NIELS GRONBECH-JENSEN, CHAIR  
College of Engineering Faculty Executive Committee  
Mechanical and Aerospace Engineering  

RE: Reconstitution Proposal: Department of Chemical Engineering and Materials Science  

The Department of Chemical Engineering and Materials Science Reconstitution proposal was forwarded to all Davis Division of the Academic Senate standing committees and Faculty Executive Committees from the schools and colleges. Responses were received from the Committee on Planning & Budget (CPB), Committee on Academic Personnel-Oversight Subcommittee (CAP), Graduate Council (GC), and Undergraduate Council (UGC).  

The Academic Senate appreciates the desire of the Chemical Engineering and Materials Science faculty to proceed with department bifurcation, as expressed by their near-unanimous supporting vote. Nevertheless, several points of concern arose from the committee responses, which should be carefully considered:  

- Undergraduate Education:  
  o As noted by the College of Engineering Faculty Executive Committee, the long-term viability of a department that lacks a vigorous undergraduate program is debatable.  
  o The proposal did not provide a plan to insure a standalone Materials Science Department can reach sustainable levels of undergraduate teaching under the new budget model. Again, such a plan should be established before campus approval of the reconstitution proposal.  
  o In the short-term, it may be beneficial for Materials Science to look for departments in which there is opportunity for shared teaching loads (e.g., the arrangement Plant Sciences has with the College of Biological Sciences). A two or three year plan for achieving a teaching load comparable to the rest of the college should be provided before the plan is approved.  
  o Within the last several years, the inability to establish an undergraduate critical mass has been cited as a reason to disestablish a department in College of Engineering.  

- Graduate Education: Clarification is needed before the reconstitution moves forward concerning separate bylaws, and if a formal graduate program vote was taken, specifically:  
  o It is not clear if the graduate program membership list matches the list of department faculty, and if not, given that members outside of the existing department can hold membership in graduate program, did the graduate program accomplish a formal vote regarding reconstitution?  
  o Graduate Council endorsed the last set of Chemical Engineering and Materials Science bylaws. The approved bylaws mention two programs, including the bylaw title, however, remaining bylaw language seems to describe a single combined program. The complexity here, in terms of faculty governance, is there are two separate degrees offered, but one combined graduate program. Although not difficult, should reconstitution occur, separate bylaws must be created for each reconstituted graduate program.  
  o Additionally, the smaller undergraduate student numbers in the Materials Science Department will require a concerted effort to assure that TA support for graduate students continues to be available in the Chemical Engineering and other departments if reconstitution proceeds. The proposal lacks evidence that this important issue was considered.
• There are examples of viable campus programs being discontinued following implementation of departmental structure changes that lacked thorough academic planning.

• The new dean (not an interim dean) should have an opportunity to comment on the plan prior to campus approval.

Reluctantly, the Academic Senate does not approve the reconstitution proposal as presented based on the reasons articulated above.

Sincerely,

André Knoesen, Chair
Davis Division of the Academic Senate
Professor: Electrical and Computer Engineering

Enclosure

C: Provost/Executive Vice Chancellor Hexter (w/enclosure)
   Dean Lavernia (w/enclosure)
   Vice Provost/Dean Thomas (w/enclosure)
   Co-Department Chairs Faller and Risbud (w/enclosure)