

JAMES L. WINKLE COLLEGE OF PHARMACY
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SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: 03/01/2018

PROJECT TITLE: Investigating mechanism of action of Antiperspirants/Deodorants

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Project Description

For the last ~110 years, Aluminum salts have been the World Best-in-Class technology for Antiperspirant/Deodorant (APDO) performance. Today, there is not an absolute clear picture on overall mechanism of action and this work will probe key components of the existing Antiperspirants literature reported mode of action.

In this project, we will aim to better understand role of Active particle size in dry and hydrated form (e.g. geometric radius, hydrodynamic radius, radius of gyration, Equivalent Spherical Diameter, other) and Active hydration rate on overall Antiperspirant performance. For current Antiperspirant products on shelf, we do not fully understand this relationship nor its impact on overall performance. The student will work closely with the PI from UC and will interact with scientists from P&G which will provide them exposure to industrial collaborations. The students is expected to have interest in cosmetic science, physics and/or chemistry.