SCHOOL OF MINES AND METALLURGY
ALUMNI ACADEMY

Agenda and Comments for Thursday, April 11, 1996

1. Introductions

   Members of the Academy: Existing and incoming members of the Academy are listed on
   a single alphabetical list in the appropriate tab. Chairman is Mr. James L. Spehr, Co-chairman is
   Mr. Jeffrey L. Zelms, and Members-at-Large of the Executive Committee are Dr. William H.
   Daniels, Mr. Robert A. Garvey, Dr. Robert J. Miller, Dr. James A. Scott.

   Members of the School of Mines and Metallurgy: A faculty list is at the designated tab in
   the notebook.

   Members present will be introduced

2. Announcements

   A. Events and Schedule

   B. American Ceramic Society, St. Louis Section, Spring Meeting

      To celebrate the occasion of the conferral of an honorary degree on Helio Guimaraes, B.
      S., 1951, President of Magnesita, S.A. there will be a ceremonial dinner at Rolla on May 9, 1996,
      in conjunction with the Spring Meeting of the St. Louis Section. Details are on a separate flyer.

   C. Mining Engineering

      Our mining students have again taken a clean sweep in the Intercollegiate Mining
      Competition with both the men’s and women’s teams taking first place. Mining has had four
      new scholarships established this year (Kennecott, BHP, ARCO Coal, and Marston & Marston).
      The funding of the Quenon Chair has progressed to the point that we will establish a Quenon
      Professorship for a five-year term and then establish the higher-level Chair. Three mining
      students have returned from a study-abroad stint at the School of Mines in Kalgoorlie, Western
      Australia. They represent the first of what we hope will be regular exchanges with Australia,
      South Africa, Chile, and England.

3. SOMM Academy Mission

   The Charter of the Academy (see tab) specifies its mission as 1. Recognition, 2.
   Consultancy, and 3. Ambassadorship.

   The Academy is a self-determining group, comprised of distinguished graduates of the
   School of Mines and Metallurgy, who foster the future of the School of Mines and Metallurgy.
This fostering is done by acting as counsel to the Dean of the School, by acting as ambassadors for the School, and by assisting in a key ambassadorship activity: development.

Last year, we likened the Academy to the National Academy of Science, also comprised of distinguished people, who are vigorous in their discussion of national science policy. The School of Mines and Metallurgy Academy, acting as a whole or by self-designated committee, is the Dean’s Advisory Council. We welcome this input from a key stakeholding community.

4. Campus and School Mission

A. Campus Mission

In several all day meetings, campus representatives have expanded UMR’s Mission Statement, “Educating tomorrow’s leaders in engineering and science,” into a vision statement for UMR. The entire statement is under the appropriate tab and will also be placed in copies of the Strategic Action Plan and the Catalog.

The Vision statement captures the manifold goals of UMR as a modern, American, research-oriented university. It delineates our objectives in teaching, research, public service, assistance to our State and region, and respect for our roots and traditions. It helps the Schools, departments, and individual faculty members to establish their own goals and partitions of work efforts.

The UMR Promise and Master Student Fellow Programs are two major efforts implemented in the last 18 months to attract tomorrow’s leaders to UMR.

B. Program Review

A copy of the Program Review document, which was being formulated at the time of our last meeting, is included in the notebook. It suggests that UMR is a tightly focussed institution and has six major, interrelated areas of emphasis.

- Instructional Technology
- Manufacturing
- Infrastructure Engineering
- Environmental Science and Technology
- Materials Science and Technology
- Geotechnical Science and Engineering

These six topics clearly respect the traditions of UMR, its inherent strengths, and its potential to contribute to society. Virtually every department and every faculty member can contribute to one or more of these areas. The School of Mines and Metallurgy has a lead role with respect to geotechnology and materials and contributes to all six of the programmatic areas.
Program Review is a system-wide effort to reallocate internal resources into disciplinary areas in which we excel or expect to excel.

C. School Mission

The mission of the School is to translate the broad campus mission into the individual subject areas of its seven degree programs, Geology and Geophysics and Ceramic, Geological, Metallurgical, Mining, Nuclear, and Petroleum Engineering. Each contributes to one or more of UMR’s program thrusts.

The School has an additional mission to be the standard of quality for its programs and for itself as the assemblage of programs. We will be thought of as the premier school of mines or natural resources in the country if not the world. Our departments and research centers will be thought of by their peers as excellent and, where resources permit, as top of their class. As we review the population of Schools of Mines throughout the world, we recognize that they may not provide a sufficient benchmark for our programs. We will need to benchmark our individual programs against the nation’s best departments; this is particularly true for Ceramic, Geological, and Metallurgical Engineering, and Geology and Geophysics.

5. The Missouri Quality Award

There is an announcement about the Missouri Quality Award in your notebook. We are proud to be recognized by the Excellence in Missouri Foundation, a Baldrige-type organization, for our achievements in the continuing quest for quality. We worked very hard both to assemble a winning application and to incorporate Quality Management principles into the administration of UMR. In addition to the award itself, the examiners prepared a thorough analysis of our quality processes.

The process that could be most improved, in their opinion, was in the use of data to direct decisions. We collect reams of data, but they felt that there were many instances when the assembled and analyzed data did not flow back to the decision makers. As part of a long-term effort to improve this process, we have assembled a list of key performance indicators. This list is reduced from the first drafts; it is believed that each indicator has a strong correlation with the quality of the process under measurement. The next step is to assign responsibility for the measure and to ensure that we persevere in the process. The list of indicators is in your notebook.

6. Enrollment and Trends

Despite a dramatic fall off of interest in engineering among college-bound high school students, UMR has managed to hold its own. Enrollment statistics and projections are in a separate tab. Small falls in enrollment can have significant effects on our budget, particularly for
new enterprises and for discretionary spending.

We have included actual Winter 1996 enrollments by program; these are always smaller than Fall enrollments for the same academic year. There is also a copy of the file count for prospective freshman. The projection of campus enrollments is purposely conservative because it is used to generate budget projections.

7. Capital Campaign

In our quest for excellence and quality, we have long known that our base budget is insufficient to achieve our goals. In establishing quality, there is a significant role played by funds that come from gifts and contracts. True, many of our contract funds are restricted to a specific mission or project. However, completion of that project adds to our educational and research achievements. Personnel paid by these contracts add to our numbers. In a similar fashion, gifts from individuals and corporation enhance our mission and make possible those things that will make us excellent. The recently announced Capital Campaign is an effort to increase the gift income of the campus while linking it, in an organized way, to programmatic and campus needs.

The Council for Advancement and Support of Education (CASE) has guidelines that help universities to organize a capital campaign. We believe that Academy members will be interested in the CASE Statements, relevant to the School of Mines and Metallurgy, that have been developed for UMR’s campaign. They can be found in the notebook. There is an overview sheet that gives totals for the entire campaign. These numbers, it should be understood, are based on needs that were first defined within the programs; that is why you also have copies of the individual program CASE statements. Although each department initiated its needs statement, it is true that the campus Development Office reviewed and massaged the statements for consistency.

8. Return of Agenda to Jim Spehr, Chair