Dr. Adam Nolte Department of Chemical Engineering Rose-Hulman Institute of Technology 5500 Wabash Ave. Terre Haute, IN 47803

October 29, 2014

Dear Dr. Nolte,

I am writing to apply for the open rank/tenure-track faculty of Chemical Engineering position. I am currently working towards a Ph.D. in Chemical Engineering with and the second second

As indicated in my curriculum vitae, I have been involved in the teaching of at least one course (either as a teaching assistant or as an instructor) each semester throughout the duration of my Master's and Ph.D. study. These courses have predominantly been laboratory based, focusing on students' ability to communicate their findings through writing or technical presentations. I have assisted in the development of many of these courses as well; I contributed to the development of a quantitative rubric for the senior laboratory course to assist with ABET accreditation and I have helped transform the lecture-based first-year engineering course into a project-based, hands-on design course. I feel these experiences are highly relevant to the attributes described in the job posting on AcademicKeys.com. However, my largest contribution to the curriculum at was the development of a completely game-based grading

structure for the senior laboratory course, designed to encourage students to engage in the laboratory, rather than just passively participate in experiments. For my service to the senior laboratory course, the students selected me for the AIChE Student Chapter Teaching Assistant of the Year Award for three years in a row.

- Specific results!

My experiences in the capstone laboratory course since I started graduate school have exposed me to so many more facets of chemical engineering than I would have seen only working in one research laboratory for the duration of my Ph.D. As part of an effort to update the laboratory curriculum, experiments were developed that highlighted faculty research at

I worked with other graduate students and their faculty mentors to develop experiments based on principles of bioreactor kinetics and microfluidics. I have also helped develop experiments based on principles of chemical vapor deposition, computer-aided design, and additive manufacturing. In general, it has been my goal to show the breadth of chemical engineering as a field through the experiments presented in the laboratory class at

I look forward to working in new environments with new faculty, in both chemical engineering and related fields, in hopes of developing collaborative projects and undergraduate experiments.



Shows breadth of candidacy!

ChemE skill dumpmatches job posting General statement of philosophy

Finally, I am committed to enriching the lives of students both in and out of the classroom. I have been active in many student organizations with an emphasis on service to the undergraduate and graduate student body. Furthermore, I have developed my mentoring skills by overseeing several undergraduate research projects and three capstone design projects, which will allow me to make a positive impact on the choices my students make in their development. I am also committed to improving the quality of engineering education, and I am eager to try out emerging, learner-focused teaching methods, such as online course development and flipped classrooms.

Why candidate matches posting! I feel as if my skill set, research, and teaching interests are a perfect fit for a small, undergraduate-focused school like Rose-Hulman. My teaching priorities in graduate school have focused on improving the quality of education for undergraduates and interacting with students on a personal level. Though my teaching experience thus far has been at a large university, I have always enjoyed teaching the laboratory class because I was able to interact with the students in much smaller groups and build rapport with them on an individual basis. Furthermore, I seek an environment where the quality education of undergraduates is the primary focus. I am excited by the opportunities and experiences that a teaching environment like Rose-Hulman provides.

I have submitted my curriculum vitae, a statement of my teaching philosophy and interests, a short statement of possible research areas, and contact information for my three references **areas**. If you need any other information from me, such as

syllabi from past and present courses I have taught, copies of recently submitted journal articles, or other additional materials, I would be happy to provide them at your request. I look forward to hearing from your committee, and I would like to wish you the best of luck in your search for the best candidate for this position.

Thank you for your consideration,

Starts a conversation!

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