to get in there and work with these students," not much can be done. I do not mean mollycoddling of students. Some people may say, "He's advocating leading them around by the hand." No, I do not mean this. When a boy comes in and says: "I've got six job offerings. How about telling me about these companies?"—or he says: "Gee, I'm thinking about going on to grad school, but I really don't know."—or he says: "My freshman math instructor has failed 95% of the class." —I believe the professor ought to be doing something. I think that he ought to be asking questions. He ought to act as the inspector general, if nothing else.

In other words, the professor ought to be concerned and interested in the student, and he ought not to be concerned as much in pleasing various administrators. Doing what is right for the students is much more important than fulfilling a set of paper regulations. Let me also say that I have written quite a few papers. I have time to participate in national meetings, and I get quite a bit done. But, I have never shut my door to a student. I do not think anybody on my staff at Denver has either. I think this should be the tenor at all schools. If this forces one to work in the evening or on week ends, then one must. But advising a student who might be standing out in the hall with his knees shaking—a freshman or sophomore—is much more important than writing any paper or doing anything else. I maintain that if you inspire the student with the right attitudes he will continue to grow when he goes into industry. He will take off in the right direction, and he will be primed to walk the second mile that Dr. McKetta talked about.

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ChE problems for teachers

We continue with the thermodynamic problems and solutions prepared by Professors Irey and J. H. Pohl at the University of Florida.

1. An incomplete equation of state for a substance with the work modes $-E dZ$ (associated with charge) and PdV (compressibility) is written as;

$$\frac{V-V_0}{V_0} = \beta T + K Z P$$

a. Determine the electric potential, E, as $E = E(V,T,Z)$.

b. Calculate the difference in internal energy

$$u(T,V,Z) - u(T,V_0,0)$$

due to changes in volume and charge.

c. If $C_{V,Z}(T) = C_{V_0,0}(T)$ $\begin{matrix} V = V_0 \\ Z = 0 \end{matrix}$

find $C_{V,Z}(T) - C_{V_0,0}(T)$.

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