



research update

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Recent Research Grants

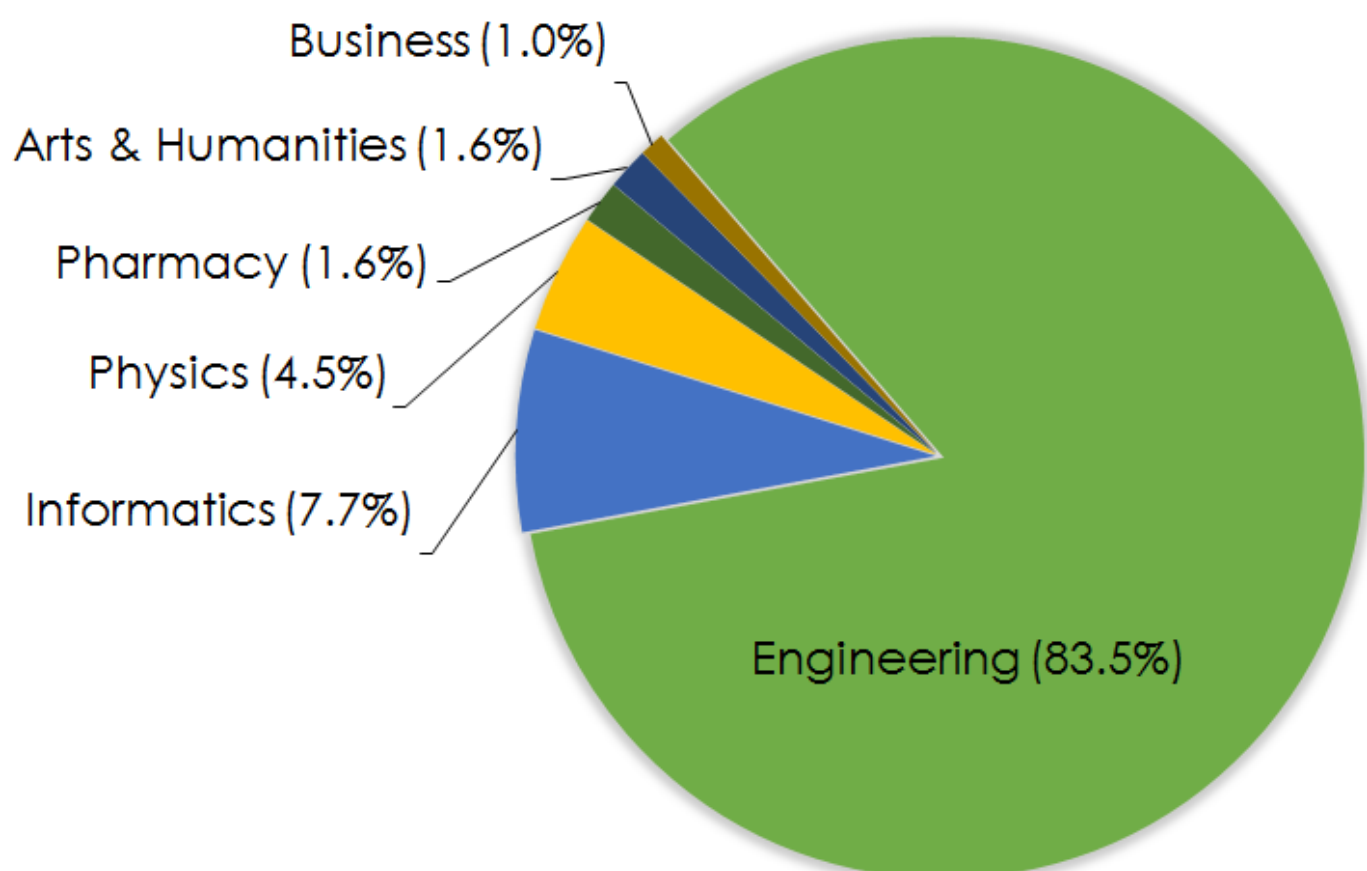
(December 2017)

- Dr. Ashraf Seleym, Engineering • Water Desalination Using Solar-Powered Capacitive Deionization Technology and Abundant Natural Resources • \$200,000 • Science and Technology Development Fund (STDF), US– Egypt Joint Science and Technology Research Collaboration Program.
- Dr. Essam Rashed, Informatics and Computer Science • Three-dimensional Imaging System for Interventional Radiology with Mobile C-arm Scanner • EGP 724,900 • STDF.

47.35 M EGP overall external research funding

4.30 M EGP added in December 2017

140% increase in external funding in 2017





Recent Publications Scopus

(November, December 2017)

1. Abdelatty M.Y., Badr M.M., Swillam M.A. "Hybrid plasmonic electro-optical directional coupler based modulator based on electrically tuning the ITO's properties," Optics InfoBase Conference Papers, Part F66-FiO 2017.
2. Abdel-Khalek A.A. "Chronic Exposure to Water of Lake Qaroun Induced Metal-Related Testicular Damage and Endocrine Disruption in Male Fish," Biological Trace Element Research, pp. 1-8.
3. Abdulhady Y.A.M., El-Shazly M.M., El-Kased R.F. "Evaluation of antibacterial activity and toxic metal removal of chemically synthesized magnetic iron oxide titanium coated nanoparticles and application in bacterial treatment," Journal of Environmental Science and Health, Part A Toxic/Hazardous Substances and Environmental Engineering, pp. 1-8.
4. Abu-Elsoud N.N. "Drug-drug interaction management in internal medicine specialty," Asian Journal of Pharmaceutics, 11, pp. S566-S574.
5. Arafa M.G., Ayoub B.M. "Nano-vesicles of salbutamol sulphate in metered dose inhalers: Formulation, characterization and in vitro evaluation," International Journal of Applied Pharmaceutics, 639, pp. 590-599.
6. Attia Y.M., Tawfiq R.A., Ali A.A., Elmazar M.M. "The FXR Agonist, Obeticholic Acid, Suppresses HCC Proliferation & Metastasis: Role of IL-6/STAT3 Signalling Pathway," Scientific Reports.
7. Ayoub B.M. "Quantitative Analysis of Drugs with Highly Different Concentrations of Pharmaceutical Components Using Spectral Subtraction Techniques," Journal of Applied Spectroscopy, 84, pp.884-887.
8. Badr M.M., Abdelatty M.Y., Swillam M.A. "All-silicon directional coupler electro-optic modulator utilizing transparent conducting oxides," Optics InfoBase Conference Papers, Part F66-FiO 2017.
9. El Hadidi H.H., Kirby D.A. "University–industry collaboration in a factor-driven economy: The perspective of Egyptian industry," Industry and Higher Education, 31, pp. 195-203.
10. El-Werr A., Shebl A., El-Rawy A., Al-Gundor N. "Pre-drill pore pressure prediction using seismic velocities for prospect areas at Beni Suef Oil Field, Western Desert, Egypt," Journal of Petroleum Exploration and Production Technology, 7, pp. 1011-1021.
11. Gomha S.M., El-Idreesy T.T., Mabrouk B.K.A., Sayed A.R. "Synthesis and characterization of new pyrido-thienopyrimidine derivatives incorporating pyrazole moiety," Synthetic Communications, 2, pp. 678-683.
12. Ibrahim A.Y., Ghallab A.O., Gadalla M.A., Makary S.S., Ashour F.H. "Technical and economical/financial feasibility analyses of flared gas recovery in Egypt from oil and gas industry from international/national oil companies' perspectives," Clean Technologies and Environmental Policy, 19, pp. 1423-143.
13. Khalil M., Elsaay H., Othman A. "Talent management: A novel approach for developing innovative solutions towards heritage communities development," Archnet-IJAR, 11, pp. 132-145.
14. Lundgren-Kownacki K., Kjellberg S.M., Gooch P., Dabaieh M., Anandh L., Venugopal V. "Climate change-induced heat risks for migrant populations working at brick kilns in India: a transdisciplinary approach," International Journal of Biometeorology, pp. 1-12.
15. Mohamed M., Farouk M., Elsayed A., Shazly M., Hegazy A.A. "An investigation of friction effect on formability of AA 6061-T4 sheet during cold forming condition," AIP Conference Proceedings, 1896.
16. Mohammad A.M., Al-Akraa I.M., El-Deab M.S "Superior electrocatalysis of formic acid electro-oxidation on a platinum, gold and manganese oxide nanoparticle-based ternary catalyst," International Journal of Hydrogen Energy.
17. Osman A.H., Mansour H., Atef M., Hakam M. "Computer guided sinus floor elevation through lateral window approach with simultaneous implant placement," Clinical Implant Dentistry and Related Research.
18. Rabea S., Salem-Bekhit M.M., Alanazi F.K., Yassin A.S., Moneib N.A., Hashem A.E.M. "A novel protocol for bacterial ghosts' preparation using tween 80," Saudi Pharmaceutical Journal.
19. Salama M.A., Hussein W.B. "An enhanced handwritten signature verification model applied on off-line benchmark data sets," International Journal of Image and Data Fusion, 8, pp. 332-353.
20. Shouman A., Hussin A.E.D., Hamed A., Din M.S.E., Mahmoud N., Baz A.E. "Performance evaluation of a novel dual vane rotary compressor," IOP Conference Series: Materials Science and Engineering, 232.



Recent Publications Scopus (cont.)

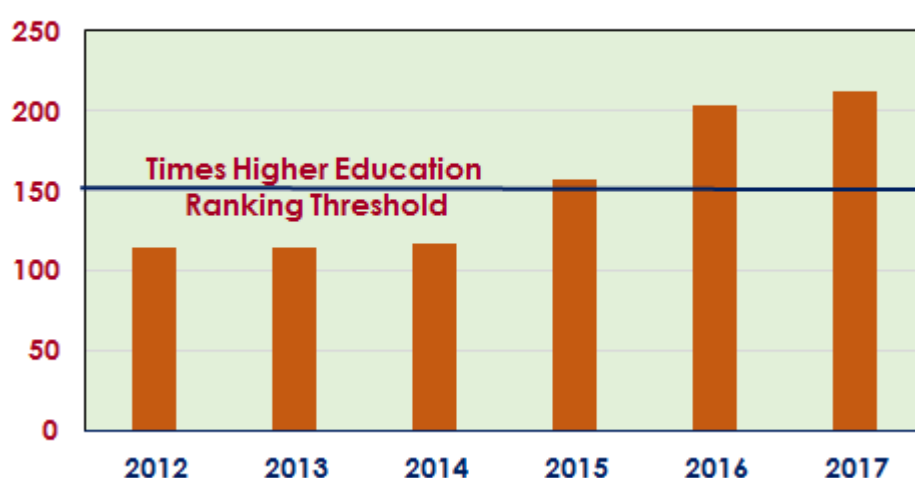
(November, December 2017)

21. Sorour F.H., Abdelmonem N.M., Tewfik S.R., Ashour F.H., Gadalla M.A. "ethylene production economics from optional feedstocks," Hydrocarbon Processing, 2017, pp. 9-14.
22. Urama I.H., Fotouhi H., Abdellatif M.M. "Optimizing RPL Objective Function for Mobile Low-Power Wireless Networks," Proceedings - International Computer Software and Applications Conference, 7.
23. Zaghary W.A., Mowaka S., Hassan M.A., Ayoub B.M. "Suitability of various chromatographic and spectroscopic techniques for analysis and kinetic degradation study of trelagliptin," Scientific Reports, 7.
24. Zaghary W.A., Mowaka S., Hendy M.S. "Comparative liquid chromatographic study for concurrent determination of canagliflozin and metformin in combined tablets," Journal of Analytical Methods in Chemistry.
25. Zaki O.S., Safar M.M., Ain-Shoka A.A., Rashed L.A. "Bone Marrow Mesenchymal Stem Cells Combat Lipopolysaccharide-Induced Sepsis in Rats via Amendment of P38-MAPK Signaling Cascade," Inflammation, pp.1-14.

CMS Collaboration

26. "Search for a light pseudoscalar Higgs boson produced in association with bottom quarks in pp collisions at $\sqrt{s}=8$ TeV," Journal of High Energy Physics, 10.
27. "Search for Higgs boson pair production in the $b\bar{b}\tau\tau$ final state in proton-proton collisions at $\sqrt{s}=8$ TeV," Physical Review D, 96.
28. "Search for leptophobic Z' bosons decaying into four-lepton final states in proton-proton collisions at $\sqrt{s}=8$ TeV," Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 773, pp.563-584.
29. "Measurements of jet charge with dijet events in pp collisions at $\sqrt{s}=8$ TeV," Journal of High Energy Physics, 131.
30. "Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $\sqrt{s}=8$ TeV," Journal of High Energy Physics, 76.
31. "Search for new physics in the monophoton final state in proton-proton collisions at $\sqrt{s}=13$ TeV," Journal of High Energy Physics, 73.
32. "Search for standard model production of four top quarks in proton-proton collisions at $\sqrt{s}=13$ TeV," Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 358.
33. "Search for high-mass $Z\gamma$ resonances in proton-proton collisions at $\sqrt{s}=8$ and 13 TeV using jet substructure techniques," Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 387.
34. "Observation of Top Quark Production in Proton-Nucleus Collisions," Physical Review Letters, 119.
35. "Constraints on anomalous Higgs boson couplings using production and decay information in the four-lepton final state," Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 775, pp. 1-24.
36. "Search for a heavy composite Majorana neutrino in the final state with two leptons and two quarks at $\sqrt{s}=13$ TeV," Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 775, pp. 315-337.
37. "Search for Evidence of the Type-III Seesaw Mechanism in Multilepton Final States in Proton-Proton Collisions at $\sqrt{s}=13$ TeV," Physical Review Letters, 119.

BUE Publications (Scopus)



573 publications in 2015-2017

212 publications in 2017