Chemical Engineering Projects Laboratory – CHEN 4905-2

Professor Terry A. Ring

**January 1, 2014 – Request for Proposals**

**Transformative Improvements of Project Laboratory Capabilities**

**Deadlines:**

January 17, 2014: Single page individual proposals and single concept slide due.

January 23, 2014: Three minute pitch on individual proposal.

January 28, 2014: Funding and Team Decisions Made by Faculty

February 14, 2014: Team proposals due.

April 11, 2014: Team project reports due.

**Description of the Program:**

The Transformative Improvements of Project Laboratory Capabilities (TIPLC) program seeks to fund projects that will, broadly, advance the capabilities and infrastructure of the teaching laboratory facilities within the Department of Chemical Engineering at the University of Utah. Proposals may focus on one or several of the following areas:

1) **Characterization of New Equipment**– Recently purchased equipment for the laboratory is often in need of characterization and project development. This program encourages proposals involving recently purchased equipment that develop SOPs, characterize EHS risks, validate manufacturer claims, and develop and test new potential projects for CH EN 4903 or other chemical engineering courses.

2) **Addition of New Equipment** – Novel experimental apparatuses that effectively demonstrate core chemical engineering concepts are highly valued by this program. Such projects may range anywhere from the development of new analytical techniques and equipment to creation of small-scale models of industrial processing equipment. Projects proposed in this category should be able to reasonably deliver new experimental apparatuses and demonstrate their use on some project that could be used to benefit the target groups listed below.

3) **Improvement of the Capabilities of Existing Equipment** – Work that develops significantly novel projects using existing equipment or that adds new measurement or control capabilities to existing equipment are encouraged. Projects in this category should adequately demonstrate the new capabilities and their value to the projects laboratory.

4) **Research Use of the Projects Laboratory** – Proposals that use the projects lab to conduct novel research for the department’s research program are also valued by this program. If you work as an undergraduate researcher, you are encouraged to propose projects that may facilitate the objectives of your faculty supervisor. The majority of the work in this category should be conducted within the Projects Laboratory and have some significant connection to the general goals of the TIPLC program. Proposed work should also contribute something novel to the undergraduate researcher’s research project and not merely be a continuation of ongoing work.

5) **Industrial Partnerships** – Proposals that strengthen ties between industry and the Projects Laboratory are strongly encouraged. Researchers in this category should work with local companies to develop a project that is valuable to the company, comparable in difficulty to other Projects Lab projects, incorporates department lab facilities, and is manageable within the given the time, staff, and resource constraints of this program. Additional resources donated by industrial partners while encouraged do not count against the project’s total allowable cost.