

JUST ANOTHER DAY AT THE OFFICE

Richard M. Felder
Department of Chemical Engineering
North Carolina State University
Raleigh, NC 27695-7905

The scene is the conference room in a mythical chemical engineering department just before a faculty meeting. Everyone is talking.

Andre (the department chairman): "Okay, let's get started, gang, or we'll never get out of here."

(The noise slowly subsides.)

Andre: "Now, our first order of business is the budget."

Everyone: *(Loud chorus of grumbling)*

Andre: "All right, next person who gives me grief is our new laboratory safety inspector."
(Everyone shuts up instantly.) "I've got good news and bad news. The bad news is that it's September 12 and we've already exhausted our operating budget through April. The good news is that I've got a plan."

Ed: "You're not planning to make us pay for our coffee again, are you? The last department head tried that and look what happened to him."

Andre: "No, it's even better than that—listen up! The hot research topics these days are biotechnology and microelectronics, right. I say we write a proposal to genetically engineer a bug that produces ultrapure silicon wafers from sand. I figure we should be able to get a bundle for it from a couple of our industry friends and then use what we get as matching money for an even bigger bundle from the NSF. Bruce and Gary, how about knocking out a proposal draft...just make sure you include about 30% release time for each of you and enough to pay a secretary full time."

Bruce: "No problem, as long as I can get three months summer support, some lab renovation, and a laptop...and a graduate student, of course."

Gary: "And I need a scanning microscope and summer support and two graduate students...oh, and I'll also need money to go to the Annual Conference of the ESGFPICED."

Andre: "The ESGFPICED?"

Gary: "Yeah, the Emotional Support Group for Physicists in Chemical Engineering Departments...we're sharing our inner feelings in Hawaii this year, and since Sheila is chairman..."

Sheila: "Chairperson."

Gary: "...chairperson, I thought I should be there."

Andre: "Fine, as long as you don't charge too many leis to the project. OK, so you and Bruce can..."

Bill: "Wait a minute—you can't get the price of a bagel for research this year that doesn't include polymers."

Andre: "SACRE BLEU, you're right...OK, how about a genetically engineered bug to produce ultrapure silicon from a combined feedstock of sand and polypropylene..."

Irving: "Make it molten sand and polypropylene, so we can get some good nonnewtonian rheology in there."

Andre: "Right...now in the budget, don't forget to..."

Bill: "...put in summer support and an HPLC for me, and I also need about three graduate students..."

Irving: "And I need a new rheometer and a REALLY good pair of safety shoes, four graduate students to do some heavy equipment lifting, and a workstation with a 287 GB hard disk and a full-time computer repairman..."

Sheila: "Repairperson."

Irving: "...a full-time repairperson to maintain it."

Andre: "No problem. All right, Gary and Bruce and Bill and Irving go ahead and..."

Hazel: "You can't be serious—you're going to try to get that kind of money for a project that doesn't involve the environment?"

Andre: "CARAMBA—how could I forget that? OK, Bruce, Gary, Bill, Irving, and Hazel design a bug to produce silicon from molten sand and recycled plastic things recovered from the beach after Labor Day weekend. I don't know, guys—this may be getting a little too..."

Hazel: "Piece of cake...all I'll need is a little summer support, money to attend the Fourth Annual Conference on Very Important Environmental Stuff in Acapulco next year, and five graduate students...someone has to shovel all that sand."

Al: "Just a cotton-pickin' minute here—I'm doing environmental research too, and I also have the experience to pitch this to industry...once me and my six new graduate students hit up our industry friends I guarantee they'll sprain their wrists reaching for their wallets."

Nigel: "Now see here, none of this will work unless you do it at cryogenic temperatures, a field that I just happen to know more about than anyone else here...besides, I have much broader experience in the manufacturing..."

Sheila: (*Clears her throat loudly*)

Nigel: "Excuse me, I have much broader experience in the personufacturing industries than Al does, in addition to which my British accent makes me sound ever so much more intelligent."

Al: "Oh yeah—well maybe if we were talking about the cryogenic production of bangers and mash your experience would be worth something, but we're dealing with polymerization here and you don't know jack..."

Andre: "BESAME MUCHO—will you guys knock it off already! If we don't get serious about this we'll never..."

Charlie : "HEY—what am *I*, chopped liver? I'm also doing environmental research...besides, if you don't consider the homogeneous catalytic effects of the impurities in beach sand and plastic things you'll..."

Ed: "No way, Charlie —if anyone's gonna do any catalysis on this project it's me and the seven graduate students I need—besides, this project needs someone who knows how to do real surface science, and also someone with outstanding diplomatic skills to sell it to the NSF, and it just so happens that I..."

Paul: "Don't make me laugh, Ed—I'm the real surface scientist here. You let me and eight graduate students throw some surfactants into the pot and I could get funding from your grandmother."

Ed: "I don't think so—my grandmother knows more surface science than you do, and not only that..."

Sheila: "Nine graduate students and my own Cray to develop an ASPEN simulation of the process and exclusive rights to our best graduate student hacker as project manager..."

Everyone: (*Shout in unison*) "Personager!"

Sheila: "...as project personager, or I'm out of here!"

Stanley: "Look, you're all forgetting that we're an educational institution, not just a research factory."

Matt: "He's right—we need to get the undergraduates involved. I know—we get about ten graduate students to put the whole thing in the unit ops lab, then we say that we're updating the lab to make it more relevant to chemical engineering in the 21st century, and then we go to our friends in industry and..."

Walter: "You'd BETTER use undergraduates—last spring all the new graduate students agreed to work for me when I recruited them."

Everyone: (*General uproar*)

Andre: "MAMMA MIA, ENOUGH ALREADY! Okay, let's see what we've got here—check me on this. We propose to develop an undergraduate laboratory experiment on the formulation of an ASPEN simulation of homogeneous and heterogeneous catalytic impurity effects on the cryogenic generation of ultrapure silicon from molten sand and plastic things..."

Hazel: "And its environmental implications."

Andre: "And its environmental implications. Does that work for everyone?"

Everyone: ("*Sure, great, sounds good to me,*" etc.)

Ed: "I still don't think it's scientific enough—they'll get proposals to do that from half the departments in the country."

Andre: "We'll take our chances. Now, all that's left is to write the proposal—we have a tight deadline to meet. I guess Al and Nigel with all that industrial experience should be able to..."

Al: "Gee, Andre, I'd like to, but I'm on the Conference Room Scheduling Committee this year and I've got so much to do, I really don't think I can free up the time."

Nigel: "And I'm chairing the Coffee Machine Cleaning and Supply Committee and have much more to do than Al...I really think Bruce and Gary should do it, since the heart of the project is their specialties."

Andre: "Okay, that seems reasonable..."

Bruce: "Just a minute, Andre—I'd love to do it, but I'm going to be away from my office for three weeks and no one will have a clue how to find me. I'm willing to let Gary cover for me."

Gary: "Gee thanks, Bruce...uhhh, Andre, normally I'd jump at the chance but unfortunately I'm also going to be unavailable. It's a physicist thing—you wouldn't understand."

Andre: "Hmmm. Well, how about..."

Everyone: (*Shout out excuses.*)

Andre, disgustedly: "OY GEVALT, I don't believe you turkeys. SOMEONE has to write this proposal, otherwise we'll have to go back to..."

Ollie: "Hold on—I have an idea. I'll assign the proposal to the first-year graduate students as part of their project class."

Andre: "Sold—just make sure they get it done by Wednesday. Okay, it's late now, so we'll postpone our discussion of next year's faculty retreat in Paris which I'm working on our industry friends to sponsor. Meeting adjourned." (*All get up and exit stage left.*)