

Curriculum Vitae (CV)

Said Hussien Mohamed Zoalfakar



Personal Information:

Academic Rank: Associate Professor

Department: Mechanical Engineering

Specialization: Design and Production

Position: Professor (Associate), Mechanical Engineering Department, Higher Technological Institute (HTI), 10th of Ramadan city, Egypt from 7/10/2020 to now.

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Education:

Degree	Discipline	Institution	Year
Ph.D.	Production	Menoufyia University	2014
M.Sc.	Production	Menoufyia University	2009
B.Sc.	Mechanical Engineering	HTI	2005

Academic Experience:

Institution: Higher Technolglcal Institute

Rank: Associate Professor

Dates: 2020 -now

Institution: Higher Technolglcal Institute

Rank: Lecturer

Dates: 2014-2020

Institution: Higher Technological Institute

Rank: Teaching Assistant

Dates: 2012-2014

Institution: Modern University for Technology and Information (MTI)

Rank: Teaching Assistant

Dates: 2007-2012

Institution: Higher Technological Institute

Rank: Demonstrator

Dates: 2005-2007

Research interests:

- Nano Technology and Nano Carbons
- Electro-Spinning and Nano Fibroses Structures
- Powder Metallurgy and Nano Reinforcements
- Polymer Composites and CNTs
- Tribology and wear Characteristics
- Formability and Nano Crystalline
- Friction Stir Welding and Friction Stir Processing

Publications:

1. OSAMA A. Hamed, Abdou A. Hassan, Ahmed R. Eldesouky and **Zoalfakar SH** "Processing-Property Correlation in Friction Stir Aluminum Welds", 9th International Conference on Production Engineering, Design and Control, Held in Alxeandria - Egypt, 10-12 February 2009.
2. OSAMA A. Hamed, Abdou A. Hassan, Ahmed R. Eldesouky and **Zoalfakar SH** "Application of Taguchi and Response Surface Methodologies for Friction Stir Welding Process", 9th International Conference on Production Engineering, Design and Control, Held in Alxeandria-Egypt, 10-12 February 2009.
3. Ali A.A, M.M. Eltabey, A.R. Eldesouky, **Said H. Zoalfakar** "Electrical Conductivity and Dielectric Constant of Hot Pressed MWCNTs/ Carbon Nano Fibril Composite fabrics", workshop on application of advanced materials in industry, 8-9th June 2013,GUC, Egypt.
4. Ali AA, Eldesouky AR, **Zoalfakar SH**, "Mechanical and Tribological Properties of Hot-Pressed Electrospun MWCNTs/Carbon Nano Fibril Composite Fabrics: Potential Applications for Brake Pad and Journal Bearing", 16th Int. AMME Conference, 27-29 May,2014, MS113-126, [Also Int. J. Adv. Manuf. Tech., 74\(2014\):983-993](#)
5. Ashraf A. Ali, M. M. Eltabey, W. M. Farouk, **Said H. Zoalfakar**, "Electrospun precursor carbon nanofibers optimization by using response surface methodology" International workshop Industrial 29-30th march 2013, NAKAA, Egypt. **Also [Journal of Electrostatics](#) 72 (2014) 462- 469.**
6. Ashraf A. Ali, M.M. Eltabey, Badr M. Abdelbary,**Said H. Zoalfakar** "MWCNTs/carbon nano fibril composite papers for fuel cell and super capacitor applications", 16th Int. AMME Conference, 27-29 May, 2014, **Also [Journal of Electrostatics](#) 73 (2015) 12-18.**
7. A. A. Hassan, M. S. EL-Wazery, **S. H. Zoalfakar**, "Health Monitoring of Welded Steel Pipes by Vibration Analysis", 8th International Engineering Conference, Mansoura University, Nov.,2015 . Also, **[IJE TRANSACTIONS C: Aspects, Vol. 28, No. 12, \(December 2015\)](#) 1782-1789.**
8. M. S. EL-Wazery, M. I. EL-Elamy, **S. H. Zoalfakar** "EXPERIMENTAL INVESTIGATION ON THE MECHANICAL BEHAVIOUR OF GLASS FIBER REINFORCED POLYESTER RESIN COMPOSITE", international Conference of Engineering Sciences& Applications, Aswan, Egypt, Jan, 28-31th, 2016.
9. **S. H. Zoalfakar**, Mona. A. Elsissy, Y.B Shaheen, A.A Hamada "Multi-response optimization of post-fire residual properties of fiber reinforced high performance concrete", **J. Mater. Civ. Eng., 2016, 28(10): 04016111. DOI: 10.1061/(ASCE)MT.1943-5533.0001622.**

10. A. A. Megahed, **Said H. Zoalfakar**, Abdalla E. A. Hassan, Ashraf A. Ali “A novel polystyrene/epoxy ultra-fine hybrid fabric by electrospinning” **Polym Adv Technol** **2018; 29:517–527**.
11. Ahmed Abdel Maboud , Nahed A El-Mahallawy and **Said H Zoalfakar** “Parameters optimization of friction stir processed Al 1050 aluminum alloy by response surface methodology (RSM)” **Mater. Res. Express** **6 (2019) 026527**, <https://doi.org/10.1088/2053-1591/aaed7c>.
12. **Said H. Zoalfakar**, Mostafa A. Mohamed, Mohamed A. El-Hamid, Ashraf A. Ali “Electrospun EGNPs reinforced precursor carbon nanofibril composites by using RSM” **Polym Adv Technol**. **2019;30:465–474**. <https://doi.org/10.1002/pat.4504>..
13. Nahed A El-Mahallawy, **Said H Zoalfakar**, and A A Abdel Maboud “Microstructure investigation, mechanical properties and wear behavior of Al 1050/SiC composites fabricated by friction stir processing (FSP)” ,**Materials Research Express** **6 (2019):096522**.
14. Saleh S Abdelhady , Said H **Zoalfakar**, M A Agwa, and Ashraf A Ali “Mechanical and Thermal Characteristics of Optimized Electrospun Nylon 6,6 Nano Fibers by using Taguchi Method” **Nano brief reports and reviews** 2019, Doi: 10.1142/s179329201950139x.
15. Saleh S Abdelhady , **Said H Zoalfakar**, M A Agwa, and Ashraf A Ali “Electrospinning process optimization for Nylon 6,6/Epoxy hybrid nanofibers by using Taguchi method ” **Materials Research Express** **6 (2019), 6: 095314**.
16. **Said H Zoalfakar**, Rehab E. El Badawi “Reliability Prediction of On-board subsystem satellite by Monte Carlo Methodology” April 2019, IOP Conference Series Materials Science and Engineering 610, DOI: 10.1088/1757-899X/610/1/012058
17. Nahed A El-Mahallawy, **Said H Zoalfakar**, and A A Abdel Maboud “Microstructure and mechanical properties of Al/SiC surface composite with different volume fractions using friction stir process” October 2019, IOP Conference Series Materials Science and Engineering 634:012046, DOI: 10.1088/1757-899X/634/1/012046.
18. Mohamad Salem, Hesham Elkhatib, Mohamed Gaheen, **Said Zoalfakar** “Modeling of Passive Safety Thermosyphon Loops Cooling System for Nuclear Applications”, **Arab J. Nucl. Sci. Appl.**, Vol. 52, 3, 25-33 (2019), DOI: 10.21608/ajnsa.2019.3357.1075.

19. Saleh S Abdelhady , Said H **Zoalfakar**, M A Agwa, and Ashraf A Ali , “Treated basalt fibers reinforced nylon 6,6/epoxy hybrid nanofibril composites”, Journal of Thermoplastic Composite Materials 1–15 (2020) DOI: 10.1177/0892705720904102.
20. A.A. Megahed, Mostafa A Mohamed, M. Abdel Hamid and **Said H Zoalfakar** “Microstructure, hardness, and wear properties of AA6061/WC nanocomposite fabricated by friction stir processing” Proc IMechE Part C: J Mechanical Engineering Science 2022, Vol. 0(0) 1–9 © IMechE 2022, DOI: 10.1177/09544062221091904.
21. **Said H. Zoalfakar** , Mostafa A. Mohamed ,M. Abdel Hamid1 and A. A.Megahed1Effect of friction stir processing parameters on producing AA6061/ tungsten carbide nanocomposite” Proc IMechE Part E: J Process Mechanical Engineering 2022, Vol. 236(2) 653–667, © IMechE 2022. DOI: 10.1177/09544089221083558

Certifications or Professional Registrations:

1. 18th Int. Conference on on Aerospace Science& Aviation Technology Military Technical Collage, Cairo, April 9-11, 2019. (Paper Presentation)
2. 17th Int. Conference on on Aerospace Science& Aviation Technology Military Technical Collage, Cairo, April 11-13, 2017. (Paper Presentation)
3. 6th International conference in Nanotechnology, Biotechnology and Spectroscopy, March 24-26, 2017. (Paper Presentaion)
4. The first International Conference on New Trends for Sustainability Energy (ICNTSE) October 1-3, 2016, Pharos University in Alexandria, Egypt. (Paper Persentaion)
5. The international Conference of Engineering Sciences& Applications, Aswan, Egypt, Jan, 28-31th, 2016. (Paper Presentation)
6. 8th International Engineering Conference, Mansoura University, Nov.,2015 (2 Paper Presentation).
7. Workshop on application of advanced materials in industry, 8 -9th June 2013(paper), GUC, Egypt.
8. International workshop Industrial NAKAA 29-30th march 2013, (Paper Presentation), Egypt.
9. 9th International Conference on Production Engineering, Design and Control, Held in Alxeandria-Egypt, 10-12 February 2009. (2 paper presentations)
10. 16th Int. AMME Conference, 27-29 May, 2014, (2 Paper Presentations)

Teaching Experience:

Courses taught

- 1- Mechanical Engineering Design (A)
- 2- Mechanical Engineering Design (B)
- 3- Stress analysis
- 4- Strength of Materials
- 5- Principles of Materials Science and Engineering
- 6- Advanced Material Engineering
- 7- Production Engineering
- 8- Production Technology
- 9- Engineering Drawing
- 10- Mechanics (Static & Dynamics)
- 11- Machine Design Labs
- 12- Workshops Production technology (A &B& Casting)