

King Fahd University of Petroleum and Minerals Innovation Cluster Bld., Dhahran Techno Valley Company Dhahran 31261, Saudi Arabia Eastern Province Box 15 fkafiah399@gmail.com Phone : 966-13-860-8657 Mobile: 966-54-803-3079 Fax : 966-13-860-2949

Feras M. Kafiah, PhD in Mechanical Engineering (Applied materials & manufacturing), IP Commercialization Consultant at DTVC, Technology Innovator, Co-Founder of ConCure Co. Startup and Co-Founder of Windyship

https://sa.linkedin.com/pub/feras-m-a-kafiah/7b/546/aab

R maps./

https://www.researchgate.net/profile/Feras_Kafiah

Education

Aug 2010 – Dec 2015 King Fahd University of Petroleum & Minerals.

PhD, Mechanical Engineering (Applied Materials and Manufacturing)

Dhahran, Eastern Province, Saudi Arabia

Grade: Excellent

Aug 2004 – Feb 2007 Al-Balqa' Applied University.

MSc, Materials & Metallurgical Engineering

Al-Salt, Jordan Grade: Excellent

Aug 1999 – Feb 2004 Al-Balqa' Applied University.

BSc, Materials & Metallurgical Engineering

Al-Salt, Jordan Grade: Very Good

Summary:

I am passionate about advanced smart materials and systems and its applications in different engineering fields. I like developing any materials. Smart materials and structures are the areas I am working on. I can see myself in one of the biggest research institutes, international companies or organizations that focus on this kind of researches and it can give solutions for markets.

Experience

May 2016 - present IP Commercialization Consultant

King Fahd University of Petroleum and Minerals, Dhahran Techno Valley

Company.

Responsible for the protection and efficient transfer of university discoveries to

the marketplace for the benefit of society.

Jan 2013 - April 2016

Lecturer-B at KFUPM

King Fahd University of Petroleum and Minerals, Department of Mechanical Engineering

I am teaching materials science lab and introduction to ME Design lab and working on my Ph.D. thesis in which we are trying to produce new innovative membrane for desalination water application; this project is in collaboration with MIT in the US. I ran many experiments during my research visit to MIT, and I published my work on them.

Feb 2015 - present

Co-Founder & CTO at ConCure Co.

Dhahran Techno-Valley Co. (DTVC), King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

ConCure is a startup based on an innovative idea (US patent) I came with along with my team. It is simply a blanket used in the construction field to help in the curing process. We won many prizes, locally and within MENA region of ~ 35000 USD prizes money. We secured a 65000 USD as a seed fund to develop the product and increase its TRL (Technology Readiness Level) and be able to make a spin out or license the technology.

Apr 2009 - Jan 2013

QC Coordinator and Senior Materials Engineer at King Faisal University (KFU), King Faisal University, Al Hassa, Saudi Arabia

I was the head of Quality Control Department that take cares many activities related to the construction materials and systems. I was responsible for giving the approval for different parties interested in working with KFU project (It is a mega project (~ 4 Billion USD budget) where we were building a complete educational campus). Materials selection according to the specification and contract was one of our primary daily activities. Site visits to make sure the executed materials are the ones selected. Manufacturer and suppliers visit locally and internationally to ensure that they are producing according to the standards. Preparing monthly reports for the decision makers. Whenever they are new bidding, we are helping in the specification of the project.

Research Experience

May 2014 - Aug 2014

Visiting Researcher

Massachusetts Institute of Technology, Department of Mechanical Engineering Cambridge, United States

Jan 2013 - present

Lecturer-B & PhD Candidate

King Fahd University of Petroleum and Minerals, Department of Mechanical Engineering

Dhahran, Saudi Arabia

Apr 2009 – *Dec* 2012 **Building materials researcher**

King Faisal University, Department of Mechanical Engineering

Al Hasa, Saudi Arabia

Research Statistics

RG Score 6.92

Publications 23

Reads 12.5K

Awards & Grants

Apr 2015 Award: 1st runner up of MIT Enterprise Forum Pan Arab Startups Competition

(Idea Track), prize amount: 10,000 USD, Kuwait.

Mar 2015 Award: 2nd Winner prize in the theme of Innovation at the 6th student

conference held by Ministry of Education in Jeddah on 30/3 to 2/4/2015, prize

amount: 4,800USD.

Mar 2015 Award: 3rd Winner prize in the theme of Entrepreneurship at the 6th student

conference held by Ministry of Education in Jeddah on 30/3 to 2/4/2015, prize

amount is: 4,000USD.

May 2014 Award: 1st Winner prize of the 1st KFUPM concept to prototype competition,

Entrepreneurship Institute (EI), King Fahd University of Petroleum & Minerals,

Dhahran, KSA, prize amount: 1,300 USD

May 2014 Award: 1st Winner prize of the 2nd KFUPM Venture Concept Competition,

Entrepreneurship Institute (EI), King Fahd University of Petroleum & Minerals,

Dhahran, KSA, prize amount: 5,300 USD

Apr 2014 Award: 2nd Winner prize of the Mouse-Trap Boat Competition, Mechanical

Engineer Club, Mechanical Engineering Department, King Fahd University of

Petroleum & Minerals, Dhahran, KSA, prize amount: 1,000 USD

Jan 2005 Scholarship: King Abdalla Bin Al-Hussien Scholarship for Master Degree in

Materials & Metallurgical Engineering

May 2004 Award: Appreciation Certificate, ranked first academically in Materials &

Metallurgical Engineering, Al-Balqa Applied University, Al-Salt, Jordan

Jan 2004 Award: 1st prize in Scientific Excellency Award in Materials & Metallurgical

Engineering, given by Mr. Sami Qamo, 2004, prize amount: 500USD.

Jan 2003 Grant: Academic Excellence Grant, Materials & Metallurgical Engineering, Al-

Balqa Applied University, Al-Salt, Jordan

Jan 2003 Award: Dean's Outstanding Academic Performance list of Students,

Engineering Department, Al-Balqa Applied University, Al-Salt, Jordan

Jan 2002 Grant: Academic Excellence Grant, Materials & Metallurgical Engineering, Al-

Balqa Applied University, Al-Salt, Jordan

Jan 2001 Grant: Academic Excellence Grant, Materials & Metallurgical Engineering, Al-

Balqa Applied University, Al-Salt, Jordan

Jan 2000 Grant: Academic Excellence Grant, Materials & Metallurgical Engineering, Al-

Balqa Applied University, Al-Salt, Jordan

Skills & Activities

Skills Material Characteristics, Mechanical Properties, Material Characterization,

Materials, Advanced Materials, Fiber, Electrospinning, Nanofibers, Polymers, Polymeric Materials, Textile Engineering, Nanomaterials, Smart Fabrics, Polymer Nanoscience, Materials Testing, Conducting Polymers, Nanostructured Materials, Graphene, Concrete, Polymerization, Contact Angle Measurements, Hydrophobicity, Nanomaterials Synthesis, Polymer Engineering, Materials Processing, Thin Films and Nanotechnology, Biodegradable Polymers, Surface Coating, Surface Modification, SEM Analysis, Materials Engineering,

Nanotechnology

Languages Arabic, English

Memberships Jordanian Engineers Association

Interests Smart materials and structures production and applications.

Publication Highlights

Patents

Feras Kafiah, Husam M. Walwil, Mohammad A. Khalil, Fadi M. Abu Samra: *Concrete Curing Blanket*. Ref. No: 14/620,139, Year: 09/2015

Book Chapters

Zafarullah Khan, Feras Kafiah: <u>Preparation of Polysulfone Electrospun Nanofibers: Effect of Electrospinning and Solution Parameters.</u> Membrane Technology for Water and Wastewater Treatment, Energy and Environment, first edited by A.F. Ismail, Takeshi Matsuura, 02/2016: chapter 28; CRC Press, Taylor & Francis Group., ISBN: 9781138029019.

Journal Publications

- Feras Kafiah, Zafarullah Khan, Amed Ibrahim, Muataz Atieh, and T. Laoui, <u>Synthesis of Graphene Based Membranes: Effect of Substrate Surface Properties on Monolayer Graphene Transfer</u>, Materials **10**(1): 86, 01/22/2017.
- F. M. Kafiah, Z. Khan, A. Ibrahim, R. Karnik, M. Atieh, and T. Laoui, <u>Monolayer graphene transfer onto polypropylene and polyvinylidenedifluoride microfiltration membranes for water desalination</u>, Desalination, vol. 388, pp. 29-37, 6/15/2016.
- Zafarulla Khan, Feras Kafiah, Zahid Hafiz, Fayez Shafi, Nufaiei, Ahmed Sarfaraz, Asif Furquan, Matin, Zahid Mr Hafiz, Shafi: <u>Morphology, Mechanical Properties and Surface Characteristics of Electrospun Polyacrylonitrile (PAN) Nanofiber Mats</u>. International Journal of Advanced Engineering and Nano Technology (IJAENT) ISSN: 2347-6389, Volume-2 Issue-3, February 2015.

Conference Proceedings

- Feras M. Kafiah, Husam M. Walwil, Mohammed A. Khalil: *ConCure startup as an innovative case for energy saving*. Middle East Process Engineering Conference & Exhibition, Bahrain International Exhibition & Convention Centre; 09/2015.
- Feras M. Kafiah, Zafarullah Khan, Muataz Ateih, Ahmed Ibrahim, Tahar Laoui: <u>Synthesis of Graphene Membranes: Effect of Membrane Surface Properties on Mono Layer Graphene Transfer</u>. Euromembrane 2015, Aachen, Germany; 09/2015.
- Feras M. Kafiah, Husam M. Walwil, Mohammed A. Khalil, Fadi Mohammed Abu Samra: *Concrete Curing Blankets with Superabsorbent Polymer*. 6th Saudi Student Conference (Distinguished Leading Generation Equipped with Creative Knowledge), Jeddah-Saudi Arabia; 03/2015.
- F. Nufaiei, S. A. Furquan, Z. Khan, H. Z. Shafi, F. Kafiah: (*PAN)/MWCNT Electrospun Nano Fiber Mats: Effect of Concentration on the Mechanical and Surface Properties.* 11th International Conference on Membranes Science and Technology, Kuala Lumpour, Malayesia; 08/2013.
- Z. Khan, Feras Kafiah: <u>Preparation of Polysulfone Electrospun Nanofibers: Effect of Electrospinnng and Solution Parameters</u>. 11th International Conference on Membranes Science and Technology, Kuala Lumpour, Malayesia; 08/2013.
- Feras Kafiah, F. K. Al-Nashash, A. S. El-Abaddi, J. T. Al-Haidary: *Effect of Shot Peening Process on 2024 Aluminum Alloy*. 1st Jordanian International Conference of Materials Science and Engineering, Al-Balqa Applied University, Al-Salt, Jordan; 01/2005.

Courses

Advanced Material Science Smart Materials & Structures Advanced Corrosion Engineering Special Topics in Manufacturing Mechanical properties of Engineering Polymers Construction Materials & Systems Advanced Mechanical Behavior of Materials Quality Engineering Create Entrepreneur Create Technology Entrepreneurship

Recommendations



Zafarullah Khan, Professor, KFUPM, taught Feras M. A. at King Fahd University of Petroleum &Minerals, +966138602963 (W), +966138602949 (Fax) zukhan@kfupm.edu.sa".

"I have known Feras for over 4 years as my PhD student at the Mechanical Engineering Department at King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. Feras is one of the top ranking and high achieving graduate student at KFUPM. During my interaction with Feras over last four years I have found him to be a highly intelligent and hardworking individual who has the drive and dedication to achieve higher goals. He is methodical in approach, meticulous in analysis and motivational in completing his assigned tasks timely. His strongest assets are his ability to quickly grasp scientific concepts, pay attention to details and show exceptional seriousness at his work. He has excellent interpersonal skills which goes in a long way to not only help him work as a team member but also as a team leader.



Dr. Janne Virtapohja, Technology Strategy & Planning / Technology Oversight & Coordination, Saudi Aramco, advised Feras M. A. at ConCure Co startup.

"Mr. Feras Kafiah is a Ph.D. Candidate in the Mechanical Engineering Department of King Fahd University of Petroleum & Minerals (KFUPM). He will defend his Thesis in the coming few months. Feras is a Cofounder and CTO of a start-up company ConCure Co. The product of ConCure is a patented new kind of easy-to-handle blanket to aid in the curing of concrete especially in dry climates. The ConCure Team has received outstanding recognition by winning several competitions in 2014 and 2015 in the Kingdom of Saudi Arabia and in the Middle East in categories such as Concept to Prototype, Venture Concept, Innovation, Entrepreneurship, Start-up, and more. Feras possesses an exceptional business mindset and outstanding technical skills. During my international career of more than two decades, I have never seen a presenter like Feras: He has unmatched presentation skills. Without a doubt, Feras is an intelligent individual, and as a person he is humble and easy to work with. I feel fortunate of the opportunity to having met and having got to know him both in business and on a personal level. I give him my best recommendations, and I am convinced he will fulfill any requirements at a world class level."



Dr. Esam Hesein, Architectural Design Development, Ptoject Management PMI, Leed coordinator, BIM, GIS, King Faisal University, worked directly with Feras M. A. at King Faisal University

"Feras M. A. Is very detailed oriented in Q.C subject, and he establish a good comprehensive Q.C. Matrix in king Faisal university for materials, vendors, and consultants which give a good evaluation tools to help client to monitor ongoing projects. Feras has a good self-trust, height cooperation, commitment with career ethics."



Mohammed Khalil "Albarghothi", Co-Founder & CEO, ConCure Co. startup, worked directly with Feras M. A. at ConCure Co.

"Feras is one of the most thoughtful, knowledgeable and professional people in product development and is one of the "go to" people in the Material Science and Engineering field. His ability to clearly articulate and lead the product development made him an invaluable asset in those cases where a prospect needed to see and believe the vision of where the product was headed. He's got a passion for the design, development and research, and he is one of the distinguished people in his understanding of the issues, his original ideas and his thorough execution. As a product development lead, Feras is a true pillar during the development process. His ability to gather information and make strong business decisions is greatly appreciated. You could always count on Feras for his judgment during the crucial times of a project. Within the company, he is a collaborative team player, and can be relied upon to lead multi-functional projects diligently and to deliver exceptional support and guidance to his technical group and coworkers. Beyond his role, he is ready to provide a helping hand wherever necessary. I am always in awe regarding the creativity and innovation he brings - he has a knack for thinking outside the box and turning vision from paper to reality. It is a pleasure to have him in our team and he is one of the best colleagues I have worked with and I would not hesitate to recommend him very highly for any position."



Husam Walwil, Co-Founder & Chief Innovation Officer, ConCure Co. startup, worked directly with Feras M. A. at ConCure Co startup.

"Feras is a creative person, he is excellent in dealing with the engineering problems and perfect for research and development work. In addition, his efforts and success in his life such as his MSc, PhD and field experience is substantial. Feras is hardworking guy and has a good communication skills."