

## **DR. Belal Al Zaitone**

*Assistant Professor, Chemical and Material Engineering Dept., King Abdulaziz University*

### **Education**

<i>Degree</i>	<i>Field of Study</i>	<i>Institution</i>	<i>Year</i>
PhD	Chemical Engineering	TU Darmstadt, Germany	2009
MS	Chemical Engineering	Erlangen-Nurnberg University, Germany	2005
BS	Chemical Engineering	Jordan University, Jordan	2002

### **Academic Experience**

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title (Chair, Coordinator, etc.)</i>	<i>Full or Part Time</i>
03/2013	Present	King Abdulaziz University, KSA.	Assistant Prof.		Full Time
4/2010	3/2013	University of Bonn, Germany	Post Doc.		Full Time
5/2009	3/2010	TU Darmstadt, Germany	Post Doc		Full Time

### **Non Academic Industrial Experience** (including Consultations)

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position Description (Brief)</i>	<i>Full or Part Time</i>
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### **Funded Research Projects and Patents from the Past Five Years**

1. May 2011- March 2013, Freeze Drying of complex solutions, German Research Foundation (DFG) grant for postdoctoral research, project no. SPP1423, Laboratory of Pharmaceutical Technology and Biopharmaceutics, University of Bonn
2. "Formulation of drug loaded nanoparticles in Acoustophoresis apparatus", King Abdulaziz University, (PI), RG- 438-135-246
3. "Formulation and characterization of single droplet emulsion via micro-dispensing device in Ultrasonic levitator for lab on chip applications", King Abdulaziz University, RG-1437-135-529, (PI).
4. "Drying Kinetics of Complex Fluids in Single Droplet Dryer (SDD)", King Abdulaziz University, RG 4-135-36, (PI).

### **Certifications and Professional Registrations**

### **Current Membership in Professional Societies and Organizations**

<i>Society/organization</i>	<i>Rank</i>	<i>Member Since</i>
1.		
2.		
3.		
4.		
5.		

### **Honours and Awards**

1. Bayern Government Grant for International Graduate Students. Institute of Particle Technology, Friedrich-Alexander University, Erlangen, Germany. 2005
2. Best Poster Award for young researchers, 16th International Drying Symposium, Hyderabad – India. September 2008.
- 3.

### **Institutional and Professional Services** (*administration, committees, units, etc.*)

1. Member of Graduate Studies Unit, Faculty of Engineering.
2. Coordinator of Research and Graduate Studies Committee, Chemical Engineering Department.
3. Member of ABET Committee, Chemical Engineering Department.

### **Principal Publications/Presentations from the Past Five Years**

1. B. Zaitone and Alf Lamprecht, Drying step Characterization on a single droplet for microsphere preparation, *Journal of Colloids and Surfaces B: Biointerfaces*, (2013)
2. B. Zaitone, C. Tropea. Evaporation of pure liquid droplets: comparison of droplet evaporation in an acoustic field versus glass-filament, *Chemical Engineering Science*, 66, 3914–3921, 2011.
3. Rosa Mondragon, Leonor Hernandez, J. Enrique Julia, Juan Carlos Jarque, Sergio Chiva, B. Zaitone and Cameron Tropea. Study of the drying behavior of high load multiphase droplets in an acoustic levitator at high temperature conditions, *Chemical Engineering Science*, 66, 2734–2744, 2011.
4. B. Zaitone, H.-J. Schmid and W. Peukert, Simulation of structure and mobility of aggregates formed by simultaneous coagulation, sintering and surface growth, *Journal of Aerosol Science*, Vol. 40(11), pp 950-964, 2009.
5. Schmid, H. J., B. Zaitone, Artelt, C., Peukert, W. Evolution of the Fractal Dimension for Simultaneous Coagulation and Sintering, *Chemical Engineering Science*, Vol. 61, 293 – 305, 2006.
6. B. Zaitone , J. T. McConville, A. Lamprecht , Acoustic Levitation to Simulate Rifampicin Spray Drying Kinetics. American Association of Pharmaceutical Scientists 15 Oct. 2012, Chicago, USA.
7. B. Zaitone and Alf Lamprecht, Drying of primary emulsion droplets in an Ultrasonic levitator, 8th World Meeting on Pharmaceuticals, Biopharmaceutics and Pharmaceutical Technology. Istanbul. March 19-22, 2012
8. B. Zaitone and Alf Lamprecht, Drying of PLGA single droplet in an Ultrasonic levitator, The 38th Annual Meeting & Exposition of the Controlled Release Society, Maryland, U.S.A. July 30-August 3, 2011.
9. B. Zaitone, V. Doan, I. V. Roisman and C. Tropea. Chaotic disintegration of suspension spray by a cross air flow, ILASS-Europe, Brno, Czech Republic, September 2010.
10. B. Zaitone, Frakowiak, B., Tropea, C. Drying of multiphase single droplet: two dimensional approach, 16th International Drying Symposium, Hyderabad – India. September 2008.

### **Recent Professional Development Activities** (*Workshops, training, etc.*)

- 1.
- 2.
- 3.

