Opening Session Remarks by Bruce G. Macklin
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Buenos días and good morning. It's a pleasure to be with you today.

I welcome this opportunity to discuss the wide variety of career paths and opportunities available to those of you who are considering a future in science, engineering and technology.

And I am especially pleased to represent Exxon Mobil Corporation at an event that focuses attention on the important role that Hispanic scientists and engineers will play in the global economy of the 21st Century.

Both as pioneers in technology's new frontiers, and as participants in America's continued economic prosperity, tomorrow's Hispanic scientists and engineers will remain indispensable to our nation's future.

Many of you will one day go on to distinguished careers in one of these technical disciplines.

And whether you eventually work for industry, government or as a teacher to the scientists and engineers of the next generation, the challenges and opportunities that await you are unlike any in world history.

To better appreciate just how far we have come in the past 100 years, we need only consider the slow progress of technology in the centuries that came before.

Our forebears did without sugar until the 13th Century, without coal fires until the 14th Century, without buttered bread until the 15th Century, without coffee and tea and soap until the 17th Century, without gas and matches and electricity until the 19th Century, and without television and computers and plastics until the 20th Century.

By contemporary standards of technology, even our most recent ancestors were living in the dark ages.

Having said that, however, I think it is important to remember that modern-day science and engineering owes its existence to the hard-won achievements of the past.

Scientific progress is like climbing a ladder.

Each step upward is followed by a brief pause while the body regains its balance, and we can no more disregard the steps which have gone before than we could cut away the lower part of the ladder.

In fact, I don't know of anything better calculated to keep us humble than a visit to a museum.

When we see the household utensils, farming implements, and the clothing that our ancestors used, we wonder how on earth they got along.

We wonder, until we remember that these crude and clumsy things were once considered very modern.

Each generation starts to build where the previous one left off.

A hundred years from now our cars and planes and computers — and many other things that we think are miraculous — will be shown in museums to the amusement of our descendants.

But as we face the future, we cannot take our past achievements for granted.

Are there grounds for optimism? You bet there are.

As a nation, we have long believed that the destiny of America was inseparable from education.

Now, we know a sterner truth.

Education, long the key to opportunity and fulfillment, is today also essential to our nation's economic well-being and scientific and technological leadership.

There is no easy way to excellence, no magic wand that can produce a trained and disciplined mind without the hard discipline of learning.

As the great mathematician, Euclid, put it, "There is no royal road to geometry."

The road ahead, to be sure, is a hard road — a road that we have never traveled before, a road full of obstacles.

But America has never faltered for long in the face of new challenges.

I remain an incurable optimist about the future of American science and engineering, and about the tremendous opportunities that await you.

The prophets of gloom — and there are plenty of them — always remind me of the 19th Century Boston merchant who predicted that the world would be plunged into darkness when whale oil ran out.

He didn't know about the oil that would be discovered in Texas — or about a man named Thomas Edison, who would invent the incandescent light bulb.

We live in an age notable for the extent to which the ordinary affairs of people everywhere are dependent upon the discoveries of science, developed and applied by engineering for the use and convenience of all the world's people.

For tomorrow's scientists and engineers — and for each of you here this morning, whatever you age — that spells excitement, intellectual challenge, and the unparalleled adventure of discovery.

More and more, our national well-being will rely on your skills and the spirit of curiosity that you bring to your studies — whether you are still in high school or have already taken the next step of your journey in college.

You can also be confident about the increasing demand that will exist for your skills and talents as tomorrow's scientists and engineers.

Over the coming decades, it seems certain that a confluence of intellectual advances, technological breakthroughs, and economic forces will combine to shape a new model of what engineers and scientists are and what they do.

It will be a world in which scientists and engineers will bring new tools and insights to research and practice from other disciplines.

And it will be a future in which the opportunities available to you as a scientist or engineer will be limited only by your imagination, dedication, and willingness to work hard in pursuit of your dreams.

Like many of you, I began the journey in pursuit of my own dreams when I was in high school.

I tended to favor math and science courses, and also had a very keen interest in space science and flying.

My dad was a commercial pilot and my uncle a Colonel in the Air Force, so the flying was just a part of my upbringing.

So I aspired to be a pilot one day.

Unfortunately, when it came time for college and flight school, the airline industry was deregulating and many very experienced pilots were returning from the Vietnam War.

So I decided to pursue something that was more tied to my science and math studies and chose engineering.

I went to a small college in New York — Manhattan College — and graduated with a Bachelor of Science in Mechanical Engineering.

When I got out, the job market was pretty good for engineers, and I was looking for a company where I could apply my newly learned engineering skills.

One of my mechanical engineering classmates had interviewed with Exxon, and I became aware of the career opportunities.

From his recommendation, I sought an interview, made a visit to the Bayway Refinery, and began my career there some three decades ago.

My first assignment was to work as a utilities contact engineer.

Right away, I began to learn about the various refining processes and how all the pieces of the puzzle fit together in a large complex that was refining about 300 thousand barrels of crude oil each day.

Over the next 30 years or so, I received training and worked in a number of jobs at several locations before joining our chemical company and then taking on my current assignment as Vice President of Global Operations.

My career at ExxonMobil has been filled with the opportunity to learn, take on exciting and challenging responsibilities, and work with great people from around the globe.

It has been a rewarding career. In fact, it has truly been the opportunity of a lifetime to work for the world's leading energy and petrochemical company.

I'm especially proud to be associated with company that is a leader in hiring and promoting the best people, offering significant opportunities for career development, and recognizing and rewarding superior performance.

At ExxonMobil, we place a high value on education as a means of training tomorrow's leaders and opening new doors of opportunity for all Americans.

That is also why my company is a strong supporter of HESTEC — and of organizations such as the Society of Hispanic Professional Engineers and the Society for Mexican American Engineers and Scientists.

In our view, business has an enlightened self-interest in helping improve the foundations of our educational system.

Education is the key to the future of our industry and of our nation.

If we are to maintain our competitive position in international commerce, and our standard of living at home, we will need to rely increasingly on a well-educated work force.

That is why we must continue to improve educational opportunities for all student populations if we are to have a talented, technologically skilled work force capable of competing in an increasingly competitive global economy.

In the battle for economic leadership, you are the generation who will one day be on the front lines.

That is why we believe it is so very important for all those who you have the ability and drive to succeed.

Judging from the caliber of the students with us today, I am confident that you will make a significant contribution to American science and engineering.

I also believe that you will discover – as I have – that your decision to pursue a career as a scientist or engineer will be as exciting as it is rewarding.

As the next generation of leaders in the field of chemical engineering, it will fall to you to ensure that we remain a major contributor to our nation's economic growth and international competitiveness.

Let me conclude with what I consider to be a basic fact of our national life.

It has become common to refer to our own age and the 20th century as the American Century.

Given our abilities, ingenuity, and diversity as a people, and given the potential inherent in our system of government, there is no reason whatsoever why we cannot be entering upon the second American Century.

The basic resource upon which we build that technologically oriented century will be largely those young people who choose to enter careers in scientific or engineering disciplines.

Therefore, it is absolutely incumbent upon all of us to do everything possible to see that the education and training that Hispanics receive is worthy of their potential and their achievements as Americans.

And that, put simply, is the final message that I want to leave with you today.

True success in your life's work is not about how much money you make or your job title.

The only real measure of success is being good at what you do and really enjoying it.

Remember that no matter how smart you are, there is no substitute for hard work.

America's businesses understand that diversity is a strength, not a weakness.

We also know that the talents of all segments of the population must be harnessed if we are to compete successfully in the global economy.

And we know that the future has never been brighter and the opportunities have never been greater for tomorrow's Hispanic scientists and engineers.

In America, you can achieve anything, fulfill any dream, and master your own destiny.

The human mind has great power and potential, if only you will work hard and persevere without ceasing in the direction of your life's goals.

On behalf of all of us at ExxonMobil, I wish you the very best as you begin that exciting journey of life.

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