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Sunil K. Saxena
Professor and Chair

March 25, 2021

Dear dB-SERC Award Committee,

I am writing as Chair of the Department of Chemistry at the University of Pittsburgh to support Prof. Sean Garrett-Roe and the team of co-instructors (Madison and Meyer) for their application for a dB-SERC Course Transformation Award. Sean joined our Department in August 2011 as an Assistant Professor, and the University has committed extensive resources to the establishment of Sean's research and teaching. In 2017, Sean was promoted to Associate Professor.

Since arriving in Pittsburgh, Sean has proven himself to be an outstanding instructor, earning the Chancellor's Distinguished Teaching Award in 2017. In the last few years, Sean has dedicated significant effort to bringing active learning to the General Chemistry program. Sean was a leader of a Course Incubator Grant from the Provost to modify CHEM 0110 General Chemistry, our largest service course, to use more active learning techniques.

The educational goals expressed in Sean's dB-SERC proposal are to restructure the grading scheme of CHEM 0110 using principles of mastery-based grading. The team will align assessments to clearly articulated student learning objectives. Each learning objective will have multiple levels of conceptual difficulty ranging – recall, comprehension, analysis, and use. Students will have multiple attempts, typically about three, at each assessment. The plan will not require additional grading resources. The dB-SERC award will allow him to *bring student-centered approaches to assessment* of learning and measure how effective this course transformation is.

I find his plans to revamp the grading scheme of CHEM 0110 General Chemistry 1 to be exciting, well considered, and feasible. I give him my full support.

Sincerely yours,

A handwritten signature in black ink, appearing to be "S. Saxena", written over a vertical line.

Sunil K. Saxena
Professor and Chair