

# CURRICULUM VITAE

Salah M. Alzghoul, Ph.D.  
Biomedical Engineering  
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## BIOGRAPHICAL INFORMATION

Birth date: February 13, 1985

Birthplace: Zarqa, Jordan

## EDUCATION

- 2013-2016 Louisiana Tech University School of Engineering and Science  
Ph.D. in Biomedical Engineering, GPA (3.91).  
Dissertation advisors: Sandra Zivanovic, Ph.D. (Louisiana Tech University). Long Que, Ph.D. (Iowa State University).
- 2010-2011 University of Bridgeport School of Engineering  
M.S. in Biomedical Engineering.
- 2003-2008 Jordan University of Science and Technology  
B.S. in Biomedical Engineering.

## EMPLOYMENT

- SEP 2016-NOW Lecturer at Biomedical Engineering department, The Hashemite University, Zarqa, Jordan.
- 2013-2016 Graduate Research Assistant, Louisiana Tech University, Institute for Micromanufacturing (IFM), Ruston, LA, USA.
- 2010-2011 Graduate Research Assistant, University of Bridgeport, Bridgeport, CT, USA.
- 2008-2010 Service Engineer, IntermedJo, Amman, Jordan.
- 2007-2008 Undergraduate Internship, Royal medical services, Amman, Jordan.

## HONORS & AWARDS

- Alpha Eta Mu Beta, National Biomedical Engineering Honor Society.
- Graduate Research Assistantship, Louisiana Tech University, Ruston, LA, USA

Full Scholarship, Bachelor's of Engineering, Jordan University of Science and Technology, Irbid, Jordan (2003).

## **TEACHING EXPERIENCE**

2013-2015 Teaching Assistant, Louisiana Tech University:

- Control systems.
- Control systems lab.
- Chemical engineering seminar series.

2010-2011 Teaching Assistant, University of Bridgeport:

- Bioinstrumentation.
- Bioelectronics.
- Bio-MEMS.

## **CERTIFICATIONS**

- Six Sigma Green Belt.
- General Lab Safety.
- Clean room and Research and Instructional Laboratory.
- Ultrasound Devices Service and Maintenance.
- Computer Hardware, Networking and Operating System.

## **SERVICE AND MEMBERSHIPS**

- Member of Alpha Eta Mu Beta, National Biomedical Engineering Honor Society.
- Member of the Biomedical Engineering Society (BMES).

## **MANAGEMENT AND LEADERSHIP**

- Give training to undergraduate seniors on how to immobilize proteins over gold coated substrate.
- Give training to graduate on how to detect prostate cancer by using nanosensors.
- Service engineers team leader.

## **RESEARCH**

- Detecting anthrax by using Fabry-perot interferometer.
- Detecting and screening of the prostate cancer by using nanoporous thin-film sensor.
- TCAD simulation of delta-doped MOSFET with post-low-energy implanting selective epitaxy.
- Single input – multioutput PZT Micropump.
- Design and Simulation of a MEMS Piezoelectric Micropump.
- Ultrasound Air bubble detector.

## PUBLICATIONS

- S. Alzghoul, M. Hailat, S. Zivanovic, L. Que\*, G. Shah\*, "Measurement of serum prostate cancer biomarkers using a nanopore thin film based optofluidic chip," *Biosensors and Bioelectronics*, 77, 491-498 (2015)
- S. Alzghoul, M. Hailat, S. Zivanovic, L. Que\*, G. Shah\*, "Development of nanopore thin film-based optofluidic sensors for measurement of circulating prostate cancer markers," presented at Gordon Research Conference: Cancer Nanotechnology, 2015
- S. Alzghoul, M. Hailat, S. Zivanovic, G. Shah\*, and L. Que\*, "Detection of neuroendocrine marker in blood samples using an optofluidic chip," *Proceeding of Transducers*, pp.1703-1706, 2015

## POSTERS

- S. Alzghoul, M. Hailat, S. Zivanovic, L. Que\*, G. Shah\*, "Detecting of serum prostate cancer biomarkers using an Anodic Aluminum Oxide sensor," *LaTech Grad Research Symposium*, Ruston, LA (2015).
- Salah Alzghoul<sup>1</sup>, Long Que<sup>1, 2</sup>, Mohammad Hailat<sup>3</sup> and Girish V. Shah<sup>3</sup>, "Development of a novel prostate cancer test for mass screening." *LaTech Industrial day*, Shreveport LA (2015).
- Alarbi Elhashmi, Salah Al-Zghoul, Xingguo Xiong, "Design and Simulation of a MEMS Piezoelectric Micropump", The American Society for Engineering Education Northeast Section Conference, 2011, Hartford, CT.