

Achievements of the
post-graduate studies
and research sector
Year 2020/2021

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MODIFICATION OF THE POST-GRADUATE REGISTER:

Essential modifications have been made to the Post-graduate register. These modifications were a result of many consultations and discussions with the department coordinators. New Diplomas, which is acquainted with quality and labor market data, will be added and many diplomas, already in the register, will be activated. Some modifications, which would facilitate and simplify the rules governing the study in contravention of the basic rules and regulations of the university, are also made.

DEVELOPMENT AND ELEVATION OF THE CULTURE OF SCIENTIFIC RESEARCH:

After consultations with the college departments, approval of several proposals to raise the cululture of scientific research of the post-graduate students was taken by the college council. These proposals included:

- ❖ The student is obligated to attend at least 70% (a condition of submitting the thesis) of the various scientific activities that are held in the department or college (seminar - workshops - symposiums and scientific conferences - public lectures etc.)
- ❖ The student is obligated to attend two courses of developing the skills of faculty members as a condition for registration in the Masters (Ethics of Scientific Research - Effective Presentation)

and the Ph.D. (How to write a scientific thesis - statistical analysis).

QUALITY AND ACCREDITATION:

Presently, with the assistance of a group of colleagues (Departments' coordinators), and through frequent attendance of quality training courses and workshops, we were able to put the final touches to the postgraduate studies and research standard to be submitted to the Quality Assurance and Accreditation Authority. This standard includes (programs and courses descriptions, research plan strategy, self-evaluation, funding sources, processing course files, ... etc.)

SCIENTIFIC CONFERENCES AND FORUMS:

This year, many conferences, scientific forums and training courses were held, such as:

- ❖ Faculty of Science hosted a symposium within the initiative of the Faculty of Tourism and Hotels "**Know your country... A tour of Egypt's tourist attractions**" October 30 at the headquarters of the Faculty.
- ❖ Faculty of Science hosted Prof. Dr. Mohamed Sami Al-Shall - Professor of Physical Chemistry - Virginia Commonwealth University - in the United States of America, to give a public lecture in the field of energy and water in accordance with Egypt's vision 2030.
- ❖ The faculty holded a competition awarding the Best Applied Research in Faculty of Science for the year 2021-2022 in the College's Conference Hall on April 11, 2021.

- ❖ The Opening of the 15th International Conference on Chemistry and its Role in Development International Conference from 9 to 13 August (Mansoura - Hurghada).
- ❖ The opening of the tenth Young Researchers Forum 2021 on July 27 at the headquarters of the Faculty of Science.
- ❖ The scientific conference of the faculty was held on July 11, in the presence of the dean of the faculty, the vice deans, heads of scientific departments, members of the faculty and their assistants, in order to present the most important achievements of the college in this year, as well as open the door for discussion about the difficulties facing scientific research in the college.
- ❖ A Celebration of the International Day of Medical Physics and its Applications was held on Sunday, November 7, 2021.

THE FIELD OF SCIENTIFIC RESEARCH:

This year, Faculty of Science was able to accomplish many achievements in the scientific research field in Egypt and received many scientific rewards and projects, such as:

- ❖ 6,200 scientific articles have been published, over the course of 2020, in international journals with a high impact factor, which is equivalent to 25% of the total scientific publication of Mansoura University.
- ❖ Appointment of a Dr. Ahmed Ali Hamed Fadda, Rapporteur of the Permanent Scientific Committee for the Promotion of Professors and Assistant Professors in the Supreme Council of Universities in 2020.
- ❖ In August 2021, Stanford University, the largest American university, released a list of the best scientists in the world. The Faculty of Science, Mansoura University, had the largest share

of distinction. 10 scientists from the Faculty of Science were among 25 scientists from Mansoura University ranked among the most influential Egyptian scientists at the world level, and 9 scientists from the Faculty of Sciences were among 23 scientists from Mansoura University were the highest reference impact for the year 2021. It is also worth noting that 5 of the University's scientists Mansoura had been ranked among the top 500 scientists in their field of specialization, two of them among the top 100 in their exact specialization, and they are Prof. Mahmoud Yassin and Prof. Hamdi Agiza, Professors of Mathematics at the Faculty.

The List of the scholars with the highest reference impact for the year 2021 For the Arab Republic of Egypt from Mansoura University - Faculty of Science

Index	Name	Speciality
1	PROF. DR. ABDEL AZIZ FOUDA	Energy
2	PROF. DR. HAMDI EGIZA	Mathematical Physics
3	Prof. Dr. Hamdi Dewiedar	Applied Physics
4	PROF. DR SAMIR BONDOK	Organic Chemistry
5	PROF. DR. SAMIR SAKER	General Mathematics
6	PROF. DR. MOHAMED ESMAIL	Medicinal and Biomolecular Chemistry
7	PROF. DR. AHMED ABDEL GAWAD	Medicinal and Biomolecular Chemistry
8	PROF. DR. OLA ELGAMMAL	Inorganic Chemistry
9	PROF.DR. MOHAMED KAMAL OAU	Pure Mathematics
10	Dr. Osama Moaaz	Applied Mathematics

- ❖ For the second year in a row, 12 scientists at the Faculty, were selected in the list of the top 2% of the most distinguished and influential scientists in the world. It is a classification behind the American Stanford University in the field of biology and molecular biology research, which was recently announced by the ELSEVEIR Foundation.
- ❖ Mansoura University honored seven scientists and researchers who won state awards and incentives and awards for bodies and individuals during the celebration of the 12th science day, which was held in the conference hall of the university as follows:
 - Honoring Prof. Dr. Ahmed Ali Fadda - Professor of Chemistry - Faculty of Science, for obtaining the University Prize for Scientific Creativity.
 - Honoring Prof. Dr. Samir Atwa Saker - Professor of Mathematics - Faculty of Science, for obtaining the State Prize for Excellence in the field of basic sciences.
 - Honoring Prof. Dr. Haitham Al-Atfi, Professor of Geology - Faculty of Science, for obtaining the State Appreciation Award in the field of Geological Sciences.
 - Honoring each of Prof. Dr. / Ahmed Al-Makbati Qadada - Professor of Organic Chemistry - Faculty of Science and Prof. Dr. / Monem Reda Ismail - Assistant Professor of Physics - Faculty of Science, for each of them receiving the University Incentive Award.
 - Honoring Dr. Imam Zakaria Al-Imam - Physics Lecturer - Faculty of Science and Dr. Ashraf Muhammad Tawfiq - Physics Lecturer - Faculty of Science, for each of them receiving the university's award for the best doctoral thesis.
- ❖ Among the achievements made by Faculty of Science in 2021 is obtaining many funding for research projects from various funding organizations as follows:

- This year, the Faculty received several funding for research projects from the Science and Technology Authority (STDF):
 - Prof. Dr. / Awad Ibrahim Ahmed, Professor of Physical Chemistry, obtained a funding of 250000 egyptian pounds for a project in the preparation and study of fuel cells.
 - Dr. Ahmed Fathy Molouk, a lecturer of physical chemistry, obtained a funding of 2 million egyptian pounds for a project in renewable energy.
 - Dr. Amira Labib, a lecturer of organic chemistry, obtained a funding of 2 million egyptian pounds for a project in the preparation of polymers.
 - In March 2021, the assistant/ Muhammad Al-Saeed Abu Rayya Al-Saadi, under the supervision of Prof. Dr./ Wafa Muhammad Shukri, obtained a funding of 179,300 egyptian pounds for a project of the Botany Department entitled “Physiological responses of rice plants to salt stress and humus”.
 - For the first time, the authority is funding a number of graduate students with research projects worth 250000 egyptian pounds, and many master's and doctoral students belonging to the Faculty of Science have obtained this funding under the supervision of many professors and assistant professors in the Faculty.
- Faculty of Science obtained the largest share of the master's and doctoral scholarships offered by Mansoura University and funded by Mansoura University's Research Unit, with 16 research projects out of a total of 60 projects on August 31, 2021.

- Mansoura University announced this year the financing of 13 research projects in all faculties of the university, and Faculty of Science obtained funding for 3 research projects at a value of 300,000 pounds for each project as follows
 - Prof. Dr. Amr Awad Ibrahim - Assistant Professor at the Department of Chemistry, Faculty of Science, obtained funding for a project on the use of solar energy in seawater desalination.
 - Prof. Dr. Al-Adl Jalal Al-Din Al-Adl obtained funding for a project on the commercial production of cyanobacteria.
 - Dr. Ihab Ahmed Al-Refai, a lecturer at the Physics Department at the College of Science, received funding for a project on the manufacture of solar cells.
- Two postgraduate students also received a grant and reward from the Ministry of Social Solidarity within the framework of the program to support outstanding students at the postgraduate level, with a grant of 25000 egyptian pounds and a monthly stipend of 1000 egyptian pounds for a year.
- ❖ Also during this year, in addition to a set of training courses to raise the scientific and applied level for researchers, such as safe handling of experimental animals, safety and security inside laboratories, bees and their medical products, as well as many public and specialized lectures and workshops that took place through the cultural relations and research sectors. Currently, preparations are underway for many specialized training courses such as (Nuclear magnetic resonance course - applications in the field of chromatography-..... etc.

- ❖ Several cooperation protocols are currently being activated in the research field locally, for example (Zewail City for Research and Technology - Academy of Scientific Research and Technology - Schumann Company for Plastic Products - Sugar Company ... etc.) and internationally at the Romanian University of Pechi in the field of physics and renewable energy, which is followed up by Prof. Dr. Mohamed Saleh (Department of Physics) in his capacity as the university's official for international cooperation.
- ❖ Motivating faculty members to publish internationally in international journals with a high impact factor through publishing incentives that are supported by the university administration.
- ❖ Holding workshops in cooperation with officials of international grants programs such as ERASMUS to introduce these grants and how to write a research plan in line with international standards.