

Curriculum-Vitae

Osama M. Fakron

Address: 508 Redstone Lane. Apt 102. Blacksburg VA 24060

E-mail: fakron@vt.edu

Phone: 202-213-0609

Education

- PhD Mechanical Engineering. Washington State University. Spring 2014. Thesis: “SEM-Based Electron Tomography of Turfs Comprised of Lineal Structures”.
- MSc Applied Mathematics. Washington State University. Spring 2017. Project: “Mathematical Modeling of 3D Curve Parameterizations”.
- MSc Mechanical Engineering. University of Benghazi, Libya. Spring 2003. Thesis: “Effect of Rapid Solidification on the Microstructure of M2 High Speed Steel and Cast Iron by Laser Melting”.
- BSc Mechanical Engineering. University of Benghazi, Libya. Fall 1997.

Computer skills

- Microsoft office
- Matlab
- Image J
- EM3D
- Chimera

Experimental skills

- Materials tests.
- Heat treatments.
- MEMS fabrications.
- Synthesis and characterization of nanomaterials.
- Carbon Nanotubes Characterizations.

Languages

- Arabic (native speaker)
- English (fluent)

Courses Taught

- Mathematics: Pre-calculus; Calculus I & II.
- Statistics.
- Physics: Solid State Physics, Thermal Physics, and Mechanics.
- Engineering Mechanics: Statics & Dynamics.
- Introduction to Materials Sciences.
- Materials Science Laboratory.
- Engineering Materials.
- Strength of Materials I & II.
- Elements of Machinery I & II
- Machine Design Lab.
- Thermodynamics

Work Experience

- Aug.2018- now: Mathematics Instructor. Virginia Tech
- April.2018-Aug.2018: Statistics Instructor WWCC - Coyote Ridge Corrections Center
- Jan.2018- May.2018 : Adjunct Faculty at Natural Sciences and Mathematics Department LCSC-Lewiston-ID
- Sept.2017-June 2018: Math teaching assistance at SFCC-Pullman –Campus.
- Aug.2017-Dec.2017: Researcher at Composite Materials & Engineering Center Washington State University.
- Jan. 2016 – May.2017: Teaching Assistant, Mathematic and Statistics Dept., Washington State University.
- Sept. 2014 – Dec. 2015: Research/Staff, Mechanical Engineering Dept. University of Benghazi, Libya.
- Aug. 2009 – April 2014: PhD Student, Engineering Dept. School of Mechanical and Materials. Washington State University.
- May 2001 – July 2003: Assistant Researcher, Mechanical Engineering Dept., University of Benghazi, Libya.
- March 1998 – April 2001: Mechanical Engineer, Libyan Post Company , Benghazi, Libya.

Publication

- 1-Benyounis, K. Y., Fakron, O. M., Abboud, J. H., Olabi, A. G. and Hashmi, A. "M. S. Surface Melting of Nodular Cast Iron by Nd-YAG Laser and TIG. Journal of Materials Processing Technology. 170, 127132, <http://dx.doi.org/10.1016/j.jmatprotec.2005.04.108>
- 2-Benyounis, K. Y., Fakron, O. M., and Abboud, J. H. "Rapid Solidification of M2 High-speed Steel by Laser Melting. Materials & Design. 30, 674-678. <http://dx.doi.org/10.1016/j.matdes.2008.05.030>
- 3-Fakron, O. M. and Field, D. "SEM-Based Electron Tomography of Turfs Comprised of Lineal Structures." Microscopy and Microanalysis. 17, 990-991. <http://dx.doi.org/10.1017/S1431927611005824>
- 4-Fakron, O. M. and Field, D. P. "3D Image Reconstruction of Fiber Systems Using Electron Tomography. Ultramicroscopy. 149, 21-25. <http://dx.doi.org/10.1016/j.ultramic.2014.10.012>
- 5-Fakron, O. M. and Field, D. P. "SEM-Based Electron Tomography of Turfs Comprised of Lineal Structures, 1st International Conference on 3D Materials Science." Wiley and Sons. 233-238. <http://dx.doi.org/10.1002/9781118686768.ch36>
- 6-HarryRodin III, Somayeh Nassiri, KarlEnglund, OsamaFakron, HuiLi "Recycled glass fiber reinforced polymer composites incorporated in mortar for improved mechanical performance" Construction and Building Materials Volume 187, 30 October 2018, Pages 738-751. <https://doi.org/10.1016/j.conbuildmat.2018.07.169>
- 7-OthmanAlShareedah, SomayehNassiri, ZhaoChen, KarlEnglund, HuiLi, OsamaFakron "Field Performance Evaluation of Pervious Concrete Pavement Reinforced with Novel Discrete Reinforcement "Case Studies in Construction Materials Volume 10, June 2019, e00231. <https://doi.org/10.1016/j.cscm.2019.e00231>

References:

- 1- Dr. David P. Field, Washington State University Phone: +1(509)-335-3524;
E-mail: dfield@wsu.edu
- 2- Dr. Tom Asaki, Washington State University Phone: 509-335-3135;
Email: tasaki@wsu.edu
- 3- Dr. Muhib Aldin Rahmatalla, Digital School Technical Design College Phone: 780- 414-0200;
Email: muhibr@digitalschool.ca
- 4- Dr. Kevin R. Vixie, Washington State University Phone: 310-740-2835;
Email: vixie@speakeasy.net
- 5- Dr. Sergey Lapin, Washington State University Phone: 509-335-3141;
Email: slapin@math.wsu.edu