



March 5, 2015

Dear ACI-MO Chapter Student Activities Committee:

It is my pleasure to provide a letter of recommendation in support Ms. Samantha Wermager for the Honorary Abdeldjelil "DJ" Belarbi Graduate Scholarship Award. I have known Samantha since she first contacted me in March 2014 regarding her interest in the Civil Engineering graduate program at Missouri S&T. Although I had not had the opportunity to work with Samantha before that time, she came highly recommended to me by several colleagues in my department. I met with her to discuss research opportunities and found her to be articulate, intelligent, and extremely motivated. I also learned that Samantha had previous research experience as an undergraduate student, and she even coauthored a journal manuscript and delivered formal presentations on this research. Based the strong support of my colleagues, as well as her qualities and aptitude as a graduate student, I agreed to serve as her graduate advisor.

As you can see from her transcript, Samantha's academic record at Missouri S&T has been outstanding. She completed her BSCE degree in May 2014 (with a Minor in Sustainability), and she graduated with a GPA of 3.949 (4.0). I would also like to point out that she maintained her excellent academic record while participating in the Missouri S&T athletic program (track) during those four years. Her current GPA as a graduate student is 4.0. I recently had the opportunity to observe her scholastic abilities first hand when I served as her instructor for the course CE 5220, *Advanced Concrete Structures Design*, in which she earned one of the highest grades in the class.

Samantha is currently working on a research project that is funded by the Precast/Prestressed Concrete Institute (PCI) and the ACI Concrete Research Council (CRC) on direct shear transfer of lightweight aggregate concrete, which will also be the focus of her master's thesis. This study is a follow-on study to the work conducted by my former graduate student, Mr. Dane Shaw. The topic of the research is shear friction of lightweight aggregate concretes, which has important design implications for the concrete industry, and the follow-on project will extend the parameters of the previous study to include different lightweight aggregate types, reinforcement ratios, and interface conditions. Accordingly, the project involves both experimental and analytical components. Because of the extensive amount of experimental work required, the research group includes two graduate students (Samantha and Mr. Kristian Krc) and one undergraduate student (Mr. Nikkolas Edgmond). Samantha has taken the lead in coordinating the lab work, scheduling the entire experimental program, coordinating the undergraduate assistant's time, and corresponding with the project sponsors. She has exhibited excellent leadership and teamwork skills, and I believe she will be a leader in the industry one day. She has already taken on the lead of the ASCE student chapter as President this semester, and has previously served as President of the Missouri S&T M-Club (varsity athletic service organization).

Finally, Samantha has expressed a strong desire to pursue a career in structural engineering, with emphasis in structural concrete design. Her structural engineering work experience includes an internship with Genesis Structures (Kansas City, MO) and a co-op with Abeinsa Business Development (Chesterfield, MO). I hope you agree that Samantha's solid educational background, technical capabilities, and desire to pursue a career in the field make her an excellent candidate for the Honorary Abdeldjelil "DJ" Belarbi Graduate Scholarship Award. If you have any questions, please feel free to contact me. Thank-you for your consideration.

Sincerely,

Dr. Lesley H. Sneed, P.E.

Associate Professor, Civil Engineering