Missouri S&T Chemical and Biochemical Engineering Advisory Council

I. OVERVIEW

A. <u>Objectives</u>

Established in 1991, the Chemical and Biochemical Engineering Advisory Council's goal is to provide perspective to Missouri University of Science and Technology – Missouri S&T (formerly UMR) Chemical and Biochemical Engineering department from our stakeholders who employ our students. Past and current members of the council attended Missouri S&T during the 60s, 70s, 80s, and 90s and represent a wide diversity of industries: oil, chemical, consumer products, biotechnology, renewable energy and products, aerospace, engineering and construction, management consulting, and higher education. The council strives to provide the department and the university with the benefit of their collective experience and wisdom gained in their professional careers to build closer alliances with industry and influence the image and support of the department.

B. <u>Departmental Mission</u>

MISSOURI S&T DEPARTMENT OF CHEMICAL AND BIOCHEMICAL ENGINEERING Mission Statement (proposed)

The Department prepares chemical and Biochemical engineers for successful careers of leadership and innovation in chemical and Biochemical engineering and related fields, expands the knowledge base of chemical and Biochemical engineering through its scholarly pursuits, develops technology to serve societal needs, and benefits the public welfare through its service to the chemical and Biochemical engineering professions.

C. <u>Departmental Vision</u>

MISSOURI S&T DEPARTMENT OF CHEMICAL AND BIOCHEMICAL ENGINEERING Vision Statement

The Department aspires to be among the top in the nation, educating and developing industry's leaders and innovators, to be a first choice for undergraduate and graduate students, to attract the best quality faculty and research personnel, and to actively participate in the ongoing global renewal of the chemical and Biochemical engineering disciplines, particularly in the areas of Bio, Material, Energy and Environmental Technologies.

D. <u>Program Objectives</u>

BSChE Program Objectives:

Graduates Will Have

1. A strong fundamental scientific and technical knowledge base and critical thinking skills, applied to solution of practical problems in chemical engineering process design, experimentation, interpretation, and analysis while working separately or in teams.

2. The ability to effectively communicate technical and professional information in written oral, visual and graphical formats.

3. An appreciation for the continuous acquisition of new knowledge applicable to their profession.

4. Growth in the awareness and understanding of the moral, ethical, legal and professional obligations needed to function as part of a professional enterprise, and to protect human health and welfare, and the environment in a global society.

II. ACTIVITIES

A. <u>Past Accomplishments</u>

- 1. Revising and preparing recommendations for suggested curriculum changes.
- 2. Providing input and direction for the department's plan.
- 3. Assisting in the prioritization of the department's strategies.

B. <u>Current Projects</u>

1. See PowerPoint presentation by Dr. Muthanna Al-Dahhan, April 14, 2011.

III. COUNCIL STRUCTURE

Potential members are nominated by current council members, recommended by the chairman of Advisory Council, and invited by the department chairman to serve a four-year term.

- **A.** Seek representatives from the top ten employers of Missouri S&T graduates.
- **B.** Seek representatives from the top ten corporate supporters of Missouri S&T.