

# DANIEL C. ROSENBALM, PH.D., P.E.

## Geotechnical Services Manager

5861 SOUTH KYRENE RD. #5  
TEMPE, ARIZONA 85283  
DCROSENBALM@SAECOSAFE.COM  
(480) 659-4101

Dr. Rosenbalm is the Geotechnical Services Manager for the Tempe office of Smith and Annala Engineering Company (SAECO). Dr. Rosenbalm has over 8 years of experience in the Geotechnical Engineering, Construction Materials Engineering & Testing, and Forensic Engineering fields. Dr. Rosenbalm has expertise in conducting geotechnical and forensic investigations and analyses, preparing geotechnical and forensic engineering reports, providing technical support to design engineers, owners, and construction personnel.

Dr. Rosenbalm's role at SAECO involves client development, engineering oversight, employee development, and strategic planning for the firm to achieve its vision to become a multi-state, multi-office operation.

Dr. Rosenbalm has served as a Senior Project Manager for a wide range of Geotechnical Engineering projects including: roadways, bridges, slope stability, temporary shoring, commercial developments, underground utilities, retention structures, and solar shade structures. In addition to pre-construction Geotechnical Engineering services, Dr. Rosenbalm has provided post design construction services for wide range of Geotechnical Engineering projects including: earth fissure evaluations, roadway intersection improvements, concrete parking structures, and tunnel evaluations. Dr. Rosenbalm has also provided foundation inspections for earthen structures and has been involved in the designs of various types of reinforced earth structures.

Dr. Rosenbalm previously has served as a Senior Staff Engineer and a Laboratory Technician for a wide range of Geotechnical Engineering and Construction Materials Engineering & Testing projects. The Geotechnical Engineering projects included: providing technical support to engineers and performing geologic reconnaissance, project background reviews, pavement evaluations, earth fissure evaluations, and field explorations. His Construction Materials Engineering & Testing projects included: creating job completion reports, evaluating field densities for pad certifications, and laboratory testing of soils & aggregate, concrete, and asphalt.

Dr. Rosenbalm received his PhD from Arizona State University Majoring in Geotechnical Engineering with a Minor in Transportation Engineering Materials. His doctorate dissertation analyzed the swell/shrinkage characteristics of compacted expansive soils subjected to multiple wetting and drying cycles. The dissertation study also presented how various token loads, moisture contents, and densities from accepted testing protocols produce varying results that could be problematic for engineering use.

Dr. Rosenbalm was selected to become a faculty associate of the Ira A. Fulton School of Engineering at Arizona State University in 2014. Since then he has taught Foundation Design (CEE 452) to more than 100 future engineering professionals. In addition, Dr. Rosenbalm was selected to become a faculty associate of the Del E. Webb School of Construction at Arizona State University in 2015 teaching Construction Materials Testing 310 (CON 310) and taught more than 250 future construction managers/construction engineers.

### EDUCATION

Ph.D., Geotechnical Engineering, 2013,  
Arizona State University

M.S., Geotechnical Engineering, 2011,  
Arizona State University

B.S., Civil, and Environmental Engineering,  
2009, Arizona State University

### PROFESSIONAL REGISTRATION

Professional Engineer, Civil  
Arizona, No. 60051

### EXPERTISE

Geotechnical Exploration Studies, Seismic Refraction Methods, Shallow Foundations, Deep Foundations, Temporary Shoring, Slope Stability, Flood Control Structures, Retaining Walls, Roadways, Pipelines, Forensic Evaluations, Underpinning, and Geotechnical Laboratory Testing

### CURRENT PROFESSIONAL AFFILIATIONS

Association of Engineering Geologists (AEG),  
American Society of Civil Engineers (ASCE),  
Geo-Institute (Secretary)  
American Society of Civil Engineers (ASCE),  
Construction Institute

