

WELCOMING REMARKS

by

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William E. Foreman - Good morning ladies and gentlemen. As conference chairman, it is my privilege to welcome you to the Ninth Annual Institute on Coal Mining Health, Safety, and Research. We are extremely pleased to have such a good show of participants at this year's conference. We are delighted also to welcome the wives who are attending this year's conference.

An excellent technical program has been assembled by the Advisory and Planning Committee. We are confident that your stay here on our lovely campus during the next two and a half days will be time well spent.

It is my pleasure at this time to call upon Dean Paul Torgersen of the College of Engineering for a few words of welcome to you.

Paul E. Torgersen - On behalf of the faculty of the College of Engineering, I welcome you to the University, to the Continuing Education Center, and to this Ninth Annual Institute on Coal Mining Health, Safety, and Research. Each year the faculty of our college conduct some 80 or 90 conferences. . These range in duration from one day to three weeks. We do take our

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obligation as a land grant institution very seriously. At a number of programs I have the privilege of offering the welcoming address, or speaking at a lunch or dinner, and I am always pleased to do so. The faculty are quite willing to permit me this privilege, although I sometimes wonder why. In one of our restrooms in an engineering building there is mounted on the wall a small machine that you can receive air from to dry your hands. Under the button there is a little sign that says, "Press button to receive message from Dean."

I look forward to this conference, in particular, and have for a number of years, for two reasons. First, I became Dean just a little over eight years ago—actually in the spring of 1970—and then during that summer, we began the First Annual Institute. Bill Foreman was kind enough to invite me to say a few words of welcome, and I did so. We have continued for nine years. This is the Ninth Annual Institute and I begin my ninth year of service as Dean. So I have had a particular affection for this conference and the opportunity to meet with you. I think the second reason I look forward to this conference is that I am also invited to the luncheon and to the banquet. Bill Foreman seems to have some special relationship with the staff of the Continuing Education Center. Each year he inspires the kitchen staff to put together a banquet that surpasses that of the last year. Those of you who were here a year ago will recall that the banquet was quite extraordinary, and I'm anxious to see what they can do this year to top last year's banquet!

We are now approaching an enrollment of 20,000 students. There is some pressure within the state for an expansion beyond that size. The 20,000 enrollment is a self-imposed ceiling, and I will hope we will operate at that level. Within this 20,000 students, we have approximately 5100 enrolled in engineering. We do have a very large college. As a matter of fact, on any national comparison, VPI will rank as the 6th or 7th or 8th largest in engineering enrollment. We have approximately 240 faculty and, by any measure or standard, we have some extraordinary talent included within that roster of faculty. We have ten curricula, one of which, as you might expect, is Mining Engineering. Our mining program has ten faculty with Dick Lucas serving as chairman. Many of you know and I expect some of you see more of him than I. He does seem to be gone a great deal.

We are rather restrictive in our admissions policy. We take some satisfaction in the quality of the students we are able to attract onto our campus. We enroll between 1100 and 1200 freshmen each year. This fall's freshmen class will include 180 young women. The interest on the part of young women is increasing dramatically, not only here, but across the country. But the competition for admission into engineering is becoming increasingly difficult, and we find that we have denied admission to a number of youngsters who would like to come here and study. We find that the College Board scores of the engineering students are superior to those of every other college on campus. You would expect the math SAT score to

be higher for the engineering student—and indeed it is—but interestingly enough, the verbal College Board scores for the engineering student is also the highest of all the colleges on the campus.

We manage to attract some very capable students. We also have in operation, now and for the last two years, a scholarship program which might be of interest to you. Through a very generous endowment provided the College of Engineering, we offer to entering freshmen (about 210 freshmen this year) scholarships which are awarded solely on the basis of merit. Financial need has nothing to do with these awards. We bring in youngsters from most of the states east of the Mississippi River.

In addition to our instructional program, we are very much committed to research. There are a number of our projects that I could share with you, but I thought I would take just a minute and tell you about a project that I find particularly intriguing and that is being developed by a professor within the college, but a professor in chemical engineering, rather than in mining engineering—yet it might be of interest to you—our so-called Coal Combustion Workshop. This is under the direction of Arthur Squires, a University Distinguished Professor—a member of the National Academy of Engineering—and indeed a very unusual person. Arthur Squires, if he were asked to subtitle this workshop, would describe it in terms of thinking small, rather than large. As you know, coal will be an important part of the energy future of this country, and the reason is obvious—the resources are there—we have coal that will last us a couple of centuries. Most people, when thinking of this coal, think in terms of large-scale applications: burning of coal in electrical generators, plants, or in steel mills. Well, if Arthur Squires were asked to describe how coal might be used, he'd begin by describing the chicken farmer. Last year, that is the winter before this immediate past winter, many, many chickens came very close to dying. The reason was that in mid-February propane supplies were terribly short and, if the cold weather had lasted another week, there would have been a large number of dead chickens. We have some chicken farms in the northern Virginia area. Most are heated with propane. We can continue to provide propane for this type of an operation, but it's increasingly difficult to do so. We can convert to oil, and this is the logical conversion, but Dr. Squires feels we really ought to be converting to coal. Coal fired furnaces can provide space heating for buildings, they can dry crops such as tobacco, and they can keep greenhouses warm. Especially for those needs now being met by natural gas, small-scale coal combustion may provide the best alternative. The key is in the furnace. As it turns out, there have been some developments in small-scale furnaces, not in this country, but in other countries, particularly in Great Britain. What we hope to do here at Virginia Tech, and what we have already begun to do, is collect some of the more advance furnaces for the small-scale combustion of coal and put them into this Coal Combustion Workshop. Then, when extension agents, architects, engineers and others are interested in some new building, and they're considering alternatives to the more historical means of heating,

they can look at our coal combustion furnaces. This, we hope, will eventually lead to some substantial research, but for the moment we would like to catch up with what's being done in other places in the world.

Let me, at this point, acknowledge the speakers who we will have with us today. We're particularly pleased and proud to be able to offer you individuals of the caliber that will appear on your program. On the Key-note Session this morning, as you know, we have Mr. Robert Brown, the under secretary of Labor, Mr. Mills, a member of the National Coal Board from England, Mr. Arnold Miller, president of the United Mine Workers of America, and Mr. Allen Overton, president of the American Mining Congress. Our luncheon speaker, as you know, is the Honorable Julian M. Carroll, the Governor of Kentucky. We also have as our banquet speaker, one of our alumni return, Mr. Stonie Barker, who is serving as president of Island Creek Coal Company and chairman of the Bituminous Coal Operators' Association. We are privileged and proud to have these people with us.

Let me conclude, perhaps on a lighter note. We are very proud of the university; we are very proud of our academic programs and our research effort. This Saturday we begin our first home football game. We do have an athletic program. Although it does not receive the same national attention that other programs may receive, interestingly enough—perhaps coincidentally enough—the appearance of the Governor of Kentucky. We have a game on November 4 with the University of Kentucky. I'm sure when they made up their football schedule they thought: wouldn't it be nice to have a breather on November 4. We're the breather for the University of Kentucky on November 4! As it turns out, WE have the breather the week before. We play the University of Alabama!

I say this, hoping you'll appreciate the symbolism. What can you expect of a school with an athletic program which has a turkey as its mascot? At the University of Kentucky they have a wildcat. Most schools have something ferocious—lions, or tigers, or what have you. VPI has as its mascot a turkey. This, understandably, describes our athletic program over the last few years although, interestingly enough, we did do something noteworthy in athletics a couple or three years ago. In fact, it was more than that. VPI was successful in the NIT; it must have been five or six years ago. We won four games by a total of five points, to show you how we coasted through! The last game was an overtime win over Notre Dame. A year or two after that I was invited to Notre Dame to give an address. In the interest of an introduction, saying something light to the audience, I mentioned that I was particularly pleased to be on the campus of Notre Dame for two reasons. One, there were some graduate students that I had been close to over the years when I was on the faculty; I had not been on the campus before, and it was a pleasure to see the campus and to see these former graduate students who were now faculty at this very famous university. Secondly, I was thankful to Notre Dame because they were the team

we had beaten the year before in the finals of the NIT! I stopped for a minute, and I looked at this audience of students and faculty. There wasn't a single smile in the whole audience. I later learned that Notre Dame takes their athletics seriously; you don't make statements about beating Notre Dame!

Let me conclude by telling you one last story. I have a very good friend serving as dean at the University of Oklahoma. They do not have mining engineering, but they have a petroleum engineering program. He told the following story, apropos to their petroleum engineering program and that I thought might be of interest to you. It seems that there was a wildcatter in the state of Oklahoma who had tried, on a number of occasions, to locate oil. The state had been drilled over pretty carefully, but low and behold, one day, he did find some oil. Unfortunately, the well immediately burst into flames. He called Red Adair in Houston, who makes a practice of putting out oil well fires, and asked for his assistance. Red Adair said he would be glad to come out, but he thought he should know that his rates were expensive. He would charge \$50,000 just to make the trip, and if they undertook the project, it would be \$20,000 per day. The wildcatter was appalled at the expense, but he did need to put out the fire. He asked if anyone else could be recommended—someone closer to Oklahoma—perhaps someone who would be less expensive. Red Adair suggested an Indian up on one of the reservations—Indian Joe who, over the years, had managed to put out a few fires. He would be less expensive. So the wildcatter called Indian Joe up in Osage County. After some time he managed to get through and explained his problem. Joe would be glad to take care of it and put out the fire; he would charge \$10,000, and he wouldn't have to pay unless the fire was extinguished. The wildcatter was elated, and asked when Indian Joe could be there. He would be there that afternoon. "Give me the directions, and get out there by the fire. I'll be out about the middle of the afternoon." The wildcatter went to the spot out in the prairie. Around 3:00 PM, far off in the distance, this truck appeared rattling across the prairie with a cloud of dust behind. The truck came on a beeline towards the fire. As it got closer, the wildcatter could see that Indian Joe was driving a flat-bed truck. On the back, about 20 or 30 individuals were wrapped up in blankets. They were a motley crew—some Indians, some red necks, and some college students with beards—all one tumbled mass. They were drinking beer as they came across the prairie, and they were throwing the cans off the back of the flat-bed truck. The truck got closer and closer. It began to slow down—slower and slower. Finally it came over the last hill and made a straight line right to the fire and finally stopped directly over the blaze. The fire started to creep up around the truck. Some of the individuals began to catch on fire, and all of a sudden there was a great eruption of bodies from the back of the truck. Individuals started taking blankets and beating on each other and beating on the truck and putting out the fire. There was a great collection of dust and smoke! After some time the smoke and dust died down. Nearly 30 individuals lay in a heap and on top of of each other. The wildcatter was amazed at the

technique and went over to Indian Joe and said, "Here's your check for \$10,000. That's an amazing technique that you have. Tell me, what's the first thing you're going to do with the check?" Indian Joe thought for a minute and said, "The first thing I'm going to do is get the brakes and the steering mechanism on the truck fixed!"

On behalf of the faculty of the College of Engineering, we do welcome you to this program. We're delight to have you. I hope you get the chance sometime over the next few days to walk across our campus to see some of our facilities. We are pleased to have you here.

William E. Foreman - Thank you, Paul. We are grateful for your continued participation in our conference program. We realize that we've put you to press each year, knowing that with each continued year you've had to come up with new stories and statistics. Please return next year for the Tenth Annual Institute.

I would now like to turn the Keynote Session over to Mr. Joseph Lamonica, Chief of the Health Division, Office of Coal Mine Safety and Health, Mine Safety and Health Administration of the Department of Labor. Mr. Lamonica has served as co-chairman of these institutes since their development. It is my pleasure, Joe.

Joseph A. Lamonica - Welcome to all of you. It's nice seeing some familiar faces and some new faces this year. I think this large turnout is an indication that the efforts of the Advisory and Planning Committee have become fruitful in offering a fine program.

Having introduced our first two Keynote Session speakers, I'm going to turn the session back to Bill Foreman.

William E. Foreman - Before our coffee break this morning, I would like to make a few remarks concerning the Ladies' Program. The Ladies' Program for Thursday includes a luncheon and fashion show. It is necessary to know how many wives plan to attend the luncheon by 11:00 this morning. Mrs. Shaw, hostess for the Ladies' Program, would like to request that wives intending to attend the luncheon sign up during the coffee break at the front desk in the lobby. Registration for the Ladies' Program is scheduled for after the luncheon, but it will be of help if Mrs. Shaw can make a count this morning for tomorrow's luncheon and fashion show.

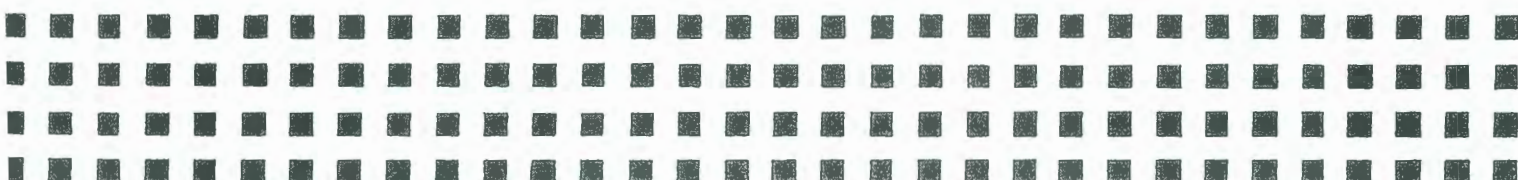
Ladies and gentlemen. Let's continue our program of the Keynote Session. The Bureau of Mines jointly sponsors our annual institutes. Dr. David Forshey, Acting Chief for the Division of Mining Research for Health and Safety, serves as co-chairman of the Institute. I am pleased to introduce Dr. David Forshey.

David R. Forshey - Good morning, ladies and gentlemen. I am pleased for the opportunity to welcome you to this year's Institute. The Bureau of Mines is proud to co-sponsor with MSHA and VPI & SU this annual series of meetings on coal mine health, safety and research. We trust you will find the 1978 proceedings to be stimulating and productive.

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