Small Businesses and I/UCRC’s: a Win-Win?

Bob De Saro
ERCo
Energy Research Company
ERCo

- Founder and President of Energy Research Company (ERCo) - 1991
- Founding Industrial Member of The Center For Resource Recovery and Recycling (CR3)
- ERCo Develops and Sells Industrial Instruments for Process Control
- Formed Joint Venture, Melt Cognition, for Commercial Sales of Diagnostic Instruments and AIM to Metals Industry (ERCo, MS LLC, and wTe)
CR3

- WPI, CSM, KU Leuven
- Diran Apelian, Brajendra Mishra, Bart Blanpain
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CR3

- Well Organized
- Well Run
- Efficient
- Results Oriented
- Everyone Listens and Adapts
- (Well, Almost Everyone)
Why I Joined CR3

- Personal Relationship with Center Director
- Saw Opportunity – Birds of a Feather
- NSF Funding to Offset Dues First Two Years
- Access to CR3’s Sister Centers: ACRC and CHTE
- Access to Companies and Resources
  - Greatly Improved Chances of Winning R&D Projects
  - Enhanced ERCo’s Core Technologies
  - Uncovered Many Opportunities With Center Members
CR3 Membership Benefits to ERCo

- The New Friendships Made and the Old Ones Reinforced
- CR3 Successes Are Part of My Legacy
Networking – THE KEY

• Meet A-List Industry Folks at the Top of Their Game
  • Advisory Board
  • Joint Proposals
  • Cross Fertilized
Project Spinoffs

- NSF Fundamental Research
  - ERCo Discovered a Fundamentally New Spectroscopic Technique.
  - WPI Constructed a Mathematical Model to Describe the Physics
- DOE’s ARPA-E Project
  - Aluminum Integrated Minimill to Transform the Secondary Aluminum Industry
  - Cornerstone Project for DOE
  - Three CR3 Projects Supported Both the Proposal Effort and the Subsequent Work.
- Member Company Projects to Apply Our Technologies to Their Problems
IP

- Two Center Projects to Understand and Solve A Significant Technical Problem with One of ERCo’s Product
- Market Study – Which Intertwined with ARPA-E Project
Student Interns

- Outstanding Quality
- REU Means Outstanding Cost As Well
- Also Qualifies as Required Cost Sharing to DOE Project
Benefits to CR3 from ERCo Membership

- Companies Big and Small Get to Network With Me.
- We have Provided Our Core Technology To A Number Of Projects At No Cost.
- Provide Our Lab And Equipment For Use At No Cost.
- Provide Time And Labor as FG Leader and PSC Chair.
- Member Companies Get Funding from Successful Joint Proposals
- Center Uses My Administrative Skills
- Actively Involved In All Meetings
How Small Companies Can Benefit

- Technology Match
- Personal Chemistry Match
- **You Only Get What You Put In** - It’s Not the Host but the Guests
The Downside to CR3 Membership

- Annual Membership Fee - $33,000
- Cost to be Active Member
  - Attend Formal Meetings - $13,000
  - Labor to Support CR3 Projects - $40,000
  - Annual Subtotal Costs to ERCo - $86,000
  - Off line Focus Group Meetings - $?
  - Addressing Other Members’ Requests - $?
  - Administration Duties - $?
Small Businesses Dropout Rate is High
This is Unacceptable
What Can be Done?

- Better Technical Match
- Better Personal Match
- Small Business Employees MUST Get Involved in Center – There are no Shortcuts Here
- Dues Structure Must Change
  - Allow Small Business In-Kind for at Least Part of the Dues (Will Also Assure Involvement)
  - Other?