



The Seventeenth Annual ACERC Conference

February 20-21

**University of Utah
Salt Lake City, Utah**





22 Professors Involved

- | | | | |
|----------------------|------|-------------------|------|
| • Calvin Bartholomew | ChE | • Warren Lucas | CE |
| • Larry Baxter | ChE | • Mardson McQuay | ME |
| • Merrill Beckstead | ChE | • Justin Peatross | Phys |
| • Jeffrey Bons | ME | • Dave Pershing | VP |
| • Mark Clement | CS | • Ron Pugmire | ChFE |
| • Eric Eddings | ChFE | • Adel Sarofim | ChFE |
| • Tom Fletcher | ChE | • Doug Smoot | ChE |
| • Fernando Fonseca | CE | • Quinn Snell | CS |
| • Hugh Hales | ChE | • Dale Tree | ME |
| • Bill Hecker | ChE | • Brent Webb | ME |
| • JoAnn Lighty | ChFE | | |
| • Matt Linford | Chem | | |





Research Faculty/ Postdocs

- Scott Hill Combustion Resources, Provo
- Søren Kær Denmark
- Helle Junker Denmark
- Geoff Silcox ChFE, U of U
- Mark Solum ChFE, U of U
- John Veranth ChFE, U of U
- Angela Violi ChFE, U of U
- Kevin Whitty ChFE, U of U

**Plus ~30 graduate students
~45 undergraduate students**



ACERC secretaries – Nicole Douglas, Trang Tran





Current Research Interests

Industries

- Electric power
- Chemical processes
- Forest products
- Transportation
- Cement
- Glass
- Military (safety)

Fuels

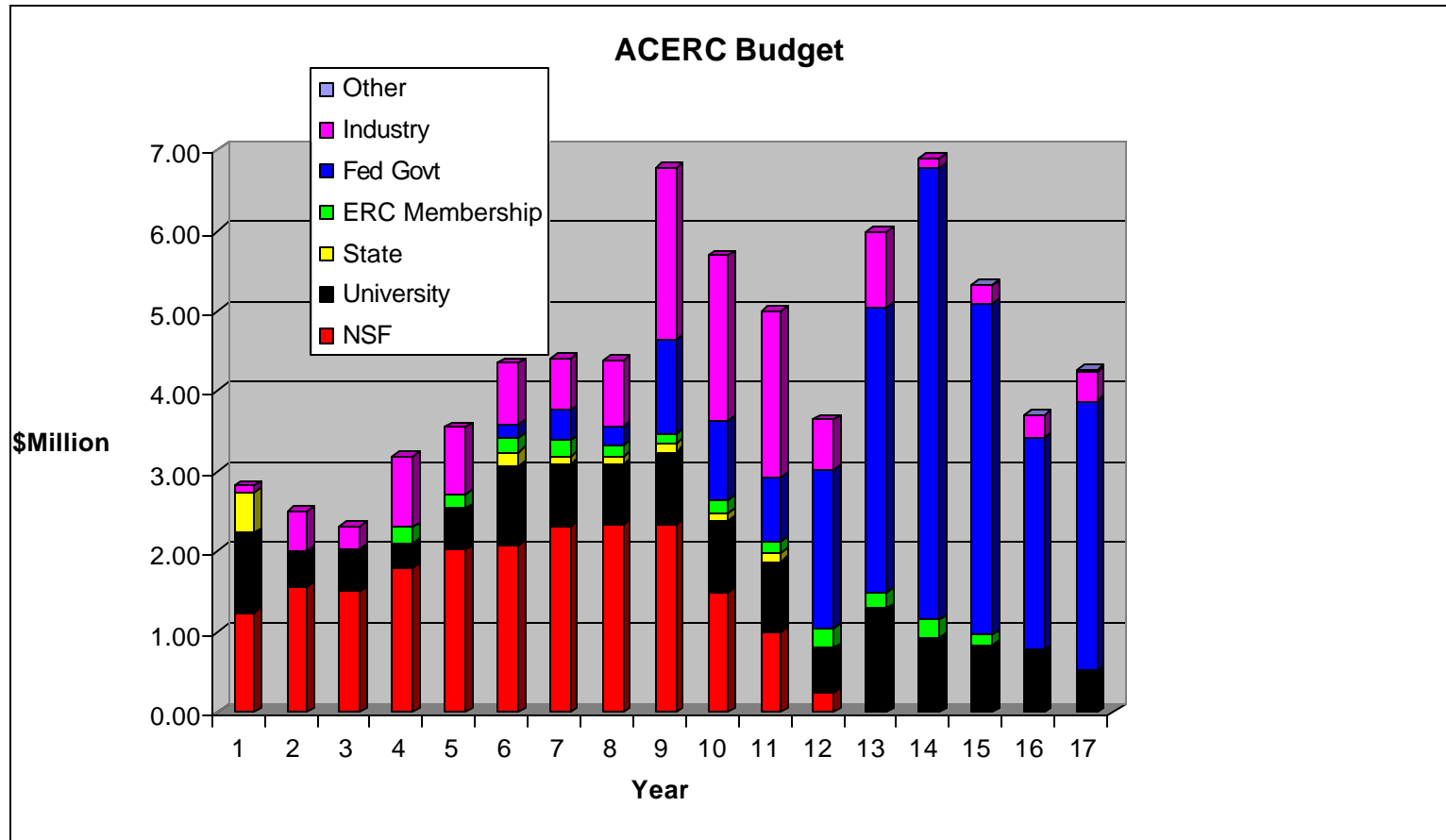
- Coal
- Biomass
- Black liquor
- Petroleum coke
- Live fuels
- Natural gas
- Jet & diesel fuel
- Metallurgical coke
- Soot
- Foams
- Model hydrocarbons

Subjects

- Organic reactivity
- Ash
- Soot formation
- NO_x, SO_x
- Heat transfer
(convective, radiative)
- CFD
- Parallel computing

ACERC Research Funds

1987-2002



Over \$75 million in research over 17 years!



Meeting Schedule

Thursday morning

- Mineral Matter
session chair: Larry Baxter, BYU

Thursday afternoon

- Mercury Issues
session chair: JoAnn Lighty, U of U

Thursday evening

- Poster session (by ACERC students)

Friday morning

- NO_x Reduction
session chair: Eric Eddings, U of U

Friday afternoon

- Fuel Reactivity & Soot Formation
session chair: Tom Fletcher, BYU



Announcements

- Congratulations to:
 - Professor Adel Sarofim, recently elected to the National Academy of Engineering
 - Professor L. Douglas Smoot, recipient of the DOE Homer Lowry Award in Fossil Energy, recently retired from BYU
- Special welcome to:
 - EPRI Biomass Interest Group
 - IEA Biomass Interest Group
- Lunch today is in the food court
- Don't forget the poster session
 - 5:00 to 7:30 pm
 - Light buffet while you look at posters & talk to students
 - Poster contest (vote for your top three)
- Mormon Tabernacle Choir rehearsal (8 pm, Temple Square)



Member's Luncheon

- Friday at noon
 - Time to discuss ACERC
 - Suggestions
 - Business opportunities
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- If you feel like working with ACERC in the future, please come!