



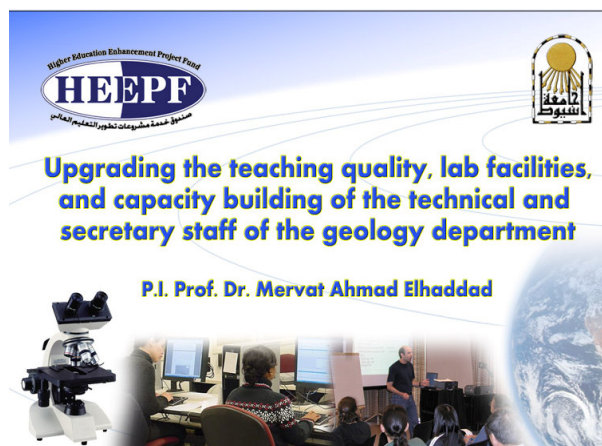
**Assiut University**  
**Faculty of Science**



## **Projects of the faculty** **funded by HEEPF, TEMPUS**







# 6

## April 2006

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**FACULTY OF SCIENCE, ASSIUT UNIVERSITY  
ADMINISTRATION**

**THE DEAN:**

**Prof Dr. MOSTAFA M. KAMAL**

**VICE-DEAN FOR EDUCATION AND STUDENTS AFFAIRS:**

**Prof. Dr. AHMED Y. ABDEL-MALLEK**

**VICE-DEAN FOR GRADUATE STUDIES AND RESEARCH:**

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**VICE-DEAN FOR COMMUNITY SERVICES AND ENVIRONMENTAL AFFAIRS**

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**HEAD OF THE PHYSICS DEPARTMENT**

**Prof. Dr. NASER M. AFIFY**

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**HEAD OF THE BOTANY DEPARTMENT**

**Prof. Dr. FAWZI M. SALAMA**

**HEAD OF THE ZOOLOGY AND ENTOMOLOGY DEPARTMENT**

**Prof. Dr. IMAM A. A. MAKKAWY**

### **THE MISSION OF THE FACULTY OF SCIENCE**

- A center of higher education and scientific research in the field of basic sciences to realize the mission of Assiut University in preparing scientists and specialists for scientific and industrial centers, equipped with the basis of specializing scientific knowledge.

- Offering to students the best teaching services in their study fields to acquire the required knowledge and skills through curricula based on local and international standards.
- Sharing in developing sciences of mathematics, physics, chemistry, biology and geology through research of its scientific schools.
- Implementing its human resources, research facilities and expertise to solve environmental problems and to enhance community development.

### **THE VISION OF THE FACULTY OF SCIENCE**

The Faculty of Science, Assiut University aims to be a distinguished faculty on the national and international levels producing graduates who are prepared to succeed and to be creative. The Faculty aims also to conduct highest quality research meeting the technological and scientific research needs of industry, government and society .Quality assurance and accreditation is a prime and principal goal of the present phase.

The University of Assiut was established in October 1957 with only two faculties, one of them is **The Faculty of Science** and the second is The Faculty of Engineering.

The Faculty of Science at Assiut University is housed in six 5-story adjacent buildings built in the early 1960's and completed in 1983. Recent buildings added are the administrative building and a new additional building of the Chemistry Department.

The Departments maintain numerous instrument rooms and special labs for certain measurements and specific

purposes. The total size of all Departments provides good facilities for research and assures students good guidance.

Faculty of Science has been established upon the common department system which makes the faculty responsible for teaching all courses of the basic sciences to undergraduate as well as to graduate students of different faculties of the university. So, strong, active, top-quality six scientific departments translate the mission and strategies of the Faculty of Science. These departments are:

**1- Department of Mathematics**

**2- Department of Physics**

**3- Department of Chemistry**

**4- Department of Geology**

**5- Department of Botany**

**6- Department of Zoology**

In this academic year 2005/2006 the faculty students reached 2102 students distributed as follows: 679 students in the first year, 508 in the second year, 447 in the third year and 468 in the fourth year. Faculty of Science has awarded the degree of B.Sc. to 6357, M.Sc. to 847 and Ph.D. to 394 students through the period from 1960/1961 to 2004/2005. The Faculty graduates occupy different professional positions in broad spectrum of institutions, agencies, authorities, and universities. Such invaluable academic output reflects the high achievement and continuous development of the faculty.

Quality assurance and accreditation (QAA) unit was established as a requirement of higher education reform process. Such a system represents a more reliable and comprehensive management system since it reflects different

experience and qualification of academic and non-academic personnel.

## **Faculty Staff Members**

The total number of staff member in the faculty of science according to last update estimation (May, 2005) is 353 including professors, assistant professors and lecturers distributed among the six departments of the faculty. The number of assistant staff (assistant lecturer and demonstrator) is 131 covering all specialization all over the departments of the faculty.

## **Educational Programs**

The Faculty of Science in Assiut University is one of the university's largest faculties, offering several B.Sc. degree programs. Additionally, the Departments within the Faculty offer a teaching service for faculties such as Education, Pharmacy, Engineering, Agriculture and Veterinary medicine. This is in accordance with the Departmental system applied in Assiut University. The size and complexity of the Faculty is reflected in the following statistics for 2005.

Number of Students:

Undergraduate students: 2212

Post-graduate students : 238

Non-science students : 7251

**The Programs of undergraduate study performed in the faculty of science, Assiut University are:**

### **Single Programs**

1- Mathematics

2- Physics



- 3- Physics and Electronics
- 4- Applied Physics
- 5- Computer Sciences
- 6- Chemistry
- 7- Botany
- 8- Zoology
- 9- Entomology
- 10- Geology
- 11- Geophysics
- 12- Environmental Sciences

### **Double major programs**

- 1- Physics and Chemistry
- 2- Chemistry and Microbiology
- 3- Chemistry and Botany
- 4- Chemistry and Zoology
- 5- Chemistry and Entomology
- 6- Chemistry and Geology

Also, the faculty offers Diploma in one of the following areas of specialization:

- 1- Mathematics and Statistics.
- 2- Statistics and computer sciences
- 3- Mathematics and computer sciences.
- 4- Mathematics and operations research.
- 5- Solid state physics.
- 6- Radiation physics.
- 7- Nuclear physics.
- 8- Plasma physics.
- 9- Metals and alloy physics.
- 10- Physics and renewable energy.
- 11- Biophysics.
- 12- Applied physics.
- 13- Analytical chemistry.

- 14-Applied chemistry.
- 15-Applied geology.
- 16-Hydrogeology.
- 17-Geophysics.
- 18-Biological technology.
- 19-Fish biology and fish culture.
- 20-Applied entomology.
- 21-Taxonomy of flowering plants and Egyptian flora
- 22-Applied microbiology.
- 23-Applied plant physiology.
- 24-Fresh water biology.
- 25-Environmental sciences.
- 26-Complementary Diploma for teachers.

The faculty of science offers an extensive variety of academic programs. The teaching programs incorporate general-education, theoretical, methodological, and scientific, research and professional contents. The syllabi are implemented through various forms including:

1. Lectures using different tools such as black and white boards, over head projectors, power point. The faculty designs a condensed workshop program to train the faculty members and their assistants on using multimedia in teaching.
2. Laboratory and practical sessions.
3. Theoretical exercises in Department of Mathematics.
4. Field visits for Geology, Chemistry and Biology students.
5. Summer training for 6 weeks after passing the third year
6. Doing an essay or mini review or project focusing on effective subject or local problems for fourth year students.

Undergraduate studies extend over four academic years

and the teaching courses are divided into two semesters for each year of study.

The chance for independent learning is allowed by the library and internet points which are distributed all over the different departments and their special libraries, in addition to special center for internet and information.

Financial support of students is offered in different forms:

1. Support the notes and books for all students. In this concept the University's book foundation (UBF) buys the notes and books from the professors and disseminates these materials to students at low prices. In addition, every department disseminates 5 % of its books free for poor students.
2. Outstanding students receive regular monthly salaries for motivation.
3. Irregular financial aids are paid to students who are in need.
4. The fees and other expense (after examination of social status) are paid by the faculty for poor students.

The additional tutorial help for students who in need are represented is the following manners:

1. The administration of the faculty organizes low number groups (8 students per group) at a very low cost paid by the students themselves. This small fee is just to ensure the seriousness of students. The fee is paid to instructors or assistant lecturers who teach the student to motivate them to do their best.
2. Within the University's policy, the faculty organizes additional lectures by the professors as a tutorial help for students who are in need or those having any delaying conditions. The lecturers cost is covered by the university.

3. By the university law, each professor has 6 hours per week as office hours to meet the student and answer their questions singly or in groups. Professors should announce these hours at the beginning of the course.
4. In addition, the learning environment at the faculty and the relations between staff member and students are open and friendly. Most students do not hesitate to ask members for guidance and counseling in academic questions.

A full student guide is available. This guide included all-important services for students. The student can get this guide on registration for the first year. In addition to the available website of Assiut University which includes guiding information about all faculties, faculty of Science has a fully planned site within the university one demonstrating all available educational services offered by the faculty for students

“[http://www.aun.edu.eg/fac\\_sci/index.htm](http://www.aun.edu.eg/fac_sci/index.htm).”

### **Facilities and services for distinguished students.**

The faculty offers different services for distinguished students such as:

1. Social care by the faculty administration and staff members
2. Regular cash awards for them
3. The top-grade students are chosen to work in their departments as demonstrators to complete their M.Sc. and Ph.D. to qualify them to be staff members.
4. The distinguished students are honoured in “Day of Science” which is held annually under supervision of the president of the University and they receive presents and certificate of honour from the Dean of the Faculty.

5. The faculty annually select the ideal male and female student and donate them a certificate of honour.

There are many services offered to the students of the Faculty of Science through the faculty or the university, for examples is:

- Medical care, which covers all students at the university hospital.
- All services for students activities through the students union or individually are available in all fields like arts, social, cultural, sporting and scouting.
- The faculty has six computer Laboratories, software programs and internet center.

In addition to general study tables in the six department's libraries of the Faculty and also of the main library, the University student library has three large quiet study areas with total capacity of ~1500 individual study carrels and three group study rooms with 5-6 reading tables and 40-50 seats in each.

The use of quiet study areas is conditional upon the rules which have to be obeyed. The students work appropriately in these areas where they are seated. This library Facility is found to be highly beneficial. The students find a peaceful oasis with individual study carrels available for use.

The quiet study halls are opened 16 hours every day except Friday; the working hours are from 8.00 A.M. to at midnight.

There are three net work points in rooms within the study areas which can be used by the students. These rooms are intended for students working on group projects or small groups study.

825 students are entitled to the full accommodation in the university dormitory with relatively small fee in preference for small age and educational record.

The faculty of science has six libraries in the specific departments, in addition to general and microfilm libraries available for all faculties' students.

All libraries are air-conditioned and have computer-aiding facilities and internet point's connection. Each library has its own non academic staff that guides and offers advice for students in their specific field of study.

All libraries are open from 8:00 a.m. until 8:00 p.m. (Saturday-Wednesday) and from 8.00 a.m. until 3:00 p.m. (Thursday).

The libraries include books, journals, and other reference material in connection with the academic and research programs and professional work. The library collection reflects the existence of an active acquisition policy; this policy includes specific acquisitions on the request and recommendation of the faculty members. The library collections are reasonable and go well beyond the minimum collection required for use by students in specialized programs

In addition to 331 CD's available in the seven libraries of the faculty, there is a microfilm library which includes many books, M.Sc. and Ph.D. theses.

Each department has its own computer center including (6-10) computers, printers and scanners to provide all electronic services needed for students and staff members. This number

of computers and other instruments still inadequate and the administration of the faculty arrange to increase and modernize these equipments annually

### **Laboratories and equipment:**

All lecture theaters, teaching halls, class rooms and seminar rooms are healthy lighted, ventilated and provided with comfortable seats. There are two theaters provided with multimedia equipment in addition to other teaching aids (e.g. overhead projectors and slide projectors, Internet points). In addition, there is a mobile data show machine ready to be delivered to any hall or classroom on request. The administration of the faculty planned to increase gradually the equipment number to satisfy all theaters and halls. This will be dependant on the fund availability.

The laboratory facilities reflect the requirements of the offered educational program. The laboratories are equipped with instruments and equipment of kind and quality to ensure the effective functioning of the laboratory.

Each curriculum has a carefully constructed and functioning plan for the continuing replacement, modernization, maintenance, and support of laboratory equipment and related facilities.

There was shortage in Adequacy of audiovisual aids in the faculty. Only multimedia and photography labs were established within an area of 30-40 m<sup>2</sup> suitable for 25 seats. Now two projects are involved in establishment of a new audiovisual and multimedia lab.

# Projects

**Project Title:** Enhancement and Development of Organic Chemistry Teaching Program for the Bachelor Degree of Science (chemistry major).

## General data

**Date: March, 2006**

|  |  |                               |                               |                    |
|--|--|-------------------------------|-------------------------------|--------------------|
| Code: B-048-I0   | Duration: 25 Month   | Start Date: Sep.2004          | End Date: August 2006         | Budget: L.E.629300 |
| Project Title:   | Enhancement and Development of Organic Chemistry Teaching Program for the Bachelor Degree of Science (chemistry major) |                               | Co-finance budget: L.E.233998 |                    |
| Institution: Faculty of Science  | University: Assiut   |                               | Partner Institutions:         |                    |
| P.M.: Prof. Dr. Aboel-Magd A. Abdel-Wahab  | Mobile #: 012-3971381  | Phone #: 088-2411485/ 2363707 | e-mail: Wahab_47@hotmail.com  |                    |
| Beneficiaries*: Undergraduate Students, Faculty members, Assistant Staff , Technicians and Industry. |  |                               | Other Parties:                |                    |
| Theme+: Program development, and curriculum development  |  |                               | Field: Chemistry              |                    |
| Web Site: <a href="http://www.edoctep.tk">www.edoctep.tk</a>   |  |                               | Specialty: Organic Chemistry  |                    |

## Summary

Enhancement of the quality, efficiency, relevance and outcomes of the teaching program of organic chemistry for chemistry major students represents the main target of the proposed project. The target-teaching program is very significant and wide in its scope; it is 65 hours per week. 30 hours of which are dedicated to theoretical



courses. Developing and restructuring the undergraduate syllabi and curricula, utilizing teaching technology, upgrading lecture halls and labs and assignment of the students' achievements are the main program tracks.

The suggested project is in agreement with the faculty strategy, as 2003, which states that science education improvement should be made as a high priority by all faculty departments.

The main objectives of the project include redesigning courses and applied work to cope with accredited international universities, in addition to the use of modern teaching technology and up-to-date labs. Advanced courses, modern topics and advanced experiments are included after survey of the international universities syllabi and curricula. The use of teaching aids and application of modern teaching technology will be of fruitful education impact. Of course, upgrading the infrastructure of labs, a library and lecture hall is of high priority for implementation of the project. Outcomes measures and

Performance indicators will be applied for continuous assessment. The main achievements of the project is the production of high quality innovative and skilled graduates coping with the international standards and is able to deal with advanced technology. The final outcome of the project is the increase of the national revenue.

**Objectives (State only SMART objectives; Specific, Measurable,**

- Developed syllabi and curricula for both theoretical and practical courses.
- Training of faculty, TA's and technicians.
- Upgrading labs, library and classrooms.

**Deliverables (Outputs/outcomes)**

- Graduation of skilled, innovative and competitive chemists.
- Developed chemical industries and research which result in increase of the national revenue
- Application of the project in our faculty and other universities ,which is expected to the society with high quality human resources.

**Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

**Equipments:**

Electric Oven - Hot plate with regulator - Hot plate with magnetic stirrer - Hot air gun  
Vacuum pumps - U.V. lamp for TLC - Digital balances with cabinet - Digital  
balances with cabinet.

**Glass and Lab supplies:**

Different types of needed glass ware and lab supplies.

**Textbooks.:** New boxes in the field of Organic Chemistry.

**Chemicals:**

A great number of materials were purchased for students use.

**Outside Links (Category: T=International travel or I= Invited experts)**

In Progress

**Dissemination**

- Meeting and discussions with the faculty and university administration for projects integration ..
- Meeting of the faculty projects managers in the presence of faculty administration for ideas exchange, cooperation and integration .
- Conference attendance, exchange of idea with international specialists
- Meeting with managers of similar interest in other Universities .
- Web site publishing of the course 101C (www.epp.aun.edu.eg).
- Holding of three workshops .

**Sustainability**

- Contact of other Universities and specialists.
- Publishing of the course 101C on the website of Assiut Univ.
- Courses 101C and 242C (theoretical and practical) are now at the hands of students.

**Integration/Coordination Fields**

- Electronic publishing of courses ( web site, power point, CD, etc.....).
- Exchange of courses materials.
- Use of software, learning materials, texts, etc.....
- Use of training centers and facilities.
- Exchange of ideas and problems solving.
- Participation and cooperation with faculty administration and other projects in preparing for the intended Credit Hour System in the Faculty.

**Project Title: Constructing of a Teaching Resources and Multimedia Center at the Faculty of Science (TRMC)**

**General data**

|  |  |                             |  |   |
|--|--|-----------------------------|--|---|
| General data   |  |                             |  |   |
| Code: <b>B-051-10</b>  | Duration: <b>2 years</b>   | Start Date: <b>1/9/2004</b> | End Date: <b>30/9/2006</b>             | Budget: <b>82,000 \$</b> (L.E: 508.400)   |
| Project Title:   | <b>Constructing of a Teaching Resources and Multimedia Center at the Faculty of Science (TRMC)</b> |                             | Co-finance budget: <b>27184 \$</b>     |   |
| Institution:<br><b>Faculty of Science</b>  | University: <b>Assiut University</b>   |                             | Partner Institutions: <b>non</b>       |   |
| P.M.: <b>Prof. Dr. Mostafa Mohamed Kamal</b>   |  | Mobile: <b>0123971293</b>   | Phone: <b>2343837</b>                  | e-mail:<br><b>mostafak@acc.aun.edu.eg</b> |
| Beneficiaries*: <b>Undergraduate students, Faculty members, Assistant staff, Technicians</b> |  |                             | Other Parties:                         |   |
| Theme+: <b>IT</b>  |  |                             | Field: <b>Teaching with Multimedia</b> |   |
| Web Site: <a href="http://www.trmc.aun.edu.eg">http:// www.trmc.aun.edu.eg</a>               |  |                             | Specialty: <b>Multimedia</b>           |   |

**Summary**

Enhancing the educational processes at the faculty of science through constructing a teaching resources and multimedia center is the ultimate goal of the proposed subproject. Such teaching resources and multimedia center will enhance the infrastructure of the university. The faculty staff teaching skills will be enhanced through a series of extensive training sessions on how to use/apply the up-to-date cutting edges teaching methodologies. All of these will help students for deeper understanding of their subject materials, and will prepare them at the same time to be ready for the real life jobs and challenges. Introducing

and bringing the subproject objectives to reality will completely satisfy not only Assiut University's strategies, but also the strategies of the national education all over the country. Faculty of Science that consists of six main departments grants B.Sc. degrees in 16 different basic science fields as well as higher degrees (M. Sc. and Ph.D.) in the main topics of the basic sciences. The number of students enrolled in the faculty of science is only 2200 students; yet more than 12000 students coming from Engineering, Agricultural, Pharmacy, Veterinary, specific Education, Education and computer science faculties are studying basic science in the faculty of science. Enhancing the teaching methodologies/styles of the staff in the faculty of science will have a vast impact not only on students enrolled in the faculty of science, but also on most of the students enrolled in other faculties at Assiut University.

**Objectives (State only SMART objectives; Specific, Measurable,**

- To upgrade the technological infrastructure of the Faculty of Science/Assiut University through constructing a teaching resources and multimedia center
- Converting selected teaching materials of introductory courses of different subjects into different multimedia modules to be available in the TRMC
- To train instructors to the highest level of professional and scientific teaching standard
- To train the teaching resources and multimedia center's technicians/staff to manage, operate and maintain the equipments/multimedia tools

**Deliverables (Outputs/outcomes)**

- Constructing teaching resources and multimedia Center
- Converting a selected ten courses material from each of the six departments to a digital analog
- Special training for Faculty members on the "using multimedia on teaching"
- Special training for teaching resources and multimedia center's staff

**Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>➤ Computers</li> <li>➤ Data Show</li> <li>➤ Lap Top</li> <li>➤ Photo Copy machine</li> <li>➤ Printers</li> <li>➤ Digital Video Camera</li> </ul> | <ul style="list-style-type: none"> <li>➤ Audio / Video Station (TV , Video , DVD )</li> <li>➤ Scanner</li> <li>➤ Softwares</li> <li>➤ E-Books</li> <li>➤ Publisher-Made Transparencies</li> </ul> |
|---|---|

**Outside Links (Category: T=International travel or I= Invited experts)**

Exchange of experience in multimedia

**Dissemination**

| Type         | Target Recipients                         | Date       |
|--------------|---|------------|
| Workshop     | Faculty staff members and their Assistant | 20/3/2005  |
| Brochure     |   | 20/12/2004 |
| Posters      |   | 6/4/2005   |
| Website      |   | 1/1/2005   |
| Presentation |   | March 2006 |

**Sustainability**

| Plan   | (Expected) Date                   |
|--|-----------------------------------|
| After the HEEPF funding has ended, the TRMC will be there active and opened in the university supplying all the teaching staff on the faculty with the teaching materials and multimedia tools.  | After the HEEPF funding has ended |
| Out standing staff during the two-year project period will be appointed by the university to continue working in the TRMC.   |                                   |
| The university will cover any multimedia tools maintenance requirements.   |                                   |
| Two workshops per year, after the HEEPF funding has ended, will be held, to keep the interested teaching staff in the Faculty of Science up dated with the new multimedia tools and methodology. |                                   |

**Integration/Coordination Fields**

| Item  | Other project(s)+                      | Contribution* | Description                              |
|---|--|---------------|--|
| Mutual exchange of experience   | A-082-10, B-048-10, C-067-10           | S             | Exchange of experience in multimedia     |
| Unification of approach (credit hour system, e-format....)                        | -                                      | -             | -  |
| Joint Training  | A-082-10, B-048-10, C-067-10           | S             | Using the Multimedia center for training |
| IT prospectives (Data base, LCMS**, virtual lab,.....)                            | A-082-10, C-065-10                     | T             | Data Base and test bank                  |
| Share of facilities (CDs, green houses, training centers, digital libraries.....) | A-082-10, B-048-10, C-067-10, C-065-10 | G and T       | Training center available                |
| Use of labs (equipments, tools,...)   | A-082-10, B-048-10,                    | G             | Holding workshops/training               |

|   |   |   |   |
|---|---|---|---|
|   | <b>B-046-I0, C-067-I0,<br/>C-065-I0, D-088-I0,<br/>D-090-I0</b>                         |   | sessions for interested<br>instructors in the TRMC  |
| Use of learning tools (produced<br>software, multi-media entities, learning<br>materials,.....) | <b>A-082-I0, B-048-I0,<br/>B-046-I0, C-067-I0,<br/>C-065-I0, D-088-I0,<br/>D-090-I0</b> | G | Movable stations available<br>(each one contains computer,<br>data show, Video, TV)                                 |
| Use of purchased item (software, texts,<br>journals,.....)                                      | <b>A-082-I0, B-048-I0,<br/>C-067-I0</b>   | S | E-books, software and text books<br>are available.  |
| Complementary deliverables (course<br>material,...)   | <b>A-082-I0, B-048-I0,<br/>C-067-I0</b>   | S | Converting selected teaching<br>materials of different subjects<br>into different multimedia<br>modules in the TRMC |
| Complementary/joint program   | -   | - | -   |
| Auxiliary courses/curriculum  | -   | - | -   |
| Avoid duplication of items  | <b>A-082-I0, B-048-I0,<br/>C-067-I0</b>   | S | Avoid duplication in training<br>sessions for Faculty staff   |
| Coordinated courses/programs  | <b>A-082-I0, B-048-I0,<br/>C-067-I0</b>   | S | Preparing the interdisciplinary<br>courses  |
| Integrated web site   | <b>A-082-I0, B-048-I0,<br/>B-046-I0, C-067-I0,<br/>C-065-I0, D-088-I0,<br/>D-090-I0</b> | S | Linkage the websites of all<br>projects at the faculty of science   |
| Auditing and peer revision  | -   |   |   |
| Joint publication   | <b>A-082-I0</b>   | S | Electronic publication of the well<br>prepared courses  |
| Problem Solving   | <b>A-082-I0</b>   | T | Cooperation with others   |
| Consultation  | All projects  | T | Cooperation with others   |
| Management scheme   | -   |   |   |
| Dissemination items (website,<br>brochures, newsletter, workshops,<br>conferences, others)      | <b>A-082-I0, B-048-I0,<br/>B-046-I0, C-067-I0,<br/>C-065-I0, D-088-I0,<br/>D-090-I0</b> | S | Holding workshops, website<br>design, preparing brochures in<br>the TRMC  |
| Sustainability plans (joint projects,<br>specialized units, others)                             | <b>A-082-I0</b>   | S | Continuous preparing and e-<br>publishing the courses   |

# Project Title: Development of Educational Museum for Egyptian Fauna (DEMEF)

## General data

Date: 13/3/2006

|   |   |                          |                                |                             |
|---|---|--------------------------|--------------------------------|-----------------------------|
| Code: D-090-IO  | Duration: 24 months   | Start Date: July, 15, 05 | End Date: June, 15, 07         | Budget: 542985 L.E.         |
| Project Title:  | <b>Development of Educational Museum for Egyptian Fauna (DEMEF)</b> |                          | Co-finance budget: 145310 L.E. |                             |
| Institution: Faculty of science   | University: Assiut  |                          | Partner Institutions:          |                             |
| P.M.: Prof. Dr Ahmad hamed Obuid-Allah  |   | Mobile #: 0122302328     | Phone #: 0882303613            | e-mail: DEMEF2005@Yahoo.com |
| Beneficiaries: Undergraduate students, Graduate students, Professional members, Faculty members, pre-university students      |   |                          | Other Parties:---              |                             |
| Theme+: Knowledge resources   |   |                          | Field: Zoology                 |                             |
| Web Site: <a href="http://www.aun.edu.eg/fac_sci/proj/demef/demef.htm">http://www.aun.edu.eg/fac_sci/proj/demef/demef.htm</a> |   |                          | Specialty:                     |                             |
| Faculty of science, Assiut projects   |   |                          |                                |                             |

## Summary

The Project aims at establishing an educational museum for the Egyptian fauna in the Department of Zoology, Faculty of Science, Assiut University. The need for this Project arises from the fact that the Department offers zoology courses for more than 4000 students per year including several faculties like Veterinary, Pharmacy, Education, Agriculture and Science. The majority of courses offered depend mainly on preserved and mummified animal specimens. The pre-university students are in need of such a museum for learning more about Egyptian fauna and their behaviors. Also, the schools need animal specimens for teaching and using them as reference groups. The researchers dealing with the taxonomy of animals need to know the previous studies carried out on a certain group of animals. So, the project was designed to fulfill this gap by constructing a data base about the fauna of Egypt including the taxonomical and ecological works which have been done before. To help in identifying samples and specimens in the museum the project aims at constructing a colored atlas for this purpose.

## Objectives (State only SMART objectives; Specific, Measurable,

- \* Establishment of reference taxonomic groups reflecting biodiversity, representing Egyptian fauna and being educational bases.
- \* Establishment of micro-technique and mummification unit.
- \* Establishment of a scientific library for the fauna using modern methods of technology (Multimedia).
- \* Establishment of Egyptian-fauna electronic database (uploaded on WWW) including the related research articles

## Deliverables (Outputs/outcomes)

- \* Reference taxonomic groups representing Egyptian fauna.
- \* Atlas of Museum fauna
- \* Well-trained researchers qualified to identify and classify animals especially for other community services.
- \* Well-trained technicians qualified for specimen maintenance and development.
- \* Well-developed educational Egyptian-fauna museum open to receive pre-university students and amateurs in addition to its essential teaching and learning function in higher education.
- \* Permanent micro-technique and mummification unit.

- \* Well-trained micro-technicians and mummification technicians.
- \* Electronic library for fauna provided with electronic books and publication and multimedia
- \* Well-trained librarians for electronic library management.
- \* Egyptian-fauna database uploaded on WWW.
- Well-trained persons for using and researchers for upgrading the fauna database.

## Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+

| Lab/unit/system Entity*                                      | Location     | List |   |  |
|--|--------------|------|---|--|
| 1- Computer  | Project room |      | 2 |  |
| 2- Data show   | Project room |      | 1 |  |
| 3- Scanner   | Project room |      | 1 |  |
| 4- Printer   | Project room |      | 1 |  |
| 5- Printer (colors)  |              |      | 1 |  |
| 6- Microtome   |              |      | 1 |  |
| 7- Water bath  |              |      | 1 |  |
| 8- Video camera  |              |      | 1 |  |
| 9- Multi-probe instrument for measuring (pH, Do, Temp, TDS.) |              |      | 1 |  |
| 10- an oven  |              |      | 1 |  |
| 11- DVD  |              |      | 1 |  |
| 12-Television  |              |      | 1 |  |
| 13-Centrifuge  |              |      |   |  |

## Dissemination:

- 1- Constructing a web site. [http://www.aun.edu.eg/fac\\_sci/proj/demef/demef.htm](http://www.aun.edu.eg/fac_sci/proj/demef/demef.htm)
- 2- Workshop about the objectives and activities of the Project (finished Sept. 2005).
- 3- Workshop about identification and classification of animals for training staff members and assistant staff (finished).
- 4- Workshop to train technicians how to preserve specimens and what is the nature of animal specimens (finished).
- 5- Workshop for teachers of pre-university schools, police officers, and judgeship to discuss the importance of the project (Dec. 2006).
- 6- Preparing publications and posters about the objectives and activities for the targeted groups and beneficiary like pre-university schools, undergraduate students, Faculty members, Assistant staff, researchers (2<sup>nd</sup>, 15<sup>th</sup>, 24<sup>th</sup> months)
- 7- Workshop to train technicians for micro-technique and mummification of animals. (11<sup>th</sup> month)
- 8- Workshop to train technicians for using the electronic library and multimedia (16<sup>th</sup> month)
- 9- Workshop for staff members, assistants and students to know the database of animals and how to use it (24 month).

## Sustainability

- 1- Auto-sustaining through micro-technique and mummification unit. This unit will provide museum with specimens. Also, it can provide other universities and schools with animal specimens either preserved or mummified.
- 2- Auto-sustaining through biodiversity poster of the Egyptian fauna, which may provide other universities and pre-university schools.
- 3- Annual support from the university as a lower limit to maintain and renew museum specimens.
- 4- Auto-sustaining through the Atlas of Egyptian fauna of the museum, which may be sold to other universities and pre-university schools and staff-members.
- 5- Auto-sustaining through visits of the museum by pre-university students, university students, staff members, researchers, and public.

## **Integration / Coordination Fields**

**Coordination field include the following;  
Pre-university schools, police, judgeship, researchers, universities, public and visitors.**



## **Project Title:** Curriculum Development of Faculty of Education by Introduction of “Environmental Sciences Computer based Courses Modules” and Skills Improvement of In-Service School Teachers (TOT).

| General data  |                               |   | Date: 18/03/2006   |                    |
|---|-------------------------------|---|--|--------------------|
| Code: C-065-IO  | Duration: 18 Months           | Start Date: 15/2/2005                         | End Date: 15/8/2006  | Budget: 404000 L.E |
| <b>Project Title:</b> Curriculum Development of Faculty of Education by Introduction of “Environmental Sciences Computer based Courses Modules” and Skills Improvement of In-Service School Teachers (TOT). |                               |   | Co-finance budget: 108605.4 L.E  |                    |
| Institution: Faculty of Science.  | University: Assiut University |   | Partner Institutions: Faculty of Education, Assiut University  |                    |
| P.M: Prof. Dr. Esmat Abd El Hamid Keheila   |                               | Mobile #: 0103082429<br>Phone #:+20 88 311906 | <a href="mailto:keheila@aun.edu.eg">e-mail: keheila@aun.edu.eg</a><br><a href="mailto:keheila@hotmail.com">keheila@hotmail.com</a> |                    |
| Beneficiaries:(1) Undergraduate Students, (2)In-service school teachers (TOT), (3) Faculty Staff  |                               |   |  |                    |
| Theme+: Curriculum Development & Training   |                               |   | Field: Environmental Sciences<br>Education & Training  |                    |
| Web Site: <a href="http://www.cdessit.aun.edu.eg">www.cdessit.aun.edu.eg</a>  |                               |   | Specialty: Environmental Sciences  |                    |

### **Summary of the Main Features of the Project**

- Now in joint cooperation between Faculties of Science and Education in Assiut University, a New Curriculum shall be created by introduction of Environmental Sciences Education Program in undergraduate level to design a new specialty degree in “Biology, Geology and Environmental Sciences” within the Science Group of Faculty of Education in Assiut University by September 2006. Also the project aims to skills improvement of In-Service School Teachers in Environmental and Earth Sciences Education (TOT).
- The principal objectives of this project are: (1) Curriculum development by design new high quality environmental sciences computer-based courses modules; (2) Skills development of teaching staff, (3) Modernization of teaching/learning resources; (4) Promotion of Environmental Sciences Education program through Assiut University web site, (5) Establishment of permanent training/teaching workshop to improve skills of in-service school teachers in Environmental and Earth Sciences Education.
- The project will lead to enhancement of the process of teaching/learning for both staff members and students via the use of modern classrooms and labs and use of multimedia materials and Internet-mediated learning environments, which will provide mechanisms for the students to search, access, and download educational materials over the Internet anywhere at anytime.
- The environmental science education aims to develop active and well-informed individuals who are aware of their environment and their responsibilities in protecting and conserving that environment. It enables the learner to develop critical-environmental-thinking, problem-solving & effective decision-making skills.
- The Environmental Sciences Education aims to attract a multi-disciplinary audience of undergraduate and post-graduate students, school teachers, researchers, practitioners and government employees interested in the environmental and earth sciences from diverse backgrounds, such as geologists, civil engineers, forest and agricultural engineers, geographers, biologists, ecologists, hydrologists, archaeologists, and local planners.
- Environmental Science courses will provide a broad overview on the main components of Earth and Environment (Geosphere, Hydrosphere, Atmosphere and Biosphere).

**Objectives (State only SMART objectives; Specific, Measurable,**

| Objectives   | Target Group  |
|--|---|
| (I) To Introduce “Environmental Sciences” specialty within the undergraduate Science Group at Faculty of Education in Assiut University by September 2006. | (I) Undergraduate Students at Faculty of Education in Assiut University |
| (II) To improve skills of in-service school teachers in Environmental and Earth Sciences Education (TOT).  | (II) In-service school teachers (TOT)                                   |

**Deliverables (Outputs/outcomes)**

| Deliverables   | % Accomplished | (Expected) End Date | Beneficiary  |
|--|----------------|---------------------|--|
| (1) Establishment of 3 new Teaching labs in Geology, Botany & Zoology Departments (Microscopic/PC Multimedia Presentations Labs) | 90%            | 30/04/2006          | Undergraduate Students at Faculties of Education and Sciences in Assiut University |
| (2) Establishment of Digital Library & Multimedia Publishing Lab.  | 100%           |                     | Undergraduate Students at Faculties of Education and Sciences.                     |
| (3) Skills development of academic teaching staff (TOT).   | 90%            | 30/04/2006          | Teaching staff and assistant staff in Faculties of Education and Sciences.         |
| (4) Design of new high quality environmental sciences computer-based courses modules.  | 100%           |                     | Undergraduate Students at Faculty of Education.                                    |
| (5) New Curriculum in “Environmental Sciences” for BSc students in Faculty of Education.   | 100%           |                     | Undergraduate Students at Faculty of Education.                                    |
| (6) Training Center of Environmental & Geological Sciences Education   |                | 15/08/2006          | In-service school teachers (TOT)   |

**Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

| Lab/unit/system Entity*   | Location                              |
|---|---------------------------------------|
| (1) 3 new Teaching labs: (Microscopic/PC Multimedia Presentations Labs (MPMPL)) | Geology, Botany & Zoology Departments |
| (2) New Digital Library & Multimedia Publishing Lab.                            | Geology Department                    |
| (3) Training Center of Environmental & Geological Sciences Education            | Geology Department                    |

**Dissemination & Sustainability**

|   |
|---|
| (1) Holding a workshop for awareness of the project   |
| (2) Preparation of a Brochure for the project.  |
| (3) Preparation of a power point presentation lecture of the project for the workshop and download it on the project Website.     |
| (4) Preparation of Posters for the project.   |
| (5) Design the project Website & publishing it on Assiut Univ.  |
| (6) Establishment of Digital Library and Multimedia Publishing Lab for Continuous Upgrading and Production of Teaching Resources. |
| (7) Establishment of a “Training Center of Environmental & Geological Sciences Education”   |

**Project Title:** Improve the qualification of the staff members and their assistants in Electronic Publish, Establish an electronic publishing unit and publishing the academic course Electronically in Assiut University

**General data**

**Date: 31.3.2006**

|   |   |                     |  |                         |
|---|---|---------------------|--|-------------------------|
| General data  |   |                     | Date: 31/3/2006  |                         |
| Code:A-082-10   | Duration:2 years  | Start Date:1/4/2004 | End Date:31/3/2006   | Budget: 697800 L.E.     |
| Project Title:  | Improve the qualification of the staff members and their assistants in Electronic Publish, Establish an electronic publishing unit and publishing the academic course Electronically in Assiut University |                     | Co-finance budget: 185211 L.E. (From Assiut Univ.)                       |                         |
| Institution: Assiut Univ.   | University: Assiut  |                     | Partner Institutions: Nothing  |                         |
| P.M.:Prof. Dr. Nasser AFIFY   |   | Mobile #:0102595736 | Phone #:020882411360   | e-mail:afify@aun.edu.eg |
| Beneficiaries*: Professional members, Faculty members, Assistant staff and students   |   |                     | Other Parties: Nothing   |                         |
| Theme+: E-Publishing and Training.  |   |                     | Field: Training the staff members, Electronic publishing and E-learning. |                         |
| Web Site: <a href="http://www.epp.aun.edu.eg">http://www.epp.aun.edu.eg</a> & <a href="http://www.eppau.org">http://www.eppau.org</a> |   |                     | Specialty: Nothing   |                         |

**Summary**

Activity 1: Description:

- 1- Prepare training programs (original programs and educational programs for many users).
- 2- Train the trainers on the above programs, two training courses will be held, each course has 20 hrs for ten trainers at least for 5 days. The stuff project with the aid of expert company will train the trainers on the program.
- 3- The participated (280 stuff member and their assistance) will be selected with the agreement of the university. Each one will attend two successive training courses. The First course concerning with the requirements of electronic publishing such as Front page, Photoshop, Acrobat read & write, Flash, HTML language, Java, Forum programs, messenger programs etc.. The training course duration is 20 hrs divided to 5 successive days, 4 hrs per day. The first two hours will concerned with the information on the project goal. The next 14 hrs will be concerned with explaining the used program in the electronic publishing. In the last 4 hrs a test will be held for the participated with experimental training on the electronic publishing programs. A certificate will be given to the passed participants in the end of the first training course. The second training course will be held only for the well passed participants from the first training course. The duration of the second training course is 20 hrs for 5 successive days, 4 days per hours. In the first 12 hrs the participants will apply the program that used in the first training course. The last 8 hrs will be a workshop, which the participants with the aid of the trainers prepare a scientific material by electronic publishing. A certificate will be given to the passed participants in the end of the second training course.

The details of the training course is shown in appendix 1

Activity 2: Description:

- 1- Prepare electronic publishing unit:
  - a. PC computers and its requirements for making the pre-version of CDs diskettes and for the internet publishing.
  - b. Different equipments needed for the production of the CDs diskettes copies and other additional tools such as Audio and Video etc.
  - c. Establish a room for the unit (Furniture + internet connections + air condition.....etc.).
- 2- Select and train the technical operators for running the unit and arranging the interactive education between the students and lecturers.
- 3- Training the technical operators to high qualification usage.

Activity 3: Description:

- 1- PC computers and its suitable requirements for the project staff.
- 2- Attending the training courses for project staff, inside and outside the university, if it is necessary (for example: new publishing software programs).
- 3- Produce academic courses with Arabic and English languages by different methods to reach the optimized methods.
- 4- Seminar for discussing the optimal solutions to the university community and applying them

in the electronic publishing.

**Activity 4: Description:**

- 1- The scientific academic courses that will be electronically published should be determined with the agreement between the university administration, the authors and the project director (5 Arabic courses + 5 English courses + academic documents).
- 2- Produce the pre-version of these scientific academic courses on CDs diskettes and the internet publishing.
- 3- Produce several copies on CDs diskettes in the electronic publishing unit and/or internet publishing.
- 4- Arrange the electronic chatting and e-mail exchange between the students and lecturers for the selected published courses.

**Objectives (State only SMART objectives; Specific, Measurable,**

| Objectives                                     | Target Group                                 |
|--|--|
| Training the staff member and their assistants | Staff member and their assistants            |
| Establish an electronic publishing unit        | Staff member & their assistants and students |
| Optimized methods for electronic publishing    | Staff member & their assistants and students |
| Publishing some courses electronically         | Staff member and their assistants            |

**Deliverables (Outputs/outcomes)**

| Deliverables   | % Accomplished | (Expected)<br>End Date | Beneficiary   |
|--|----------------|------------------------|---|
| 2.a. Prepared training programs for electronic publishing          | 100            | ---                    | Two training programs for staff members and their assistants                          |
| 2.c. Training of trainers (TOT)                                    | 100            | ---                    | 20 trainers of staff members  |
| 2.d. Training workshops for staff members on electronic publishing | 85             | 30.4.2006              | 280 trainees of staff members and their assistants                                    |
| 3.a. Electronic publishing center with qualified staff             | 100            | ---                    | Publishing courses electronically for staff members and their assistants              |
| 6.a. Training hall   | 100            | ---                    | Multi purposed training center for staff members and their assistants                 |
| 4.b. Select the optimized methods for electronic publishing        | 100            | ---                    | Optimized methods for publishing Arabic text according to the standard and bench mark |
| 5.b. Electronic publishing of 10 courses on CD and/or internet     | 80             | 30.4.2006              | For staff members & their assistants and students                                     |
| 5.b.1 Interactive teaching forums                                  | 100            | ---                    | Interactive E-learning between the lecturers and students                             |
| 5.b. 2 Online Examination programs                                 | 100            | ---                    | Online examination for students   |

**Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

| Lab/unit/system Entity*    | Location          | List           |                  |                 |
|----------------------------|-------------------|----------------|------------------|-----------------|
| Electronic publishing unit | Assiut university | Computers      | Printers         | Scanners        |
|                            |                   | TV             | Video Camera     | CD Copier       |
|                            |                   | CD printer     | Silk screen unit | Data Show       |
|                            |                   | Video Cassette | Air conditions   | Internet points |
| Training hall              | Assiut university | Computers      | Printers         | Scanners        |
|                            |                   | Data Show      | Air Conditions   | Internet Points |

**Outside Links (Category: T=International travel or I= Invited experts)**

| Category (T or I) | Country | Outside Party | (Expected) Date | Duration | Scope* |
|-------------------|---------|---------------|-----------------|----------|--------|
|                   |         |               |                 |          |        |
|                   |         |               |                 |          |        |
|                   |         |               |                 |          |        |
|                   |         |               |                 |          |        |

**Nothing**

\*Joint degrees, Collaborative programs, Conference/Workshop/Symposium, Training, Peer review, Technical visit, Exchange of experience, Transfer of technology, Others (specify).

| Dissemination  |                                    |            |                  | Sustainability  |                 |
|--|------------------------------------|------------|------------------|---|-----------------|
| Type*  | Target Recipients                  | Number     | (Expected) Date  | Plan  | (Expected) Date |
| Seminar  | Staff members and their assistants | 200        | 6/11/2004        | Training Center **)   |                 |
|  |                                    |            |                  | Electronic publishing center (educational and scientific services) **)  |                 |
|  |                                    |            |                  | Electronic interactive teaching   |                 |
| Seminar  | Trainers                           | 15         | 28/12/2004       | **)<br>In the end of the project, the two units will transferee to Assiut university and operated as special units to sustain the aims of the projects. |                 |
| Seminar  | Staff                              | 70         | 9/7/2005         |   |                 |
| Workshops  | members and their assistants       | 312<br>1   | ---<br>30.4.2006 |   |                 |
| Brochure   | All univ. members                  | 1000       | 5/2005           |   |                 |
| Website:<br><a href="http://www.epp.aun.edu.eg">http://www.epp.aun.edu.eg</a><br><a href="http://www.eppau.org">http://www.eppau.org</a> | All users                          | Open users | ---              |   |                 |

**Project Title:** Professional Master in Flavour & Fragrance Chemistry and Chemistry of Cosmetic Products

**General data**

**Date:**

|   |   |                             |  |                   |
|---|---|-----------------------------|--|-------------------|
| General data  |   | Date:                       |  |                   |
| Code: JEP, 31017,<br>2003-EG  | Duration 3 years  | Start Date: :<br>01.01.2005 | End Date:<br>31.12.2007  | Budget: 355 884 € |
| Project Title:  | Professional Master<br>in Flavour & Fragrance Chemistry<br>and Chemistry of Cosmetic Products |                             | Co-finance budget: 20 000 €  |                   |
| Institution: Chemistry<br>Department, Faculty<br>of Science   | University: , Assiut University   |                             | Partner Institutions:<br>1-University of Nice-Sophia Antipolis (France)<br>2-University of Ferrara (Italy)<br>3-Sugar & Integrated Industries Company<br>(Egypt) |                   |
| P.M.:   |   | Mobile #:                   | Phone #:   | e-mail:           |
| Beneficiaries*: Undergraduate students, Graduate students, Professional<br>members  |   |                             | Other Parties:   |                   |
| Theme+: , Curriculum development  |   |                             | Field:   |                   |
| Web Site: <a href="http://www.aun.edu.eg/fac_sci/proj/mac/index.htm">http://www.aun.edu.eg/fac_sci/proj/mac/index.htm</a> |   |                             | Specialty:   |                   |

**Summary**

**Project Description:**

Introduction of the Chemistry of Aroma, Fragrance and cosmetic Chemistry to the Faculty of Science of Assiut University. This type of chemistry has never been taught to the Faculty of Science students neither in Assiut University nor in any other Egyptian Universities. Also this project includes the creation of a Master degree in the same specialty for two years study with the presentation of a small thesis following the European norms.

**Objectives (State only SMART objectives; Specific, Measurable,**

| Objectives  | Target Group  |
|---|---|
| 1) To create at Assiut University a <b>Master course programme in 2 years (5 &amp; 6)</b> on Flavour and Fragrance Chemistry and Chemistry of Cosmetic Products in line with <b>European standards</b> ;                        | Bachelors' Students (year 4) and Postgraduate Students (years 5 & 6)<br>Senior and junior teachers are trained in new contents – Flavour & Fragrance Chemistry and Chemistry of Cosmetic Products - and in new Teaching Methods notably using information technologies. |
| 2) To involve <b>Enterprises</b> of the Food-Processing, Perfumes and Cosmetics Industries in the Master course programme;  | As above  |
| 1.A). Creation of an <b>Introductory Course Package</b> of 26 hours in the 4th year of Chemistry (14 theoretical hours + 12 hours practical work) in order to sensitize the Bachelors' students to the Master related subjects; | Bachelors' Students (year 4)  |
| 1.B). Creation of a <b>Standard Course Package</b> of 60 hours in the Master year 1 (5th year) : 30 theoretical hours + 30 hours practical work;  | Postgraduate Students (years 5 )  |
| 1.C). Creation of a <b>Specialized Course Package</b> of 120 hours in the Master year 2   | Postgraduate Students (years 6 )  |

|   |                                  |
|---|----------------------------------|
| (6th year) : 60 theoretical hours + 60 hours practical work;  |                                  |
| <b>2.A). Organisation of Seminars</b> dedicated to applied topics <b>by Professionals of the Industry</b> | Postgraduate Students (years 6 ) |
| <b>2.B). Organization of Practical placements in enterprises</b>  | Postgraduate Students (years 6 ) |

**Deliverables (Outputs/outcomes)**

| Deliverables | % Accomplished | (Expected) End Date | Beneficiary |
|--------------|----------------|---------------------|-------------|
|              |                |                     |             |
|              |                |                     |             |
|              |                |                     |             |
|              |                |                     |             |

**Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

| Lab/unit/system Entity*                     | Location             |               | List   |   |   |
|---|----------------------|---------------|--|---|---|
| Aroma, Fragrance and cosmetic products lab. | Chemistry department |               | Homogenizer, Viscosimeter, UV lamp, Ultrasonic bath, Stirrer, centrifuge | Glassware, rotatory evaporator, Drying oven, pHmeter, anal. balance | Laptop, printer, volatile oil separator, soxhelets, |
|   |                      |               | Specialized books  | Chemicals   |   |
|   |                      |               |  |   |   |
|   |                      |               |  |   |   |
| Category (T or I)                           | Country              | Outside Party | (Expected) Date  | Duration  | Scope*  |
| T   | FR                   |               | 01-31 May 2005.  | 1 month   | Training  |
| T   | IT                   |               | 01-31 May 2005.  | 1 month   | Training  |
| T   | IT                   |               | 07-11 June 2005  | 5 days  | Second management board meeting                     |
| T   | IT                   |               | 10 September – 10 October 2005   | 1 month   | Training  |
| T   | EG                   |               | 24 Novemver- 01 December 2005  | 10 days   | Information technology                              |
| T   | EG                   |               | 13-22 January 2006   | 10 days   | Teaching  |
|   |                      |               |  |   |   |
|   |                      |               |  |   |   |
| Dissemination                               |                      |               |  | Sustainability  |   |
| Type*                                       | Target Recipients    | Number        | (Expected) Date  | Plan  | (Expected) Date                                     |
|   |                      |               |  |   |   |
|   |                      |               |  |   |   |
|   |                      |               |  |   |   |
|   |                      |               |  |   |   |
|   |                      |               |  |   |   |

## **Project Title:** Upgrading Teaching Quality, Lab Facilities and Capacity Building of the Technical and Secretary Staff of the Geology Department

### **General data**

### **Date:**

|   |   |                           |                                     |                            |
|---|---|---------------------------|-------------------------------------|----------------------------|
| Code: B- 046- Io  | Duration: 24 months   | Start Date:September 2004 | End Date:August 2006                | Budget:663400 L.E.         |
| Project Title:  | Upgrading Teaching Quality, Lab Facilities and Capacity Building of the Technical and Secretary Staff of the Geology Department |                           | Co-finance budget:                  |                            |
| Institution: Faculty of Science   | University: Assiut University   |                           | Partner Institutions:               |                            |
| P.M.: Prof. Dr. Mervat A. Elhaddad  |   | Mobile #: 012/ 230 33 94  | Phone #: 088/ 2411474               | e-mail: mervete@aun.edu.eg |
| Beneficiaries*: Students, technical staff, instructors and Teaching staff                             |   |                           | Other Parties:                      |                            |
| Theme+:   |   |                           | Field: Basic Sciences               |                            |
| Web Site: <a href="http://www.upgradinggeology.aun.edu.eg">http://www.upgradinggeology.aun.edu.eg</a> |   |                           | Specialty: Earth Sciences / Geology |                            |

### **Summary**

The geology graduates at Assiut University are educationally and intellectually weak relative to their international counterparts.

The assistants in labs need permanently professional help from professors without having a dependable on-hand standardized reference. The lecture rooms and labs are old enough without improvement since the establishment of the university at 1957.

The technical and secretary staff are not qualified up to the international standard to do their job efficiently.

The above situation could be solved in our project through four different phases. In the inception phase the renovation of labs and lecture room will take place besides supplying them with the needed equipment .

A computer lab will be installed to enhance the students skills. A workshop will be organized to set-up the initial working procedure. Training programs for the technicians and secretary staff will be done., followed by a training program for the instructors will take place. For **the development of** methodology a questionnaire will be distributed. Then collection of comments will take place. This will lead to the adjustment of the procedures adopted. **The implementation** phase include several activities like the search on the internet of the syllabus of the courses given at one of the international universities like Cambridge or Leeds and enhance our syllabus without touching the course curricula approved by the High Supreme Council of Egyptian Universities. Then the preparation and compilation of material on CDs for all courses will take place. This will be followed by a training program for all department professors and instructors on lectures and lab works presentation using the gained teaching facilities and material.

This upgrading process will lead :

to get a university graduate of international standard ,  
to upgrade the teaching quality ,  
to improve the capacity building of technicians and secretary staff.  
To improve the geology department infrastructure.



**Objectives (State only SMART objectives; Specific, Measurable,**

| Objectives   | Target Group                              |
|--|---|
| 1) Establishing a computer lab supplied with the necessary software and be used at the same time as a multimedia lab                         | - Undergraduate, graduate, teaching staff |
| 2) Training the secretary staff on using computers for better performance  | - Secretary staff                         |
| 3) Training and providing the technicians with computer for monitoring, recording specimens, inventory work, disseminating information, etc. | -Technicians and inventory people         |
| 4) Training the instructors on the manipulation of the software  | - Assisting staff                         |
| 5) Upgrading the syllabus of the courses   | - Undergraduate students                  |
| 6) Preparing courses on CDs  | - Students and teaching staff             |
| 7) Training professors and instructors on presentation skills  | - Teaching staff                          |

**Deliverables (Outputs/outcomes)**

| Deliverables   | % Accomplished             | (Expected) End Date | Beneficiary                         |
|--|----------------------------|---------------------|-------------------------------------|
| Complete archiving system for the geol dept.         | 100%                       |                     | Employees & administration staff    |
| Computer literacy for the working force in the dept. | 100%                       |                     | Employees, students, teaching staff |
| High quality teaching                                | 100%                       |                     | Students and teaching staff         |
| Students of international standard                   | Feedback after three years |                     | Students                            |

**Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

| Lab/unit/system Entity*   | Location  | List   |
|---|---|--|
| Computer lab  | Fifth floor, geol dept.   | Well furnished audio-visual lab with 22 computers supplied with an ADSL service and all taught earth science courses recorded on CDs |
| Seminar room  | Fifth floor, geol. dept   | Well furnished audio-visual seminar room of 40 seats supplied with ADSL service  |
| Four Students lab   | First & Second floor , geol. Dept.                              | Renewed audio-visual labs supplied with ADSL service and data base for all samples and material used in teaching                     |
| - Data base for all available samples and material in the dept. | Labs one, two, three and four, and in the basement of the dept. |  |
| - Renewed room for the dept. secretary                          | Second floor  | Supplied with cupboard, two desks, two computers   |
| - Renewed inventory room  | The Basement of the geol. dept.                                 | Supplied with one computer and data base for all material available in the dept.   |

+Facilities may include, but not limited to, furnished center, LAN, server, green houses, ..., etc.

\*Audio-visual, Computer Lab, Specialized Lab (specify), Training Center, Electronic Lab, Archiving System, Data base, Digital Library, Library, Others (specify).

**Outside Links (Category: T=International travel or I= Invited experts)**

| Category (T or I) | Country | Outside Party | (Expected) Date | Duration | Scope*                                     |
|-------------------|---------|---------------|-----------------|----------|--|
| T                 | U.K.    | Cambridge     | April 2006      | 5 days   | Technical visit and exchange of experience |
| I                 | U.K.    | Cambridge     | July 2006       | 5 days   | Technical visit and exchange of experience |

\*Joint degrees, Collaborative programs, Conference/Workshop/Symposium, Training, Peer review, Technical visit, Exchange of experience, Transfer of technology, Others (specify).

| Dissemination           |                                  |        |                 | Sustainability  |                 |
|-------------------------|----------------------------------|--------|-----------------|---|-----------------|
| Type*                   | Target Recipients                | Number | (Expected) Date | Plan  | (Expected) Date |
| Workshops               | Teaching staff                   | 90     | March 2006      | Website (to be updated annually) for the department activity, facilities and programs available to students | March 2006      |
| Seminars                | Teaching staff                   | 90     | May 2006        |   |                 |
| Brochure and posters    | Teaching staff in the university | 500    | August 2006     |   |                 |
| Different Presentations | Teaching staff                   | 400    |                 |   |                 |

\*Seminar, Brochure, Workshop, Posters, Website, Newsletter, Conference Participation, Presentation, Others (specify)

## **Project Title; Thin Client Technology for Improved Learning of Mathematics (TCTILM)**

### **General data**

### **Date:**

|   |  |                      |   |  |
|---|--|----------------------|---|--|
| Code: D-088-10  | Duration: 24 Months  | Start Date: 16-7-05  | End Date: 15-7-07                       | Budget: \$ 81,000  |
| Project Title:  | Thin Client Technology for Improved Learning of Mathematics (TCTILM) |                      | Co-finance budget: \$ 28,198            |  |
| Institution: Faculty of Science   | University: Assiut University  |                      | Partner Institutions:                   |  |
| P.M.: Prof. Dr. Ahmed A. Allam  |  | Mobile #: 0105279102 | Phone #: 0882411356                     | e-mail: <a href="mailto:a.allam@aun.edu.eg">a.allam@aun.edu.eg</a> |
| Beneficiaries*: Undergraduate student, Faculty members, Assistant staff       |  |                      | Other Parties:                          |  |
| Theme+: Program development, Training   |  |                      | Field: Mathematics and Computer Science |  |
| Web Site: <a href="http://www.math.aun.edu.eg">http://www.math.aun.edu.eg</a> |  |                      | Specialty: courses of Levels 1 and 2    |  |

### **Summary**

- Courses contents enhancement:
  - 1) Implementation of courses specification form.
  - 2) Revision and acceptance of the specification form from the implementation team
  - 3) Reconstruction of the level 1 and 2 courses contents according to international academic standards
- Technology integration:
  1. Building of the project lab, and furnishing it with almost all needed equipments.
  2. Building of the multimedia studio and furnishing it with all needed equipments and software.
  3. Implementation of a training session about the available technologies for courses enhancement to the department's members.

### **Objectives (State only SMART objectives; Specific, Measurable,**

1. Enhancement of the teaching capabilities of Mathematics and Computer Science courses taught to levels one and two.
2. Students should have the necessary technology skills to access information through interdisciplinary learning environment.
3. Professors and tutors should be encouraged to improve basic technology skills.
4. Easy accessibility of knowledge for students with disabilities.
5. Impeding the spread of illegal personal teaching phenomena.

### **Deliverables (Outputs/outcomes)**

- Enhancement of Mathematics and Computer Science courses in the first and second levels according to the academic institutions international standards.
- Simplification of levels one and two Mathematics and Computer Science courses by teaching them in a modern attractive methodology.
- The ability to recycle old PCs and expand our network.
- Increased access to up to date software for department's members and students.
- Skills development for both faculty and students.
- The technology staff will have additional training in web development applications.
- The ability to motivate self learning through a contingency improvement center available to the majority of university's students.
- Professors will be able to access the system to sign up to teach courses as well as record grades.
- The ability to incorporate higher levels courses, departments, and faculties into the TCTILM.

### **Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

| Description     | Server | PC | Photo Copier | Laptop | Administration PC | DVD Camera | Writing Pad | Data Show | Laser Printer | Flash Memory | Network Switch | Air Condition |
|-----------------|--------|----|--------------|--------|-------------------|------------|-------------|-----------|---------------|--------------|----------------|---------------|
| Number of Units | 1      | 32 | 1            | 1      | 2                 | 1          | 2           | 1         | 1             | 2            | 2              | 1             |

**Dissemination**

- 1) Workshops for the mathematics department and faculty members
- 2) Distribution of a brochures to all departments
- 3) Organize webpage, bulletin board, newsletter, or other form of communicating opportunities.

**Sustainability**

- 1) Department acceptance and acknowledgement of the necessity of the project.
- 2) The presence of core staff to carry out the project's mission.
- 3) Investigating the possibility of partnerships with foundations willing to access the project and leverage their funds on a local basis.
- 4) Investigating the possibility of lab accessibility with a minimal hourly fee for students.
- 5) Determine and use the best organizational structure and approach for attracting IT people.
- 6) ID core Mathematics and Computer Science courseware programs.
- 7) ID training partners, TA, and willing professors.

**Integration/Coordination Fields**

- 1) Coordinating efforts with other projects specially the ones interested in course enhancement.
- 2) Integration of our curriculum with other department's curriculum in a credit hour format.

**Project Title:** Development of New Analytical Chemistry Curriculum in Faculties of Science in Upper Egypt (DONAAC)

**General data**

**Date:** 14/3/2006

|   |  |                               |   |  |
|---|--|-------------------------------|---|--|
| <b>Code:</b> C-067-10   | <b>Duration:</b> 18 months   | <b>Start Date:</b> March 2005 | <b>End Date:</b> Aug. 2006  | <b>Budget:</b> 77,000 US\$<br>450, 450 L.E |
| <b>Project Title:</b>   | Development of New Analytical Chemistry Curriculum in Faculties of Science in Upper Egypt (DONACC) |                               | <b>Co-finance budget:</b> 167, 786 L.E (1 <sup>st</sup> and 2 <sup>nd</sup> quarters) + 27, 870 L.E (3 <sup>rd</sup> quarter) |  |
| <b>Institution:</b> Department of Chemistry, Faculty of Science   | <b>University:</b> Assiut University   |                               | <b>Partner Institutions:</b> Department of Chemistry, Faculty of Science, Qena Branch, South Valley University                |  |
| <b>P.M.:</b> Nagwa Thabet Abo El-Maali  |  | <b>Cell #:</b> 0101025080     | <b>Phone #:</b> 088-2332200 ext. 714  | <b>e-mail:</b> nelmaali@yahoo.com          |
| <b>Beneficiaries*:</b> Undergraduate students, Graduate students, Faculty members, Assistant staff, Technicians, Industrial Companies in surrounding area |  |                               | <b>Other Parties:</b> -----   |  |
| <b>Theme+:</b> Curriculum development, New Diploma, Certified Anal. Chem. Lab (ACCL)  |  |                               | <b>Field:</b> Science (Chemistry)   |  |
| <b>Web Site:</b> WWW.DONACC.edu.eg  |  |                               | <b>Specialty:</b> Analytical Chemistry  |  |

**Summary**

**1- Development of a new Anal. Chem. curriculum for undergraduate B.Sc. students**

(chemistry) based on the International Academic standards and some recommendations of the some Industrial Leaderships who attended the workshops. This new courses have been subjected to:

- Peer reviewing (Prof. Stephen Weber, University of Pittsburgh) see attachment.
- An approval from the chemistry Department council (9/10/2005) for teaching the first level (Introductory Quantitative analysis) in semester I(2005-2006).

(Comparison between the current Analytical Chemistry Courses and those developed by our project is Enclosed).

**2- Renewal of the Undergraduate Anal. Chem. Lab (Univ. Co-Finance).**

**Provide the Lab** with two PC's with their attachments and a statistical software (MiniTab) in order that students be able to convert their Analytical data to chemical knowledge and chemicals needed.

**3- New Diploma so called " Environmental Anal. Chem. Diploma "**

The syllabus of this new diploma was constructed with course description and content, Also a disseminating brochure is prepared. This diploma was subjected to the Chem. Dep. Council approval ( 8/1/2006) the Faculty member council approval (15/1/2006) and Finally in 26<sup>th</sup> Feb. 2006, an approval from Assiut University Council.

**4- Updating of the M.Sc program**

As usual after many meetings between some of the project members and other professors from the Chem. Dep. (post-graduate staff members committee), an updating of the M.Sc courses has been done with an approval by the Chem. Dep. Council in 12 March 2006. Teaching the updated courses will be Sep. 2006.

**5- Establishment of a New Analytical Chemistry Certified Lab. (ACCL)**

In the new Annex building, ACCL is in the process of establishment, this includes.

- Preparation of the "Laboratory Quality Assurance Manual" which describes all the documents

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|--|
| and the Lab services ,.....etc.  |
| b- Purchase the Instruments needed for the Lab either from the University Co-Finance (pH-meters, Flame photometer, balance, magnetic stirrer,.... or by the project fund with the Univ. co-finance (capillary Electrophoresis system). |
| c- Furnish the Lab and its annex (Sample Receiving and Information Management Room) either by university co-finance or by the project fund.  |
| d- Employ four persons in the Lab., three technicians and one computer specialist. The technicians have been started training on the QA system in Labs (training has been completed in T3A & Cemex Labs companies).                    |

**Objectives (State only SMART objectives; Specific, Measurable, ...)**

| Objectives  | Target Group                                     |
|---|--|
| I. Preparing the needed updating theoretical and practical Analytical Chemistry courses for undergraduate students and teaching these courses.              | Undergraduate students                           |
| II. Improving the already existing Analytical Chemistry Laboratories in our department to meet the requirements of the Quality Assurance mechanism.         | Students, Technicians                            |
| III. Structuring a new syllabus for the new proposal Diploma so called "Environmental Analytical Chemistry".  | Diploma students                                 |
| IV. Updating the theoretical and practical courses for M.Sc. students.  | M.Sc. Students                                   |
| V. Demonstrating how statistical analysis methods can convert chemical data into chemical knowledge.  | Under and Post-graduate students.                |
| VI. Introducing the principles of quality assurance to provide a working knowledge of the role and importance of quality assurance in Analytical Chemistry. | Staff members, Assistants and technicians.       |
| VII. Establishment of the proposed new laboratory so called "Analytical Chemistry Certified Laboratory" in the chemistry department new Annex building.     | Staff members, students and Industrial Companies |
| VIII. Preparing the students to be qualified for future employment.   | Students   |

**Deliverables (Outputs/outcomes)**

| Deliverables  | % Accomplished | (Expected) End Date | Beneficiary   |
|---|----------------|---------------------|---|
| <b>Output:</b><br>I.A. We'll have the materials needed for teaching the students, the basis and the most recent trends in Analytical Chemistry.   | 100%           | completed           | The introduction of a new analytical chemistry curriculum has been achieved based on International Academic Standards (see attached Peer Reviewing) and the inclusion of a quality assurance needs, QA and QC systems in this curriculum. Therefore, our performance seems to be beneficial, objective and applicable. The necessity of fulfillment of the work is came an urgent educational task of the faculty of science. |
| <b>Outcome</b><br>I.B. Students will have the theoretical and practical aspects of modern methods of chemical analysis; gain experience about the requirements of their environmental society.  | 100%           | 17 Oct. 2005        |   |
| <b>Outcome</b><br>II.A. The environment of the Analytical Chemistry Laboratories will be so good to be able to implement the quality assurance mechanism in the advanced updating Analytical Chemistry practical courses.                 | 100%           | Jan. 2005           | Our Anal. Chem. labs will be too close to the requirements of (QA).   |
| <b>Outcome</b><br>III. A. Students demonstrate a knowledge and broad understanding of the central facts and the experimental basis of modern environmental analytical chemistry. They can be easily employed in environmental management. | 100%           | 26 Feb. 2006        | Students will be able to demonstrate the basis of modern environmental analytical chemistry.  |

|   |                                  |                   |   |
|---|----------------------------------|-------------------|---|
| <b>Outcome</b><br>III.B. Students will demonstrate their practical skills in environmental & chemical techniques.   | Teaching will start by Sep. 2006 | Sep. 2006         | Students have practical skills in environmental & chemical techniques.        |
| <b>Output</b><br>IV.A Preparing Analytical Chemists to meet and solve the requirements of Industry and increase their range of technical and non-technical skills to start successful environmental careers.  | 70%                              | May 2006          | Development of the skills of Analytical Chemists                              |
| <b>Outcome</b><br>V.A. Students will be able to handle, analyze and interpret experimental generated data by statistical analysis methods. Extend the students' proficiency in the use of statistical software to aid the presentation, analysis and interpretation of practical data and prepare reports and quality control charts for their experiments. | 100%                             | Jan. 2006         | The statistical tools are delivered in the theoretical courses of Anal. Chem. |
| <b>Outcome</b><br>VI.A. Students will be able to understand the following items:<br>- roles and importance of (QA),<br>- sampling techniques, sample pre-treatments,<br>- method choice,<br>- making a valid measurement,<br>- using standard reference materials,<br>- reporting their data,<br>- drawing control charts.                                  | 100%                             | Nov. 2005         | We succeeded to introduce the meaning of (QA)                                 |
| <b>Outcome</b><br>VII.A. Students will learn all the methodologies used in chemical analysis with strong emphasis on the separation techniques necessary for chemical analysis.   | 100%                             | completed         | Development of the skills of Analytical Chemists                              |
| <b>Outcome</b><br>VII.B. An income will be gained from the analysis fee in this laboratory, which makes the sustainability of the project high.   | -----                            | Under preparation | the sustainability of the ACCL  |
| <b>Outcome</b><br>VII.C. -Increase the proficiency of the staff members, assistants and technicians in the Analytical Chemistry laboratories.<br>-The skills of students will be so good to meet the requirements of the recent trends in analytical chemistry.   | -----                            | April 2006        | Students and staff have increased their skills                                |

#### Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+

| Lab/unit/system Entity*                           | Location   | List                                       |
|---|--|--|
| Specialized Lab (Analytical Chemistry Lab, ACCL). | Chemistry Department, New Annex Building (B), Third Floor. | Flame Photometer (Co-Finance)              |
|   |  | pH-meters (Co-Finance)                     |
|   |  | Electronic Analytical Balance (Co-Finance) |
|   |  | Magnetic Stirrer (Co-Finance)              |
|   |  | Capillary Electrophoresis Instrument       |
|   |  | MiniTab Statistical Software               |
|   |  | Curtains                                   |
|   |  | PC with attachments                        |
|   |  | Reference Text Books                       |
| Undergraduate Students Lab                        | Chemistry Department, Building (A), Second Floor.          | 2 PC's with their attachments              |
|   |  | MiniTab Statistical Software               |

**Outside Links (Category: T=International travel or I= Invited experts)**

| Category (T or I)                           | Country                                    | Outside Party | Duration                         | Scope  |
|---|--|---------------|----------------------------------|--|
| Stephen G. Weber<br>(Invited Expert, I)     | USA  | -----         | 18-20 November 2005              | Curriculum Peer Review<br>Invited speaker (I) in Workshop (2)  |
| Gustavo Calderon<br>(Invited Consultant, I) | Venezuela,<br>(Assiut<br>Cement,<br>CEMEX) | -----         | 2 <sup>nd</sup> Quarter till now | QM, Lab Quality Assurance System<br>for Analytical chemistry Lab<br>(ACCL) Certification, this includes:<br>documentation, exchange of<br>experience |
| Karel Vytras                                | Czech                                      | -----         | 18-19 Feb. 2006                  | Invited speaker (I) in Workshop (3)  |

**Dissemination**

| Type*  | Target Recipients  | Number | (Expected) Date |
|--|--|--------|-----------------|
| Workshop (1)   | See Web site: <a href="http://WWW.DONACC.edu.eg">WWW.DONACC.edu.eg</a> | 83     | 26/3/05         |
| Brochure of Workshop (1)                                 |  |        |                 |
| CD for Workshop (1)                                      |  |        |                 |
| PM Presentation  |  |        |                 |
| Channel 7  | See Web site: <a href="http://WWW.DONACC.edu.eg">WWW.DONACC.edu.eg</a> |        |                 |
| <a href="http://WWW.DONACC.edu.eg">WWW.DONACC.edu.eg</a> |  |        |                 |
| Diploma Brochure   |  |        |                 |
| Workshop (2)   |  | 114    | 19/11/05        |
| Brochure of Workshop (2)                                 |  |        |                 |
| Workshop (3)   |  | 96     | 18/2/2006       |
| Brochure of Workshop (3)                                 |  |        |                 |

**Sustainability**

| Plan  | (Expected) Date    |
|---|--------------------|
| University co-finance for the ACCL  | For ever           |
| Starting our Faculty for developing the Curricula under University Strategy   | Till establishment |
| The channel already existed between the staff members of our faculty and the University Self Evaluation and Accreditation   | For ever           |
| The Lab& Lecture notebooks for the updated courses  |                    |
| The connection with industrial experts and analysts leads to strengthen the links between development of the theory and practices of the proposed analytical chemistry curriculum |                    |



## **Project Title:**

### **General data**

### **Date:**

|                 |             |             |                       |         |
|-----------------|-------------|-------------|-----------------------|---------|
| Code:           | Duration:   | Start Date: | End Date:             | Budget: |
| Project Title:  |             |             | Co-finance budget:    |         |
| Institution:    | University: |             | Partner Institutions: |         |
| P.M.:           | Mobile #:   | Phone #:    | e-mail:               |         |
| Beneficiaries*: |             |             | Other Parties:        |         |
| Theme+:         |             |             | Field:                |         |
| Web Site:       |             |             | Specialty:            |         |

### **Summary**

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### **Objectives (State only SMART objectives; Specific, Measurable,**

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### **Deliverables (Outputs/outcomes)**

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### **Equipment/Software/Texts/Journal subscription/E-Forums/Facilities+**

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### **Outside Links (Category: T=International travel or I= Invited experts)**

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### **Dissemination**

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### **Sustainability**

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### **Integration/Coordination Fields**

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