In year 2019, we celebrated the ranking of our university “Beni-Suef University” as the 1st Egyptian University, 601-800 world wide and 301-400 in the physical sciences, 101-150 in the young universities as Times Higher Education published. It is also a great pleasure to announce that for the 1st time we are included at Shanghai ranking (901-1000). We are willing to compete next year on advanced positions.

Faculty of Postgraduate studied for advanced sciences (PSAS) is a high-class faculty, a rich research-based education platform that transfers you from multidisciplinary, interdisciplinary to transdisciplinary research in FOUR main departments working cooperatively to achieve the best prototypical education on both regional and international level.

Faculty of Postgraduate Studies for Advanced Sciences (PSAS)

PSAS is distinguished by expert qualified team working together with large number of research facilities in the specified laboratories.
The vision of the faculty is to become a unique scientific school in carrying out researches and advanced studies among universities, local, regional and global institutions. Additionally, to contribute in solving the industrial problems and achieving sustainable development goals tackling EGYPT vision 2030.

It is gratifying to note that the agenda of the conference covers a wide range of very interesting items related to the nanotechnology, biotechnology, environmental sciences and all energy related subjects and especially those directly related to aspects of all multidisciplinary sciences.
We are aware of the tremendous effort made, by all faculty members as organizers and members of the scientific committee from day 1 up till now.

No matter how much we can do by ourselves on the national level, whether it be research or development, it is never enough. In a spirit of true cooperation, we were proud to announce for the second time reviewing and publishing international proceedings in IOP conference series: materials science and engineering. The editorial board of this issue

Prof. M.H.Khedr -Chemistry of nanomaterials
Prof. A.A. Farghali - Nanocatalysis and multifunctional materials

Ass. Prof. S. I. El-Dek - Materials Physics and magnetism

Ass. Prof. Waleed Elrouby - Nanomaterials in Electrochemical applications

Ass. Prof. A. H. Zaki - Water treatment using nanostructures
Dr. Ahmed Gomaa Biomedical use of nanoparticles

Dr. Mohamed Taha Modelling and simulation

Dr. Abdalla Abdelwahab Energy applications of nanomaterials
We must track PSAS as a multi-dimensional concept, encompassing the economic, social, institutional and physical elements of the excellent research educational platform, in a wider sense, it would be relatively easy to affect the necessary adjustments for a truly effective cooperation on the regional and international basis. This is fully consonant with our official position taken and the full support of the concept of internationalization.

This special issue on “Materials sciences and engineering” resulted from the 2019, 5th International conference on advanced sciences ICAS5, held in Hurghada, Egypt on 10-12th November, 2019. This international conference is the 5th one organized by our group at the Faculty of postgraduate studies for advanced sciences brought together academics, scientists, engineers and postgraduate students to exchange and share their knowledge and research results on all aspects of multidisciplinary sciences and to discuss practical challenges and solutions. The topics covered include:
- Materials Science and Nanotechnology
- Biotechnology and life sciences
- Renewable energy science and engineering
- Environmental science and industrial development.

New programs will be opened soon such as Stem cell biology, water and energy for sustainable environment, petrochemicals science

The event was coorganized with Paris Sud University-Paris and Misr International University (MIU) and sponsored by many Egyptian industrial communities and Scientific companies. Following the submission of abstracts to the international conference, 29 extended full papers have been reviewed from 35 categorized in Materials science and nanotechnology session and chosen for inclusion in this special issue. Collectively, these papers have addressed several key issues. I am therefore delighted to present these papers for all readers.