



Ali Mango Award for Distinguish Researcher

Dr. Nouf Mahmoud

Dr. Nouf Mahmoud has received her PhD in Pharmaceutical Sciences from the University of Jordan in 2016. Her doctoral dissertation, "Penetration and Distribution of Gold Nano particles into Skin: Effect of Nano particle Size, Shape and Surface Chemistry on Hair Follicles Targeting and Antibacterial Activity" focuses on the design of gold nano particles of different shapes and chemical properties as an innovative treatment for skin diseases, such as acne and skin infections. The penetration of gold nano particles of different shapes and chemical properties into human skin and their ability to accumulate into certain layers of skin were investigated. Also, gold nano rods were designed to be preferentially accumulated into hair follicles in order to increase the effectiveness of targeting different skin diseases and minimizing potential side effects. Furthermore, the unique photo thermal-based antibacterial activity of gold nano rods were investigated to target bacteria that cause skin infections such as acne. The scientific findings obtained from the doctoral thesis project were published in five research papers in high impact international scientific journals.

Dr. Nouf is currently an Assistant Professor of Pharmaceutics at the Faculty of Pharmacy, Al-Zaytoonah University of Jordan. Her current research focuses on the development of innovative nanoscale systems for the treatment of wounds and skin infections as well as for targeting breast and brain cancers. Also, she is working on utilizing Synchrotron light technology in studying the interaction of nano particles with different biological barriers and their toxicity. To date, Dr. Nouf has received six different local and international grants to fund her current research, as well as two grants for the use of Synchrotron light in UK and Germany.