

Consulting in the Discipline:
***External Practice as a
Reinforcement of Classroom Skills***

by

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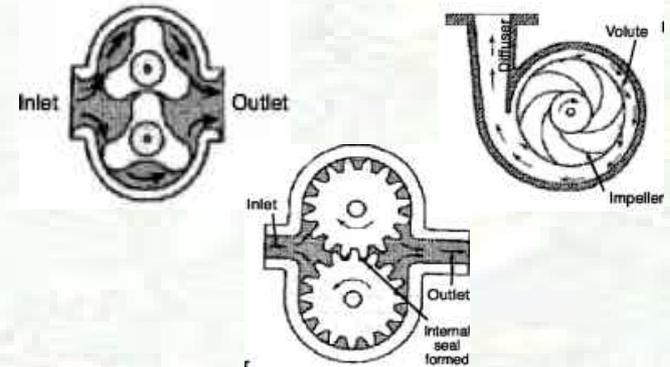
Presentation Overview

- Consultants are Subject Matter Experts
 - So are Academic Faculty
- CSCU / CCSU Policy Recognizes Consultation
 - Full Time Faculty Compliance and Reporting
- Consulting Practice Adds Experience
 - and Commercial Awareness
- Classrooms get Invested with Relevance
 - Students are Better Prepared for Success

Academic Faculty - Expertise

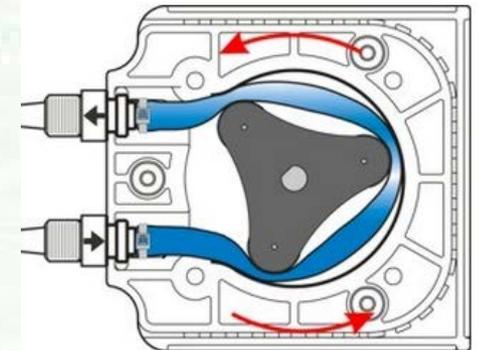
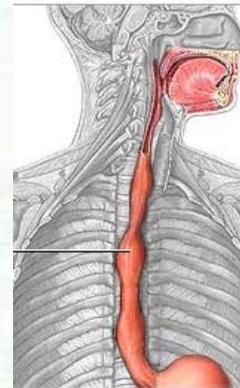
- Focused on Academic Discipline

- Fundamentals and Standards
- Classroom Environment
- Academic Norms
- Student Learning Objectives



- Subject Matter Expertise

- Free Thinker Perspective
- Interdepartmental University
- Technology Transfer
- Commercial Innovation



CSCU / CCSU Policy Recognizes Consultation

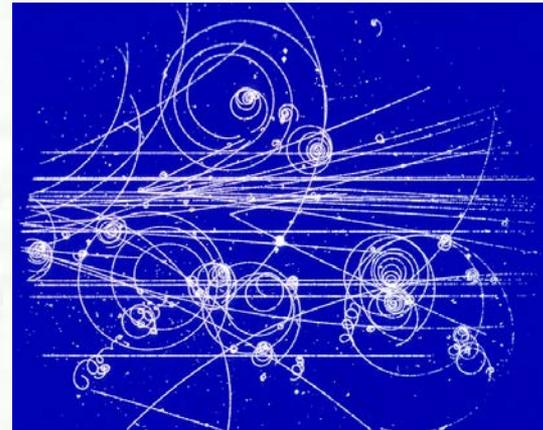
- **“Faculty professional activities such as consulting or engaging in a research project for a public or private entity often are useful in maintaining and enhancing the faculty member's academic scholarship and competence.”**

Excerpted from CSCU / CCSU Procedure for Reporting of Research or Consulting With Outside Public or Private Entity (adopted October 20, 2016)

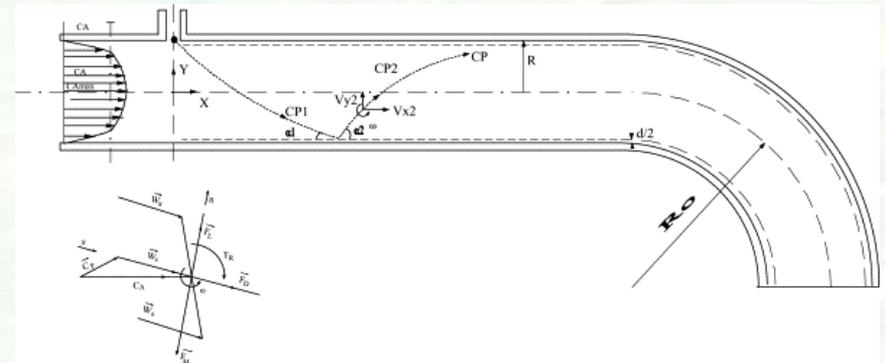
- **Full Time Faculty Requirements**
 - **Academic Dean and Provost approval required prior to engaging in outside activities.**
 - **Compliance form must be filed to report on activities.**

Consulting Practice Adds Experience

- **Research – Academic**
 - **Systematic Investigation**
 - **Open-minded Exploration and Development of General Knowledge in Field of Study**
 - **Self-driven pressures to advance the discipline**
- **Research – Commercial**
 - **Systematic Investigation**
 - **Focused on a Specific Investigation**
 - **External pressure to meet cost driven performance or schedule requirements.**



Particle Physics



Pneumatic Transport of Solid Particles

Consulting Practice Adds Commercial Awareness

- **Engineering Disciplines**

- **Physics**

- **Statics and Dynamics**

- **Structural, Mechanical, Electrical, Computer**

- **Control Algorithms**

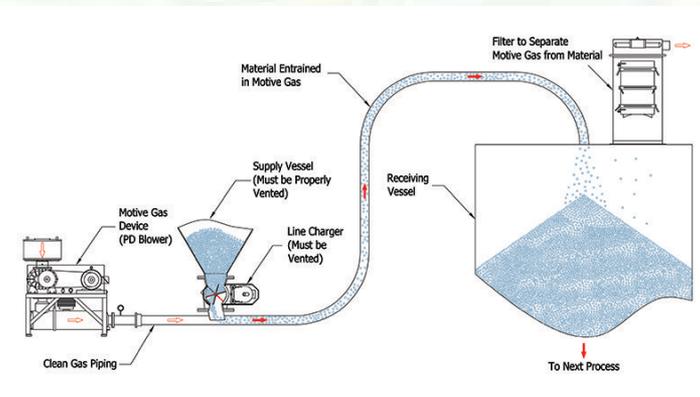
- **Material Handling**

- **Bucket Elevators**

- **Conveyors**

- **Pneumatic Transport**

- **System Automation**

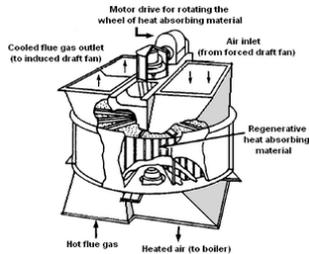


Classrooms Invested With Relevance

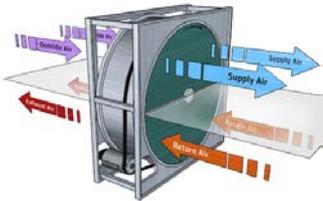
- **Faculty Member Professional Interaction with Industry**
 - Maintaining and Enhancing Expertise
 - Interchange of knowledge – theoretical meets practical
- **Faculty Led Co-Operative Education**
 - Student Awareness of State-of-the Art Technology and Practices
 - Learning of What's Old and What Needs to be New
- **Student Introduction to Career Options**
 - Participation in Commercial Work
 - Introduction to Applications Oriented Research
 - Free-thinking Innovation brought into the Commercial Sector

Academic + Commercial Expertise (Restoring The Continuity)

Organization and Companies of a Connecticut Corporation that Once Employed 42,000
(It's Chief Technologist was an immigrant educated at a State University)



**Coal Boiler
Air Preheater**



**Modern Building
Energy Recovery**

Industrial

- + P.F. Avery Co.
- + Metals
- + Bauer Pulp & Paper Equipment
- + Raymond (Crushing and Conveying)
- + **Air Preheater**
- + Tyler Screening (Industrial Wire Screens)
- + Ehrsham (Conveyors & Grain Elevators)
- + Enterprise Manufacturing
- + Resource Recovery Systems
- + Tyler Elevator
- + American Pole Structures
- + National Tank Company

Oil & Gas

- + Natco
- + Grey Tool
- + Beaumont Well Works
- + Vetco
- + Oil Field Engineering
- + Houston Forging

Corporate Support

- + Administration
 - + **Kreisinger Laboratory**
 - + Risk Management
 - + Treasury
 - + Accounting
 - + Information Technology
 - + Human Resources
- ## Engineering Services
- + Lummus
 - + Impel
 - + Maguire

Power Systems

- + Fossil
- + Nuclear
- + Services
- + Industrial Boiler

Refractories & Minerals

- + Minerals
- + Refractories
- + Cast Industrial Products
- + Building Products
- + Aluminum Building Products
- + Morgan Door Company
- + Stanley Artex
- + Georgia Kaolin
- + Pryor-Giggey
- + Transport
- + Glass
- + Hordis Bros. Glass

Instrumentation & Controls

- + Taylor Instruments
- + Process Analytics



HENRY H. KREISINGER

Thank You!