not currently have. Furthermore, as a first time applicant, you probably don't know what you don't know.

We strongly recommend you seek advice from a patent attorney. Most people would not purchase a home without professional assistance, and yet obtaining a patent is more complex. If you get it wrong from the outset, it can be impossible to correct an error, resulting in a lost opportunity to protect your invention.

### **Keep Your Invention a Secret**

Your invention must be kept secret until you have applied for patent protection. If you demonstrate, sell or discuss your invention in public before you apply, you can lose the opportunity to patent it. You can still talk to your employees, business partners or advisers about your invention, but make it clear that the information is to be kept confidential. You should use written confidentiality agreements, particularly when negotiating with potential business partners.

### **Priority Date—an Important Concept**

The date you first file a patent application establishes what is known as a priority date. Potential competitors who file an application at a later date for the same invention will not be entitled to patent it due to your earlier priority date.

### **Don't Replicate Something Already Patented**

You don't want to apply for a patent for an invention that isn't new. Before investing large amounts of time and money, search patent databases, sales brochures and the internet. This will help you determine if your invention has already been thought of by someone else.

### **Searching Patents Worldwide**

Several website provides links to a range of patent databases, including those of the major overseas IP offices. Most of these databases are free to search, but using them effectively is a specialized skill. You may want to contact a patent attorney or professional searcher to search for you.

## Step 1: Can I patent my invention?

A patent may be granted for a device or machine, a substance, a process or computer hardware and software, and even some business methods—in short, almost anything commercially useful. For a patent to be granted an invention must:

- be a manner of manufacture. A patent may be granted only for a tangible invention. no matter how ingenious or unusual they may be, you cannot patent artistic creations, mathematical models, theories, ideas or purely mental processes
- be **new** (the legal term is “novel”), which means that the invention has not been publicly disclosed in any form, anywhere in the world. Examples of disclosures that could show your invention is not new include published patent specifications, textbooks and technical journals, internet sites, or the sale or use in a public area (including demonstrations) of a product.
- involve an **inventive step** for a *standard* patent. The invention must not be obvious to someone with knowledge and experience in the technological field of the invention
- involve an **innovative step** for an *innovation* patent. There must be a difference between the invention and what is known about that technology, and this difference must make a substantial contribution to the working of the invention
- be **useful**, your invention should do what you say it will do
- not have been secretly used by you or with your consent.
- Valid patents must also meet other requirements of the *Patents Act*, in particular:
  - a sufficiently clear and complete description. It is extremely important that you put into the description (including any drawings) all the necessary information about the technical details of your invention
  - claims and the description in respect of the same invention. Are the claims **fairly based**? For example, if your application described a solar cell, claims that make no mention of how light is converted to energy may not be fairly based
  - claims must define only **one invention**.
- If you want to protect the way your invention works then patenting may be the most appropriate option, but if the appearance of your product is important and innovative (rather than how it works), then a registered design may be more appropriate.

## **Step 2: Should I patent my invention?**

It's futile patenting an invention unless you have a plan for commercialization and can defend it against infringement. A patent should be considered simply as a "barbed wire fence" around your property. It's not bullet proof and requires maintenance, but it does send a strong signal to potential trespassers.

- ✓ You should strongly consider patenting if:
- ✓ the possibility of commercial returns outweighs the time, effort and money required to acquire and maintain a patent
- ✓ the limited monopoly a patent offers would help mitigate the risks of IP theft in the markets you are interested in
- ✓ you have the resources to manage your intellectual property
- ✓ a thorough search reveals no other similar technology
- ✓ you own the invention and have kept it a secret.

Lodging your application via a patent attorney can greatly reduce the risk of serious mistakes and improve the commercial value of your patent.

There are several reasons why you may not want to file a patent. Being first to market may be worth more to you than a patent. Lodging a patent tells the whole world what you're working on. Some inventors of products with short life-cycles often seek to establish a market leader position before competitors can react. In these cases a trade mark may be a valuable asset as it protects the name of the product and the values consumers relate to that name.

For inventions with a limited market value, the cost of getting and maintaining a patent may not be justified. Your invention may have a limited market or may only be useful in countries where it's difficult to secure patent protection.

Even if your invention is patentable, keeping a trade secret via confidentiality agreements can sometimes be a better strategy. The main benefit of trade secrecy is that it can exist for as long as the information remains confidential, whereas patents and designs have a limited monopoly term. This type of strategy is only worthwhile if the product is difficult to reverse engineer (which means that it is difficult to ascertain exactly how it is manufactured).

If your invention is new, not publicly disclosed and has commercial potential, then you are ready to consider what type of patent will suit your needs.

### Step 3: What type of patent?

There are two types of patents:

- A **standard** patent gives long-term protection and control over an invention. It lasts for up to 20 years (or 25 years for pharmaceutical substances).
- An **innovation** patent is a relatively quick and inexpensive way to protect an incremental advance on existing technology rather than a ground-breaking invention. Protection lasts for a maximum of eight years.

The following table provides a quick overview of the major differences between a standard patent and an innovation patent.

	<b>Innovation Patent</b>	<b>Standard Patent</b>
Your invention must:	Be new, useful and involve an <b>innovative</b> step	Be new, useful and involve and <b>inventive</b> step
The application should include:	A title, description, up to five claims, drawings (if applicable), an abstract and forms	A title, description, no limit to the number of claims, drawings (if applicable), an abstract, and forms
A patent is granted if:	The application satisfies formalities requirements (note a 'granted' innovation patent cannot be enforced)	The application is examined and found to satisfy substantive requirements
Examination:	Optional. Examination can be requested by you or a competitor to clarify your legal rights	Mandatory as substantive requirements must be met before a patent is granted
Certification:	Must comply with substantive requirements as determined by an examiner. Only after certification can it be enforced.	N/A
Publication in the Official Journal of Patents:	At grant and again at certification	18 months from priority date and again at acceptance
Protection period:	Eight years, if annual fees paid Be new, useful and involve an <b>inventive</b> step	20 years, if annual fees paid (or 25 years for pharmaceuticals)
How long does the process take?	One month for grant. Six months if you request examination.	six months to several years depending on circumstances
How much does it cost? (Fees are subject to change)	Approximately \$1500 including maintenance fees over 8 years (not including advisor fees)	Approximately \$9000 including maintenance fees over 20 years (not including advisor fees)

## **Innovation Patent versus Standard Patent**

There is no simple rule for determining whether your invention is more likely to be suited for standard patent or innovation patent protection. This depends entirely on the nature of the advance made by your invention and what is already known in the same field of technology. For example, the invention of a new substance that re-grows hair may be appropriate for a standard patent, whereas a treadmill adjusted to be an automated dog walker may be more suitable for an innovation patent. The following are the three main differences explained.

### **1. The Innovation Patent Has a Lower Inventive Threshold**

The innovation patent option aims to provide business with a relatively inexpensive form of IP protection, which is quick and easy to obtain, for inventions having a short commercial life (e.g. simple tools, utensils, machinery or equipment).

Because the inventive threshold has been lowered compared to a standard patent, an innovation patent is also suited to inventions demonstrating comparatively minor advances over existing technology which may not qualify for standard patent protection. This will help you to acquire rights for incremental inventions and start to recoup your investment at each stage of development.

### **2. The Standard Patent Provides Longer Protection**

For inventions, in areas such as pharmaceuticals, that have a longer development and commercialization cycle, or inventions involving more complex technological advances, a standard patent may be more suitable.

An innovation patent may be granted for the same subject matter as a standard patent, except plants and animals or the biological processes for their generation, but has a shorter term of protection than a standard patent— eight years as opposed to 20 (which can be extended to 25 years for inventions relating to pharmaceutical substances).

### **3. Examination Is Mandatory For Standard Patents**

Both innovation and standard patents must be examined before you can enforce your rights. However, by default, innovation patents are not examined unless specifically requested. This saves you time and money by delaying examination until you really need it. Standard patents must be examined. At the time of examination you will be sent a notice to pay the examination fee. If you don't pay the fee your application will lapse.

Once you have identified the best patent type, you need to determine the right type of three application options.

## **Step 4: What type of application?**

There are three types of patent applications: provisional applications, complete applications and international applications.

### **Provisional Applications**

This is the easiest way to get the earliest possible **priority date**, however, it does not give you patent protection on its own. If you decide to pursue patent protection then you need to file a complete application within 12 months of your priority date.

Provisional applications are only optional, but useful if you operate in a highly competitive industry where constant innovation demands the earliest possible priority date. You may also appreciate some time to determine if your invention is worthy of further time, money and effort.

If you don't file a complete application before the 12 months is up then you lose your priority date.

### **Complete Applications**

Applications for standard or innovation patents are called **complete applications**. A complete application is necessary to actually have a patent granted. Complete applications should be considered "the real thing", whereas a provisional gets you priority date and signals your intention to lodge a complete application in the near future.

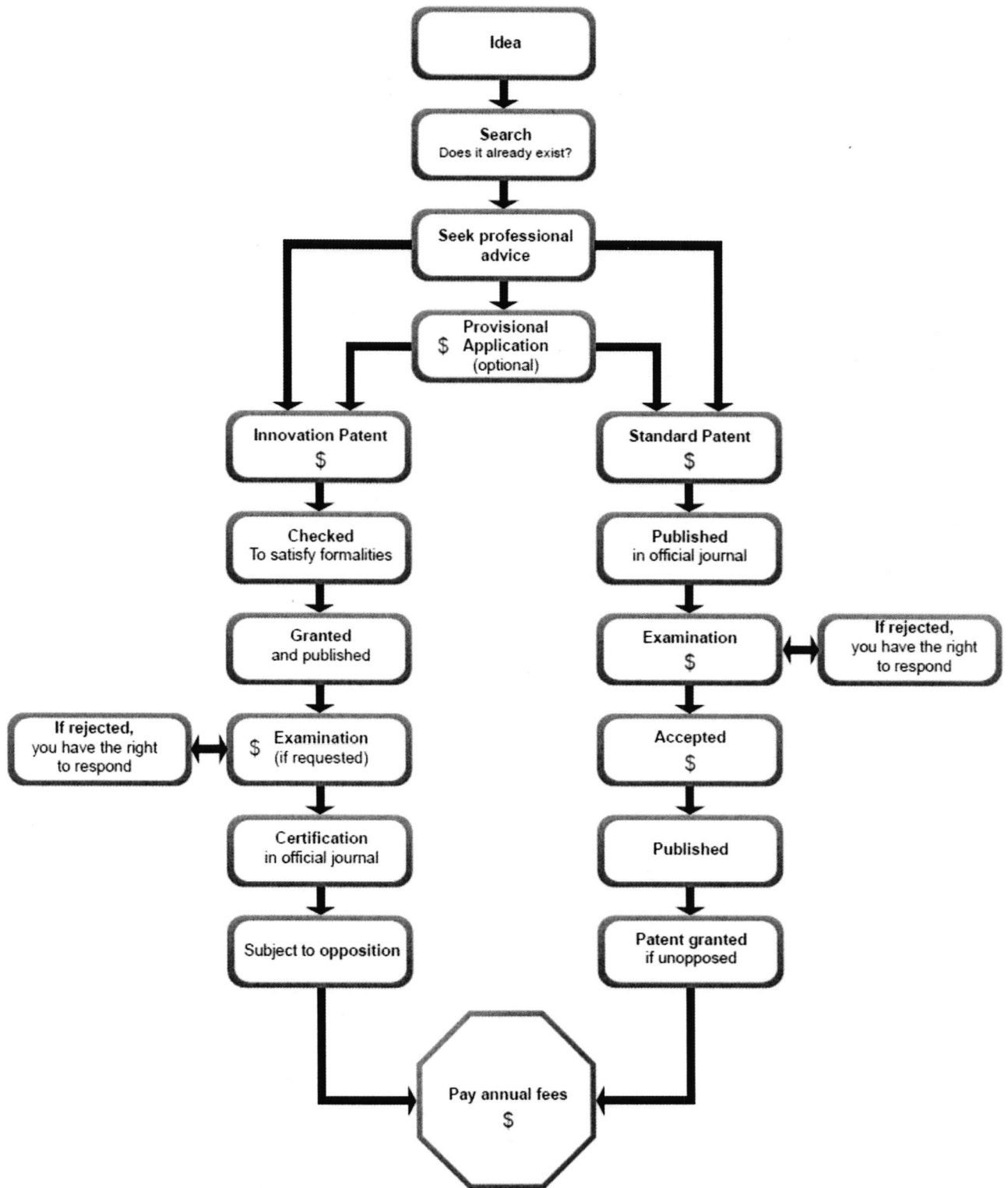
Publication is an important step for two reasons. First, the contents of your standard patent application or innovation patent are no longer confidential which means that your invention becomes part of the knowledge of the general public and may therefore subsequently assist in advancing industry and technology. For example your invention may inspire others or be used to help solve other problems.

The second reason concerns possible action you can take if someone else infringes your patent. Once you have a granted standard patent or a certified innovation patent you may wish to take legal action for any infringements that occurred from the date we published your application.

### **International Applications**

An international application is a useful way to apply for patents in a number of different countries simultaneously and protect your potentially important export markets. These applications are also known as PCT (Patent Co-operation Treaty) applications.

## Flow Chart of an Application





## Importance of Multidisciplinary Research Projects

The multi-disciplinary approach to problem solving is strongly advocated by a wide group of experts. Multidisciplinary research is a pursuit of truth with the help of numerous specialized branches of learning which aims at achieving a common aim with the aid of knowledge of other disciplines. Multidisciplinary research is an investigation or inquiry to a problem for ascertaining the hypothesis combining many academic approaches, fields or methods. Further, it can be defined as a search for knowledge through objective and systemic method for an original contribution to the existing stock of knowledge involving a combination of several disciplines and methods.

Multidisciplinary collaboration for innovation has become an important issue in design practice and education. Multidisciplinary collaboration leads to better skills in communication, collaboration, and professional abilities, a better understanding of the collaborative process and how different professions complement each other, and has a positive effect on future career development and sense of achievement.

The need of multidisciplinary research can be enumerated as follows:

1. Human being is the building block of society. All researches are directed to betterment of human being. Human life is regulated and determined by the knowledge of various disciplines. A number of researches are going on worldwide for human welfare. These researches cannot be conducted in isolation. They are naturally tempted to ask assistance from other disciplines because not only the social, economic and political aspect of human being is inter-related but even physical sciences like chemistry, physics, mathematics and engineering have importance in man's way of life.
2. Various type of incidents – natural and man – made, are taking place all around. It is not possible to study them in isolation. They can be studied in true sense of word, in an integral manner that is with the help of multidisciplinary research.
3. Objectivity and accuracy is the first and foremost goal of research. This purpose can be served by the help of multidisciplinary research. Actually this approach gives ample opportunity to study the problem with different viewpoints. At the same time it gives way to comparative study. All these minimize the chances of defects in the outcome.
4. The most important feature of multidisciplinary research is that in this era of complicated life style it makes the study quite easy and comprehensive.
5. By bringing a team of people of varied expertise together to "solve a problem" quite often a more efficient solution is achieved or a solution is obtained when one may not be possible without the multidisciplinary approach.
6. An individual or an individual specialism can quite often develop "tunnel vision" when examining a problem where it is difficult to look beyond the "usual way of doing things"
7. By forming a multidisciplinary team or by working with other disciplines it becomes possible to think outside the box. This ability to think outside the box may be essential



to solving the problem in question. The problem may also be so complex that its solution requires expertise across a range of disciplines.

8. Multidisciplinary research aims at avoiding the defects of incompleteness. Today's problems are of such a nature that their solution in isolation would give incomplete or no result. Therefore, due to intermingling nature of problems, the need for this method arises.
9. No discipline can be sufficient or complete in itself. At the same time, it cannot assert about its capability to solve all the problems. Therefore, each and every discipline is bound to take the help of other discipline in order to reach at a suitable conclusion.

## **Making Recommendations to Environmental Oriented Research**

### **INTRODUCTION**

Modern civilizations are more curious about environmental cleanliness. Environmental pollution is supposed to be a serious threat to life on the planet. The rapid growth of human activities in the recent past has resulted in a dangerous level of greenhouse gases (GHG) in the atmosphere. Control of these GHG emissions is necessary to avoid the negative consequences on climate. Fossil fuels are the main source of energy in today's world but at the same time they are the main source of  $CO_2$  emissions as well. Therefore use of green energy sources is spreading day by day throughout the world. Renewable energy sources are inexhaustible, contrary to fossil fuels, and more widely spread over the Earth's surface. The Sun being exceptional energy source, produces plentiful energy for the world. Energy produced by the Sun is in the form of electromagnetic radiation. Solar energy reaching the earth's surface averages to 1353 W/m<sup>2</sup>. Commercial and residential buildings in Saudi Arabia consume about 50% of the total electrical energy consumed. Increasing demand of electrical energy is one of the main problems being faced by the power companies in KSA. In order to meet this increasing demand of electricity in the country, it is desirable to explore every possible option of generating electric power. There are few countries of the world that use crude oil for the generation of electrical power and Saudi Arabia is one in that list. The domestic use of fossil fuels is increasing rapidly day by day due to enormous increase in energy demand of the country. Saudi Arabia consumed 2.9 mb/day of oil, in 2013 which was 4.2% more than 2012 and almost double than the oil consumption in 2010. Green energy presents many potential advantages to KSA. Firstly, due to its abundant resources, the Kingdom has a viable option for domestic consumption that would save a large amount of oil for export. Secondly, the green energy reduces atmospheric pollution and greenhouse gases

emissions. The monthly average daily solar radiation of KSA varies from 3.03-7.51 kWh/m<sup>2</sup>, which is one of the highest in the world. Saudi Arabia is located in the heart of one of the world's most productive solar regions, which receive the most potent kind of sunlight. The average annual solar radiation falling on the Arabian Peninsula is about 2200 kWh/m<sup>2</sup>. Utilization of solar energy in its various aspects, therefore, is very attractive in this part of the world. Research, development, and demonstration (RD&D) activities in Saudi Arabia have confirmed that solar energy has a multitude of practical uses. Most of the countries around the globe are interested to penetrate the renewable energy in their power sectors to obtain economic and environmental benefits. In spite of the abundant solar resources, the Energy forecasts in the country project shows negligible penetrations of renewable energy in this century.

Water pollution by toxic substances is ubiquitous and an enormous challenge. This is because over 3.3 billion people of the global population lack reliable access to clean water or live in water stressed areas. The discharge of contaminated water into public streams is a great environmental challenge, not only due to its treatment for reuse but also due to its toxicity to human beings and animals by contaminating underground water reservoirs. The removal of these toxic compounds from natural waters in drinking water treatment plants is a major challenge.

The committee recommends that environmental research advance the social goals of protecting the environment for present and future generations, restoring damaged environmental functions and is very important to encourage the sustainable use of the environment. To focus on improvements in how environmental research is approached an understanding of fundamental processes and multidisciplinary and multiscale research strategies, high-level commitment, coordination, a national agenda, plan, a strong linkage between environmental research and policy, and a mechanism to

make environmental information easily and widely available for environmental research is needed.

#### SCOPE FOR FUTURE RESEARCH:

1. Saudi Arabia has enormous oil resources and other resources, notably solar energy that may be the future electric supply in the Kingdom.
2. It is recommended that more detailed techno-economic feasibility research and must be conducted to reduce CO<sub>2</sub> emissions and increase the environment friendly sustainable energy.
3. Several wastewater treatment technologies have been used for the removal of toxic pollutants from aqueous solutions.
4. Education and training for students is also needed to strengthen the capacity to address environmental challenges by sponsoring higher education and training in environmental sciences.
5. Research groups to have the characteristics to be future oriented, be consistent with the mission and strengths of the university.
6. Research sectors need to be created at University for enhancing well define system of research and pursuing high quality ventures that are scientifically sound.
7. The research labs with developed infrastructure and equipment resources should be form for the pursuit of high quality research

#### HOW TO IMPROVE RESARCH:

1. Knowledge to solving environmental problems with a comprehensive management strategy in the context of economic and social needs is needed to apply.
2. The planning and management of research programmes and projects is critical to successful dissemination and implementation.
3. Work plans should developed with specific actions needed to address the identified improvement areas.
4. The funding should be increase to support investigators to get quality results in their research projects.
5. The research labs with developed infrastructure and equipment resources to facilitate advanced experimentation and to provide a congenial environment should be form for the pursuit of high quality research.
6. The research environment is in need to expand with core research acquiring labs, advanced instruments and hi-tech machinery, together with trained manpower and technical support necessary for their operation, functionality and maintenance.
7. Promoting the culture of research through the process of grant support by providing the facility to faculty and graduate students is important.

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## Scientific Research Chairs

King Saud University	<p>Scientific Research Chairs</p> <p>Chair of King Abdullah bin Abdulaziz for Food Security  Chair of Prince Sultan bin Abdulaziz for Environment and Wildlife.  Chair of Prince Miteb bin Abdullah for Biomarker Research Program in Osteoporosis.  Chair of Addiriyah for Environmental Research.  Chair of Engineer Abdullah Ahmad Baqshan for Bee Research.  Chair of Sheikh Mohammad bin Hussein Al Amoudi for Water Research.  Chair of Sheikh Abdulrahman bin Ali Al-Jeraisy for Nucleic Acid (DNA) Research.  Chair of Saudi Geological Survey (SGS) for Natural Study.  Chair of Targeting and Treatment of Cancer Using Nanoparticles.  Chair of Cancer Diagnosis by Laser.  Chair of Water Resources Exploration in the Empty Quarter.  Chair of Petrochemical Research.  Chair of Green Energy Research.  Bioproducts Research Chair.  Chair of Palm Tree and Dates Research.  Chair of Precision Agriculture Research.  Chair of Genome Research.  Chair of Dates Industry and Technology.  Chair of Protein Research.  Chair of Mammals Research.  Chair of Surfactants Research.  Chair of Utilization of Renewable Energy and its Applications.  Chair of Advanced Materials Research.  Chair of Catalytic Chemistry.  Chair of Ambient Computing.  Chair of Enterprise Resource Planning and Business Process Management.</p> <p>Engineering Research Chairs</p> <p>Chair of Prince Khalid bin Sultan bin Abdulaziz for Water Research  Chair of Prince Mohammad bin Nayef for Traffic Safety .  Chair of Prince Sultan bin Salman for Architectural Heritage  Chair of Princess Fatima bint Hashem Al-Najress for Research on Advanced Manufacturing Technology .  Chair of Engineer Abdullah Ahmad Baqshan for Geotechnical Engineering .  Chair of Sheikh Mohammad bin Hussein Al Amoudi for Petroleum Research.  Chair of Moalem Mohammad Awadh bin Laden for Structural Studies.  Chair of Alzamil Group for Electricity Conservation.  Saudi ARAMCO Chair for Earthquake Engineering.  Saudi ARAMCO Chair in Electric Power</p>
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	<p>Chair of Saudi Electricity Company in Power Security .</p> <p>Chair of Industrial Catalysts</p> <p>Chair of King Abdullah bin Abdulaziz for AIHesl (Forbidding the Wrong) and its Contemporary, Al-Jazira</p> <p>Chair of Prince Salman bin Abdulaziz for Civilizational Studies in the Arabian Peninsula</p> <p>Chair of Prince Sultan bin Abdulaziz for Content Analysis</p> <p>Chair of Prince Nayef bin Abdulaziz for Intellectual Property</p> <p>Chair of Prince Muqren bin Abdulaziz for Information Technologies.</p> <p>Chair of Princess Sitta Bint Abdulaziz for Family Studies</p> <p>Chair of Prince Sultan bin Salman for Development of Human Resources in Tourism and Antiquities.</p> <p>Chair of Qur'anic Sciences.</p> <p>Chair of Teaching of the Holy Quran and Reading</p> <p>Chair of Engineer Abdulmohsen Mohammad's Seerah and its Contemporary Studies</p> <p>Chair of Sheikh Abdulrahman bin Salh Al-Rasheed on Family Charity on the Role of Saudi Woman in Society</p> <p>Chair of Sheikh Abdulrahman bin Thnyan for Scientific Developments in Sciences and Mathematics.</p> <p>Chair of Al-Jazira Newspaper for International Journalism</p> <p>Chair of Developing Human Resources and Business</p> <p>Chair of Al Hilal Sports for Development Research</p> <p>Chair of Professor Abdulaziz bin Nasser Al-Manzari for Arabic Literature.</p> <p>Chair of Peace Studies.</p> <p>Chair of Teaching Arabic to Speakers of Other Languages</p> <p>The Development of Teaching Performance of Arabic at Saud University.</p> <p>Chair of Saudi Literature.</p> <p>UNESCO Chair for Childhood Studies.</p> <p><b>Medical Research Chairs</b></p> <p>Chair of Prince Salman bin Abdulaziz for Kidney Research</p> <p>Chair of Prince Satam bin Abdulaziz for Epidemic Research</p> <p>Chair of Prince Abdullah bin Khaled C. (PAK.CDRC).</p> <p>Chair of Princess Norah bint Abdullah bin Abdulaziz for Health Research.</p>
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	<p>Chair of Engineer Abdullah Ahmed Bagshan for Regeneration Research.</p> <p>Chair of Sheikh Mohammad bin Hussein Al-Amr</p> <p>Chair of Dr.Waleed Ameen AL-Kayali for Phar</p> <p>Chair of Dr.Nassir bin Ibraheem Al-Rasheed in (</p> <p>Chair of Sheikh Abdulla Ba Hamdan for Medic</p> <p>Care and Knowledge Translation.</p> <p>Chair of Sheikh Ali bin Sulaiman Al-shehri for (</p> <p>Chair of Bronchial Asthma Research.</p> <p>Chair of Vitiligo and Melanocyte Transplantatio</p> <p>Chair of Oncology Research.</p> <p>Chair of Glaucoma Research.</p> <p>Chair of Medical and Molecular Genetics Resear</p> <p>Chair of Peripheral Vascular Diseases.</p> <p>Chair of Psychological Health Research and its /</p> <p>Chair of Neonatal Research.</p> <p>Chair of Medication Safety Research.</p> <p>Chair of Dental Care for Children Research.</p> <p>Chair of Medical Education Development.</p> <p>Chair of Drug Exploration and Development.</p> <p>Chair of Voice, Swallowing and communication</p> <p>Chair of Dental Implant and Osseointegration R</p> <p>Chair of Rhinology.</p> <p>Chair of National Nutrition Policy.</p> <p>Chair of Colorectal Surgery Research.</p> <p>Chair of Cornea Studies Research.</p> <p>Chair of Deviations of Backbone Research.</p> <p>Chair of Health Education.</p> <p>Chair of Rehabilitation Research.</p> <p>Chair of Orthopedic Surgery.</p> <p>Chair of Sickle Cell Disease Research.</p> <p>Chair of Development of Dental Materials</p> <p>The Dental Biomaterials Research Chair</p>
King Faisal University	<p>Sheikh Mohammed bin Abdul-Rahman Al-Or</p> <p>Diseases in Al-Hassa</p> <p>Al-Jazeera Foundation's Chair for Supporting Affairs</p> <p>Sheikh Qhassan Al-Nemer's Chair for Developir</p> <p>The Chair of Application of Modern Techno</p> <p>Production</p>
University of Qassim	<p>Chair Sheikh Abdullah bin Saleh Al - Rashid</p> <p>biography of the Prophet and the Prophet peace  </p> <p>Sheikh Saleh Kamel Chair for Palm and Dates R</p> <p>Sheikh Ibn Uthaymeen chair for legal studies</p>

Majmaah University	Al-Jazeera Newspaper Chair for Security Media Shiekh Abdullah Al-Twijri Research Chair for A
Um Alqura	King Abdullah Bin Abdulaziz Chair for Holy Qu Albir Chair for humanitarian Services Dr. Mohammed Abdoh Yamani Chair for Recon King Salamn Bin Abdulaziz Chair for Historic N
TAIBAH UNIVERSITY	The Chair of Sheikh Yusuf Abdul Latif Jameel o University Holds the Seminar of “ Impact of Ori in Tafsir” Ameliorating the Sound Environment in the Completing the Final Model of Suction and Cle Control System Qira’at ( Methods of Reciting Qur’an) Chair in T
Tabuk University	Prince Fahd Bin Sultan chair for the study of you Prince Fahd Bin Sultan Chair for Advanced T Detection and Contribution of Diseases and its C
Imam Abdul Rahman Bin Faisal University Damam University	The Prince Muhammad ibn Fahd Chair for Urba The Aramco Chair for Traffic Safety The Jazera Chair for Health News Awareness The Ghazzan Chair for Planning and Quality The Al Ahli Bank Chair for Breast Cancer Awar The Sheikh Mubarak Farhan Al Qatani Chair for
King Abdul Aziz University	Research Chair for Hearing Disability and impla Research Chair of Voice and Swallowing Disorc Glaucoma research chair Ophthalmology research chair Rhinology and skull base research chair
King Khaled University	chair of King Khalid bin Abdul-Aziz chair Prince Faisal bin Khalid chair of coatings and paints research chair of Technology and food Chemistry researc chair of advanced water oxidation Technology a chair of solar Energy Research SABIC research chair Prince Salman bin Abdul-Aziz Chair to study th southern Arabian Peninsula