

AL-FARABI KAZAKH NATIONAL UNIVERSITY

Faculty of chemistry and chemical technology

**Department of chemistry and technology of organic substances,
natural compounds and polymers**

Confirmed
Dean of the faculty

_____ Ongarbayev E.K.

" ____ " _____ 2012 .

Approved by the University scientific-
methodical Council meeting
Protocol № 5 from 22 June 2012
Vice-Rector for Academic Affairs

_____ Abdibekov U.S.

" ____ " _____ 2012

Educational-methodical complex of the discipline

Theoretical bases of scientific research organizing

(discipline name)

Speciality Code 6M071000 Material Science and New Materials Technology

(code, speciality)

Education Form full time

(full time, part-time)

Educational-methodical complex of the discipline is compiled by Prof. Mun G.A. On the basis of experimental educational program and catalogue of elective disciplines of specialty 6M071000 Material Science and New Materials Technology

Considered and recommended at the chair meeting of Department of chemistry and chemical technology of organic substances, natural compounds and polymers

On « 22 » May 2012, Protocol № 37

Head of the Chair _____ prof. Abilov Zh.A.

Recommended at the methodical Council (bureau of the faculty)

On « 28 » May 2012, Protocol № 9

Chairman _____ Syzdykova L.I.

FOREWORD

1. Introduction

Organization and planning of scientific research in the former Soviet Union. State scientific institutions: academic, branch institutes. The Federal and Republican Academy of Sciences, branches and outlets, full members (academicians) and corresponding members of the system of financing of scientific research. The state Committee on science and technology. Scientific-technical program of SCST. The organization of scientific researches in system of the Russian Academy of Sciences. The national Academy of Sciences of the RK, the history of creation, the main achievements. The concept of scientific and scientific-technical policy of the RK. The socio-economic situation in Kazakhstan and its impact on the scientific-technical sphere. Scientific research in Universities and non-governmental institutions.. the Basic principles and objectives of the scientific and scientific-technical policy of Kazakhstan at the modern stage. Selection and promotion of priority directions of scientific and scientific-technical development in accordance with the national interests and the needs of the socio-economic development of the country, the state support of priority fundamental and applied research, promotion of financing from other sources, formation and accommodation of orders state orders for science technology on a competitive basis, integration of science, production and education, preservation and reproduction of personnel potential, support of competition and entrepreneurship in scientific-technical sphere, formation and protection of the domestic market of scientific and technical products, the legal protection of intellectual property. Program-target method of realization of the scientific and scientific-technical policy. Independent state scientific-technical examination of projects and scientific-technical programs. Innovation activities in scientific-technical sphere, the Concept of innovation activity in the Republic of Kazakhstan.

2. The main part.

The law of the Republic of Kazakhstan about science. General provisions of the Law, the basic concepts used in the law (state scientific-technical policy, the state authorized body, innovation activity, scientific, intellectual property, the main principles of state policy in the field of science). Subjects of scientific and scientific-technical activities, rights and duties of the scientific employee, scientific organizations and their rights, NAS RK, public Academy of Sciences, scientific centers, intellectual property right in the result of scientific and (or) scientific and technical activity, protection of copyrights. Management and organization of scientific and scientific-technical activity. Competence of the Government of the RK, the competence of the authorized state body and other Central Executive bodies. The accreditation of scientific organizations, accreditation of scientific organizations, the management of scientific organization. State scientific-technical expert examination. State support of the innovation activities in the field of science and technology. Integration of science and education. The financing of science. The privatization of public scientific organizations. The staffing of scientific research. Training of scientific and scientific-technical personnel, forms of increasing scientific qualification. International activities in the field of science and technology.

3. Exchange of scientific information.

Information support of scientific and scientific-technical activities. Scientific-research institutes of scientific-technical information. Abstract journals, reference books, modern system of exchange of scientific information, computer network, e-mail, Internet, information pages. The publication of research results. Theses of reports, materials of scientific conferences, deposition, and scientific articles. General requirements for the presentation and design. Rating of scientific journals. International специализированные scientific journals citation Index.

The process of developing new scientific knowledge, one of the types of cognitive activity. Scientific research is characterized by objectivity, reproducibility, demonstrability, and exactness (the latter being understood in different ways in different fields of science). There are two interrelated levels of scientific research: empirical and theoretical. On the first level, new facts of science are established and empirical laws are formulated by generalizing on these facts. On the second level, laws general for the particular field are formulated to permit explanation of previously discovered facts and empirical patterns and also to predict future events and facts.

The main components of scientific research are the statement of the problem; preliminary analysis of available information, conditions, and methods for solving problems of the given class; formulation of a working hypothesis; theoretical analysis of the hypothesis; planning and organization of an experiment; conduct of the experiment; analysis and generalization of results obtained; checking of the working hypothesis on the basis of the facts obtained; final formulation of new facts and laws; and development of explanations or scientific predictions. A further stage is added for applied science: introduction of the knowledge gained into production. The structure of scientific research is determined by various combinations of the stages listed, which may be carried out in various orders and with certain repetitions and modifications. In a number of cases, various stages may be absent (for example, when experimentally verifying previously advanced hypotheses).

Inasmuch as the results of scientific research should not repeat previously discovered facts and laws, the process of scientific research should be viewed as a function of the goal and the time available. Of two research processes relating to the same set of objects and solving the same task, that process is more effective which, other conditions being equal, leads to the intended goal in the shorter time.

Scientific research can be classified according to various principles. Among the most widespread is the division of scientific research into fundamental and applied research, quantitative and qualitative research, and unique and complex research. The reciprocal superposition and further segmentation of these classifications provide a multistep classificational hierarchy of scientific research.

The aim of discipline:

This module aims to:

- Promote students' critical reflection on professional practice and theory
- Develop students' understanding of the importance of research into professional practice and investigation and the way it supports the development of educational practice and theory
- Introduce students to models of research and ethical considerations and guidelines.
- Expand and make more systematic the students' repertoire of strategies for producing, investigating and recording data relating to professional practice
- Increase the students' confidence in their own professional expertise by enabling them to report upon and share their investigations with appropriate justification and interpretation

The purpose and tasks of the course: To give students knowledge in the system of organization and financing of scientific research in the countries of CIS and abroad advanced countries with highly developed science-based technology, for certification of the scientific staff of higher qualification, the preparation of publications and grant of various national and international funds, the experience of the patent, licensing and implementation of scientific developments.

Learning Outcomes

By the end of the module students should be able to:

- develop and defend an issue for investigation related to their own professional practice and the wider educational and/or community context
- justify their chosen mode of investigation in relation to their own professional needs and demonstrate how it has been shaped by reference to current research
- implement an investigation in an appropriately systematic manner, successfully employing a range of strategies for producing and recording data
- disseminate the results of their research drawing upon the evidence produced and demonstrating their ability to analyse and interpret their findings with appropriate attention.

Knowledge and skills after the course

The students should know: As a result of studying the discipline students should know the specifics of the organization of scientific research in the field of fundamental and applied Sciences in the countries of CIS and far abroad, the system of financial support for scientific research (international and national scientific grants, funds, programmes, etc.), a system of certification of the scientific staff of higher qualification, licensing.

Be able to: To be able to use the acquired knowledge and skills when writing projects, applications for participation in the competition according to the system of grants of different scientific foundations, the preparation of the scientific article, the registration of an application for a patent, when writing a design of a thesis, etc.

Methodology of the course: To develop the mental ability, to teach students to use the acquired knowledge and skills when writing projects, applications for participation in the competition according to the system of grants of different scientific foundations, the preparation of the scientific article, the registration of an application for a patent, when writing a design of a thesis, etc.

Al-Farabi Kazakh National University
Chemistry Faculty
Department of Colloidal and Macromolecular Chemistry

Approved by the Academic Council
of Chemistry Faculty
Protocol № _____ from _____ 2012
The Dean of Chemical Faculty
_____ Ongarbayev E.K.
" _____ " _____ 2012

SYLLABUS
by profile elective module

«Theoretical bases of scientific research organizing» 3 credits

INFORMATION about lecturer:

Professor of Department of chemical technology of organic substances, natural compounds and polymers PhD Mun G.A.

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Prerequisites: higher mathematics, physics, inorganic, analytical, physical, organic chemistry, macromolecular chemistry, chemical physics, structure of matter, quantum chemistry, advanced organic chemistry problem the theoretical foundations of catalytic processes hydrocarbon processing technology.

Postrequisites: general courses "Modern problems of physical chemistry of polymers and surface phenomena" and "Modern Problems of Chemistry and Technology of Polymers" special courses in various specializations.

STRUCTURE AND CONTENT OF DISCIPLINE

Week	Lectures title	Hours	MSS
1	Lecture 1, 2 «The modern ways of scientific research organizing. Access to information: literature search across many disciplines and sources» Seminar 1 Work with reference magazines. Writing theses of the report at the scientific conference on the results of the previously performed R & d activities.	2	MSS 1 Preparation of short presentation.
		1	
2	Lecture 3, 4 «Article writing on the results of the previously performed research» Seminar 2 Development of presentation skills.	2	
		1	
3	Lecture 5, 6 «Introduction to Data Citation Index in Thomson Reuters informational database» Seminar 3 Writing a CV of prospective studies on the requirements of the ISTC.	2	MSS 2 General provisions of the Patent Law of the RK. Patentability of industrial property. Authors and patent holders.
		1	
4	Lecture 7, 8 «What is Citation Reporting and the H-Index in Thomson Reuters informational database for worldwide scientists?» Seminar 4 Writing the application and the project for	2	
		1	

	participation in the competition on Fund of science of the Ministry of education and science of the RK on the results of the research conducted at the Department.		<p>MSS 3 Analysis of scientific activity of researcher by Thomson Reuters</p>
5	Lecture 9, 10 «Web of Science Search Tips. Cited Reference Searching» Seminar 5 Preparation and writing sections Introduction and Conclusion to the author's abstract of candidate's dissertation	2 1	
6	Lecture 11, 12 «Fundamental Research Programs, Science Fund grants, scientific, technical, and search programs. Investment and innovation programs» Seminar 6 Using Advanced Search in the Web of Science. Refine and Analyze Search Results	2 1	
7	Lecture 13, 14 «Grant funding system, the evaluation criteria and selection process. International Science Foundation. Search and selection of partners. Advanced search and exchange of scientific information» Seminar 7 Using Advanced Search in the Web of Science. Administrative Tools in the Web of Knowledge.	2 1	
8	Lecture 15, 16 «Basic requirements for the design of applications for participation in the competition for a grant to fund the INTAS, the IAEA, the ISTC. The content of the projects. The selection criteria for project appraisal» Seminar 8 Usage Reporting in the Web of Knowledge. Citation Sources in Web of Science.	2 1	<p>MSS 5 The procedure for obtaining the title of protection.</p>
9	Lecture 17, 18 «Research developing in advanced foreign countries, the system of practical implementation of scientific research, management and marketing system» Seminar 9 New Features Update in Web of Science.	2 1	<p>MSS 6 Termination and restoration of the document.</p>
10	Lecture 19, 20 «Scientific developments and marketing ideas. Relations between science and business. Business plan, the market and the market for raw materials, cash flow analysis, payback loan» Seminar 10 New scientific papers review. New methods: search and discussion	2 1	
11	Lecture 21, 22 «Scientific organization of labor. Modern high technologies, optimization of working time. Management and Marketing in the production of industrial goods and products of chemical plants» Seminar 11 Electron web pages as an instrument of scientists to declare about themselves.	2 1	
12	Lecture 23, 24 «Requirements for the project proposals to participate in the design competition for the CRDF. Preparation of individual items of project» Seminar 12 Discussion and interpretation of experiments and results of master thesis	2 1	
13	Lecture 25, 26 «Law about the science of the Republic of Kazakhstan. General provisions of the Law of the Republic of Kazakhstan on the science, the basic concepts used in the law» Seminar 13 If you are editor or reviewer of scientific journal...	2 1	<p>MSS 7 Analysis of scientific activity of researcher by Scopus and Google Scholar</p> <p>MSS 8 Writing of abstract</p>
14	Lecture 27, 28 «Право интеллектуальной собственности в РК, международные конвенции и договора по охране интеллектуальной собственности. Патент и патентное право. Открытия, изобретения, рационализаторские предложения»	2 1	

	Seminar 14 Workshop on patents writing and submission.		
15	Lecture 29, 30 «The Academy of Sciences in the USSR and the Union republics. State Committee on Science and Technology (SCST). Science and technology programs of the SCST» Seminar 15 The review of international fund granting scholarships for research and study. I want to apply for research grant of international fund.	2	
		1	

Literature:

Required reading:

1. Pogostina E.S., Pogudin P.A. Shiryayev U.N. Economy and organization of scientific research in the chemical industry - M.:Chemistry, 1078. - 176 p.
2. Collection of normative and methodical materials III. - Almaty: VAK of Kazakhstan, 2002. - 152 p.
3. International scientific funds in Kazakhstan. - Almaty: КазгосИНТИ, 1999. - 85 with.

Recommended Reading:

1. Bulletin of HAC, 1999, - №№1-3
2. Finlay, L and Gough, B (2003) Reflexivity: A practical guide for researchers in health and social sciences) Oxford: Blackwell
3. http://thomsonreuters.com/products_services/science/training/wok/
4. <http://www.sciencedirect.com/>
5. www.google.com/?tbn=pts, scholar.google.com/

The policy of academic behavior and ethics

Be tolerant and respect other people's opinions. Objection must be formulated in the correct form. Plagiarism and other forms of cheating are not allowed. Prohibited copying and prompting during the delivery of CPM, interim monitoring and examination, copying, solved problems of others, passing the exam for another student. The student, caught in the rigging of any information of the course will receive a final grade «F».

The head of department of chemistry and technology of organic compounds, natural substances and polymers, prof.

Abilov Zh.A..

Prof.,

Mun G.A.

Associated prof., PhD

Irmukhametova G.S.

Seminar 1 Work with reference magazines. Writing theses of the report at the scientific conference on the results of the previously performed R & D activities.

Thesis writing is complex. Thesis is an acquisition and, at the same time, a dissemination of new knowledge. A well-written thesis reveals knowledge of the author; it also shows understanding and appreciation of the field. Thesis is a critical rather than a descriptive work. Thesis writing is the culminating point of years of preparation.

A successfully written thesis must be original, appealing, and be an important study in terms of other researches.

Thesis Writing: Methodology:

Sampling method is a part of the thesis writing process. Following a competently written methodology, a knowledgeable researcher must be able to reproduce the results in exactly the same way, as it has been done in your thesis. Methodology part of the thesis writing process includes a description of the sampling method to be used in the work as well as justification for it.

Search and navigate through the system. Sorting lists according to different criteria and create a list of magazines with the greatest influence. Indicators used in the JCR, their calculation and interpretation. The use of the work list Marked list and save (export) of search results. Additional opportunities to export the data from the JCR. Additional indicators of publication activity log. Information about mutual quoting magazines. Information about the exclusion of magazines from the JCR and change of names of magazines.

Seminar 2 Development of presentation skills.

Presentation skills are a broad area. It takes some time to develop this skill, for some people more, for the other less time, depends of a talent. Since all of us can be in situation to be presenters, to be in the center of the audience, it is useful to learn basic skills of presenting.

Presentation is a communication process of transmitting the message from the presenter to the audience. This message can vary in length and complexity. Different presentation aids can be used e.g. flipchart, PowerPoint presentation with the video beamer, whiteboard with erasable pens, laser pointers, etc. Presentation can be done in different circumstances in a more or less formal way.

Seminar 3 Writing a CV of prospective studies on the requirements of the ISTC.

The international science and technology center (ISTC) is an intergovernmental organization, improving business contacts between scientists from Russia, Georgia and other countries of the Commonwealth of Independent States (CIS) with their colleagues from research organizations in Canada, the EU, Japan, Republic of Korea, Norway and the USA.

ISTC contributes to the implementation of international scientific projects, and also helps the global scientific and business community find and engage with institutes of Russia and CIS countries, which possess unique scientific know-how, for joint development and business.

Seminar 4 Writing the application and the project for participation in the competition on Fund of science of the Ministry of education and science of the RK on the results of the research conducted at the Department.

Funds INTAS, the Soros Foundation, the IAEA, ISTC, CRDF, INCO-COPERNICUS, etc. The main directions of the activities of a mission of experts, scientific visits and trainings. The possible volumes of funding and deadlines. Work plan, менеджмент project. The content of the projects. The selection criteria for the appraisal of projects. Basic requirements for the content and design of applications and projects. The execution of the program of research grants. Reporting form. The financial statements.

Seminar 5 Preparation and writing sections Introduction and Conclusion to the author's abstract of candidate's dissertation

Abstract is freely available in electronic abstracting & indexing services [PubMed, Medline, Embase, SciVerse Scopus]

Introduction

Provide context to convince readers that you clearly know why your work is useful

Be brief

Clearly address the following:

- What is the problem?
- Are there any existing solutions?
- Which solution is the best?
- What is its main limitation?
- What do you hope to achieve?

Try to be consistent with the nature of the journal

Seminar 6 Using Advanced Search in the Web of Science. Refine and Analyze Search Results

Search by author in the database of the Web of Science. Creating reports on quoting and interpretation of the indicators of publication activity (the average number of citations in the article, h-index, etc.). The possibilities and advantages of using a free tool ResearcherID for creating and managing your list of its publications. Function Author Finder to search by author in the Web of Science. Setting and saving reports quoting. Adding entries to ResearcherID. Advanced profile setting ResearcherID. Possibility of search on the system.

Seminar 7 Using Advanced Search in the Web of Science. Administrative Tools in the Web of Knowledge

Web of Science and Researcher ID. Search capabilities to the platform Web of Knowledge. Search in the database of the Web of Science. Working with the refinement of the search, the use of the work list Marked List.

Features a search on a database Web of Science, MEDLINE, BIOSIS, etc. The formulation of search queries with the help of search operators. Analysis of the results of the search (function of Analyze Results). Saving and exporting results. Search by пристатейным bibliographic lists in Web of Science. Advanced search in the Web of Science. Save personal settings of the search.

Seminar 8 Usage Reporting in the Web of Knowledge. Citation Sources in Web of Science.

Journal Citation Report. Search and navigate through the system. Sorting lists according to different criteria and create a list of magazines with the greatest influence. Indicators used in the JCR, their calculation and interpretation. The use of the work list Marked list and save (export) of search results. Additional opportunities to export the data from the JCR. Additional indicators of publication activity log. Information about mutual quoting magazines. Information about the exclusion of magazines from the JCR and change of names of magazines.

Seminar 9 New Features Update in Web of Science

Web of Knowledge update - new features and enhancements. Web of Knowledge version 5.3 will be launched on 17 July. This updated version will provide a number of new features and enhancements to the service. For example: there will be no stop words; you will be able to use the 'near' operator to search for words in close proximity to each other and thus focus your search; all results will be returned with no record limits. The Web of Knowledge website: <http://thenewwok.com/> provides details of all the new features as well as a range of support documentation. The library webpages at <http://www.brookes.ac.uk/library/research/wosguide.html> provide a basic guide to searching and details of features which are particularly useful for researchers. Web of Knowledge offers the most sophisticated research discovery environment available. By implementing advanced technologies to the World's most widely used and well respected citation databases, users can take advantage of the full potential of a truly integrated platform.

Seminar 10 New scientific papers review. New methods: search and discussion

Primary research formats. An Article is a technical report of primary research data on a new technique that is likely to be influential. This format is not a review of technology, but its primary report in the literature. Articles include a detailed description of the method, including all the technical details necessary to its reproducibility, and the results of a validation study. In order to guarantee immediate practical relevance, Articles must show an application of the new method to an important biological question and demonstrate its advantage over existing approaches. Validation of the new method and demonstration of its superiority over existing techniques most often involve novel biologically relevant data. However since the focus is on the technology, providing significant new insight into a biological problem is not a requirement. Articles begin with an unreferenced abstract (typically 150 words) and are divided into separate sections for Introduction, Results, Discussion and online Methods. Introduction and Discussion are brief and focused, the Results section usually contains a general description of the method followed by its validation, and the online Methods section provides all technical details necessary for the independent reproduction of the methodology, without referring to a chain of bibliographical references. The main text (excluding abstract, online Methods, references and figure legends) is 2,500 - 3500 words. Articles have no more than 6 display items (figures and tables). The Results and online Methods should be divided by topical subheadings; the Discussion may contain subheadings at the editors' discretion. If statistical testing was used to analyze the data, the online Methods section must contain a subsection on statistical analysis. References are typically no more than 40.

Seminar 11 Electron web pages as an instrument of scientists to declare about themselves

EndNote Web. Create your own lists of references. Adding entries from different sources. Sorting records, the creation of groups and access control to them. Registration of bibliographic lists and their export. Using the Cite-While-You-Write to Microsoft Word.

Importing entries in the EndNote Web from different sources. Advanced sort records by the groups and access control groups. Additional possibilities for the design of lists of literature and texts. Adding entries using the module for Internet Explorer. Advanced module Cite-While-You-Write to MS Word for registration of citations directly in the text.

Seminar 12 Discussion and interpretation of experiments and results of master thesis

The master's thesis represents an important part of the examination in the second study phase of the Master's programme. It is based on an independent research work performed by the student on a subject which was selected in consultation with a promoter during the first study phase.

This concise guide for master students of Biomedical Sciences contains a number of guidelines, which should enforce a uniform format of the thesis text and can contribute to a more fluent composition and writing of the Master's thesis.

The content and the importance of the sections are commented here, as well as the order in which these different sections must be presented in the thesis. In addition, instructions are given on the presentation of the chapters on the study of literature and on the results of the experimental work in a clear and orderly manner.

Further information on other aspects of the Master's thesis can be found on <http://med.kuleuven.be/bmw/eindwerk/> and on Toledo. In the Master's thesis regulations, the following topics are discussed:

- The supervisor
- The responsibilities of the supervisor
- Choosing a supervisor and a research project
- The stages and data in the course of the research and Master's thesis
- The lay-out of the Master's thesis
- The language of the Master's thesis and the Master's thesis defence
- The Master's thesis jury: composition and evaluation

- Composition and function of the Master's thesis coordination commission
- Dispute regulations

Seminar 13 If you are editor or reviewer of scientific journal...

Peer review is an essential component of formal scholarly communication and lies at the heart of the scientific method. Reviewing papers is part of belonging to the scientific community. Being sent a paper to review allows you a "sneak preview" into some research in your specific interest area or a closely allied field. It allows you to have some impact on what is being published in your discipline. For more experienced scientists, it is a way of mentoring other scientists. For younger researchers, it is a way to learn more about your discipline, and when you are asked to review a paper, it is an acknowledgment of your importance in the community of scientists. Elsevier shares the commonly held view that all scholars who wish to contribute to publications have an obligation to do a fair share of reviewing.

As a peer reviewer for *Science* magazine, you are part of a valued community. Scientific progress depends on the communication of information that can be trusted, and the peer review process is a vital part of that system.

Only some of the submitted papers are reviewed in depth. For in-depth review, at least two outside referees are consulted. Reviewers are contacted before being sent a paper and are asked to return comments within 1 to 2 weeks for most papers. Reviewers may be selected to evaluate separate components of a manuscript. We greatly appreciate the time spent in preparing a review, and will consult you on a revision of a manuscript only if we believe the paper has been significantly improved but still requires input. The final responsibility for decisions of acceptance or rejection of a submitted manuscript lies with the editor.

- Reviews should be objective evaluations of the research. If you cannot judge a paper impartially, you should not accept it for review or you should notify the editor as soon as you appreciate the situation. If you have any professional or financial affiliations that may be perceived as a conflict of interest in reviewing the manuscript, or a history of personal differences with the author(s), you should describe them in your confidential comments.
- If, as a reviewer, you believe that you are not qualified to evaluate a component of the research, you should inform the editor in your review.
- Reviews should be constructive and courteous and the reviewer should respect the intellectual independence of the author. The reviewer should avoid personal comments; *Science* reserves the right to edit out comments that will hinder constructive discussion of manuscripts.

Seminar 14 Workshop on patents writing and submission

If your research adds to the state of the art in the academic literature, it probably qualifies for patent protection and should be patented, too. The focus of this workshop is on writing a provisional patent application (including all sections needed for a non-provisional application) as a foundation for filing the non-provisional in the next 12 months. This workshop is intended for those researchers who are planning to be able to file multiple patents on their own (or with minimal oversight from a patent agent or patent attorney) during their professional careers. The Workshop will cover the following:

1. How to search and interpret patents: learning to look for relevant patents as prior art and examples of patent construction. How to deconstruct patents in your area of expertise and understanding sections on Specifications and Claims.
2. How to file a provisional patent: drafting the specifications and preparing drawings. Advanced Specification Drafting Issues. Lectures specific to drafting of patent specifications. Areas will include the written description, enablement and best mode requirements of 35 USC §112, as well as practical tips for ensuring the specification is truly a primary source of claim interpretation. What steps can be taken to avoid patent "profanity"?

After the workshop you should be able to: (1) write and submit a full provisional patent, and (2) start planning a non-provisional patent

Seminar 15 The review of international found granting scholarships for research and study. I want to apply for research grant of international fund

Any hesitation about studying abroad is typically related to the cost. However, what most students don't know is that they can actually apply their current on-campus financial aid package to their study abroad trip in addition to scholarships. In fact, for some students, particularly those who pay out-of-state-tuition, studying abroad can sometimes be cheaper than a traditional on-campus semester.

A study abroad scholarship is a monetary award for students to use toward the expenses of their program such as travel, course credits, books and lodging. Students must apply for scholarships and some can be very competitive while others are underutilized. There are several types of study abroad scholarships to apply for such as:

- **Destination-specific:** These are scholarships awarded by a country to students planning to pursue a study abroad program in that particular country. They are awarded as an incentive to study in that country instead of elsewhere. Check with government-sponsored travel websites of the country where you wish to study to see what scholarships are available.
- **Program-specific:** Program-specific scholarships are offered by individual study abroad programs and/or the colleges and universities where they may be associated to qualified applicants. These scholarships are often given on the basis of academic and personal achievement, but qualifications will vary based on the particular scholarship. Check with your study abroad program and university to see what scholarships are available.
- **Subject-specific:** Subject-specific scholarships are awarded by study abroad programs or institutions to students based on their particular major or field of study. These scholarships may require the recipients to enroll in subject-specific courses while abroad or conduct subject-specific research while abroad, but it's important to note that qualifications will vary based on each scholarship.