I. Title: A Faculty Cluster in Chemistry and Physics to Amplify Excellence in Energy and Sustainable Materials

II. Abstract:

The Center for Sustainable Materials Chemistry (CSMC) is a nationally demonstrated area of excellence housed at the UO. The Center is currently a $20M project and is slated for Phase III renewal by the National Science Foundation in 2015. The proposed cluster hires will cement the UO as a top-five program in sustainable and energy materials and provide essential institutional match for the renewal proposal. Further, societal needs in energy and sustainability will drive research and funding trends over the foreseeable future. Addressing challenges in these important, high-impact areas requires collaboration between basic and applied scientists spanning disciplines, and strong connections to industry. We propose hiring three faculty members targeted to fill critical capability gaps and thus catalyze significant and sustained research growth. The UO will further establish itself as an international leader in energy and sustainable materials, enabling high-impact research and education that will transform society globally and invigorate regional economic development through CSMC’s use-inspired research and student-centered innovation program.

III. Proposing Faculty

Name: S. Boettcher, DW Johnson, DC Johnson, J. Hutchison, R. Taylor, M. Deutsch

Departments: Physics and Chemistry & Biochemistry

Cluster Coordinator: Jim Hutchison

Department: Chemistry & Biochemistry

IV. College/Units Involved

Dean(s): Dana Johnston (CAS Associate Dean for Natural Science) Andrew Marcus (CAS Dean, Lead)

Department(s):
Chemistry & Biochemistry (Lead) Physics
Materials Science Institute

V. Number and Level of each New Position Proposed:

We propose three new positions for the cluster, one at up to the full professor level, one at up to the associate level, and one at the assistant level. Two of the three positions will be joint-appointed between chemistry and physics. We also propose that all positions have a partial appointment (10-40%) in “Interdisciplinary Applied Science” to seed a major effort in applied science. The areas are defined as: (1) thin film devices, (2) computational materials, and (3) inorganic Materials synthesis.

Working with Cluster of Excellence proposers and participating deans, central administration will refine specific hiring plans based on available facilities, funding and institutional support structures.