GEORGIA INSTITUTE OF TECHNOLOGY

TWO HUNDREDTH AND SIXTH
COMMENCEMENT EXERCISE

ALEXANDER MEMORIAL COLISEUM

May 6, 2000, 4:00 P.M.

(Faculty and President’s Party will assemble at 3:00 p.m. in the Hyder Room, second level of the Coliseum).

Processional
Ga Tech Brass Ensemble
Bucky Johnson & Ron Mendola

Master of Ceremonies
Dr. G. Wayne Clough, President

Reflection
Mr. Carlton O. Parker,
Director, YMCA

National Anthem
Georgia Tech Brass Ensemble

Commencement Address
Dr. Joseph Bordogna
Deputy Director, National Science Foundation

Presentation of Master's Degree Candidates
Dr. Charles Liotta, Vice Provost for Research and Dean of Graduate Studies
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Good afternoon, ladies and gentlemen. Will everyone please stand for the reflection by Mr. Carlton Parker, director of the YMCA, and remain standing for our national anthem.

Reflection

National Anthem

Please be seated. Once again, good afternoon. It is my pleasure to welcome everyone to Georgia Tech’s two-hundred sixth commencement.

This is not only the first commencement of a new century, it is also the largest in Georgia Tech history. Because of our conversion to semesters, we had no commencement in March. So today we are presenting a record 1,537 diplomas, including the largest group of women to graduate in Institute history. We decided to hold two ceremonies this spring so our students could participate in a personalized ceremony. Undergraduate degrees were awarded this morning and we have now come to the ceremony awarding graduate degrees.

This ceremony takes me back to when I completed my own PhD at U-Cal Berkeley, and the difference between then and now is greater than simply the years that have elapsed, because when I finished in 1969 more things than just academics were happening on Berkeley’s campus. To file my dissertation I had to design my travels around the demonstrations and figure out how to avoid pockets of tear gas.

But for all of this, I look back on my years in graduate school as some of the most intellectually stimulating and satisfying experiences of my life. Lots of great colleagues,
wonderful faculty, and all of us involved in creative research.

Today you are probably feeling a great sense of relief from the stresses of theses, dissertations, and comprehensive and oral exams. But for the rest of your life you will look back and value the experience of these years, and you will discover that graduate school will continue to shape your life in ways that you do not yet anticipate.

I can tell you from personal experience that the level of freedom to develop your mind and pursue your interests during graduate study is rare. The pure intensity of investigation of a tough problem for days and weeks at a time and finding a solution, is intoxicating. And, if you are like me, the friends you made during this time will be friends all your life long.

In addition to the research and scholarship of graduate school, we also hope that as you leave Georgia Tech, you carry with you vivid memories of this Institute and its traditions. Memories of the Ramblin’ Wreck Parade or being caught up in the roar of the basketball crowd here in the Thriller Dome. We hope you will always remember that “the Hill” has nothing to do with our nation’s Capitol, and that the Rose Bowl Field is not in California, but in Georgia. And that you have learned to appreciate the a Varsity chili dog and Junior’s specialty, a great hamburger and an order of fries.

We hope and believe that this day does not mark the end of your education, but is merely a milestone in a lifelong quest to open and enlarge your mind and to contribute to our understanding and knowledge of the world in which we live.

Winston Churchill once said, “We make a living by what we get. We make a life by what we give.” As you leave Georgia Tech, I encourage you to continue to use your intellect and ability in the service of society. That is what will give meaning to your life.

Today, as we celebrate the successful conclusion of one chapter of your lifelong education,
it is important to acknowledge that you have not done it alone. With you every step of the way – at least in spirit – were your parents and your spouses, who made all the difference in your success. The faculty and staff of Georgia Tech and our graduates would like to thank you for your support. Would our parents and spouses please stand so that we may recognize you.

(LEAD APPLAUSE)

Additional support for our graduates came from the Georgia Tech faculty. Now there may have been times when you got a paper or a test back with lots of red ink on it, and you had temporary doubts, but your graduation today is a sign that was just a form of constructive criticism. So now is the time for all of our graduates to say thanks to all the help they received over time from the faculty and I would like to ask the entire faculty present today to rise and be recognized.

(LEAD APPLAUSE)

Of course, those who deserve the most recognition on this momentous day are the graduates, who entered this room as students and who will leave as Georgia Tech alumni. Would all of you please stand so that we may recognize you and your achievement?

(LEAD APPLAUSE)

And now it gives me pleasure to introduce our distinguished graduation speaker. Some 200 years ago Ben Franklin said, “An investment in knowledge pays the best interest.” And he was right. Scientific and engineering research advances inject billions of dollars into the economy and create hundreds of thousands of jobs.

Half of the fundamental research in the United States is conducted at universities. Much of the funding for it comes from the federal government, with fully 20 percent of that coming through the National Science Foundation. NSF is celebrating its 50th anniversary this year as an independent U.S. government agency that promotes fundamental research and
education in science, engineering, and math.

Here at Georgia Tech, NSF funds about $25 million worth of research a year, including Engineering Research Centers like the Center for the Engineering of Living Tissues, the Center for Low Cost Electronic Packaging, and the Mid-America Earthquake Center.

Dr. Joseph Bordogna is the deputy director and chief operating officer of NSF, and is also actively involved with the President’s National Science and Technology Council. In addition to serving at NSF, Dr. Bordogna has been a practicing electrical engineer in private industry, a college professor, and a line officer in the U.S. Navy.

He was Alfred Fitler Moore Professor and dean of the school of engineering at the University of Pennsylvania before joining the staff of NSF. While at the University of Pennsylvania, he helped to found PRIME, which stands for Philadelphia Regional Introduction for Minorities to Engineering, and he was involved in K-12 education.

His own research has contributed to early laser communications systems, electro-optic recording materials, and holographic television playback systems. He is a fellow of the American Association for the Advancement of Science, the American Society for Engineering Education, the Institute of Electrical and Electronics Engineers, and the International Engineering Consortium.

It has been my pleasure to have known Joe for over a decade, both from personal relationships and through my admiration for his insightful and thoughtful writings about engineering education. He is one of the unique people who has taken his philosophies into action in creating new support programs for young faculty and educators, first in his role as head of the NSF engineering directorate, and now as Deputy Director for all of NSF.

Today he and Director Rita Colwell have developed new strategic directions for the
Science Foundation for a new age, and have worked diligently to develop congressional support for the programs. Those of us in the university community, and indeed all Americans, are in Joe’s debt for his long commitment to public service and engineering education.

It is my great pleasure to present to you Dr. Joseph Bordogna.

(DR. BORDOGNA’S REMARKS)

Thank you, Dr. Bordogna. As a token of our appreciation for taking time to speak today and in recognition of the contributions of NSF to university research, I would like to present you with this special gift.

(PRESENT GIFT)

We come now to the time that all of you have been waiting for – the conferring of degrees. At this time the candidates for the master's degree will be presented by Vice Provost and Dean of Graduate Studies Charles Liotta.

(Dr. Liotta)  Will the candidates for the master and Master of Science degrees please rise?

(Dr. Liotta)  Mr. President, I have the honor of presenting to you for the master's and master's of science degrees those candidates who have completed all requirements for those degrees.

(Dr. Clough)  Upon the recommendation of the faculty of the Georgia Institute of Technology and by authority of the Board of Regents of the University System of Georgia, I confer upon each of you the master's degree, with all the rights, privileges, and responsibilities
We shall now present the diplomas. Will the faculty marshals please bring the candidates forward.

(Dr. Thomas presents diplomas, Dr. Clough shakes hands.)

Please join me in congratulating these master's graduates.

(LEAD APPLAUSE)

Dr. Liotta will also present the candidates for the doctor of philosophy degree.

Will the candidates for the doctoral degrees please rise.

Mr. President, I have the honor of presenting to you for the doctoral degrees those candidates who have completed all requirements for those degrees.

Upon the recommendation of the faculty of the Georgia Institute of Technology and by authority of the Board of Regents of the University System of Georgia, I confer upon each of you the degree of doctor of philosophy with all the rights, privileges, and responsibilities thereunto appertaining.

Congratulations on your earning of Georgia Tech's highest academic degree. Will you please come forward and receive your diplomas.

(Dr. Liotta presents diplomas, Dr. Clough shakes hands, and major professors step on stage to hood their students.)
(Dr. Clough) Please join me in congratulating these doctoral graduates.

*(LEAD APPLAUSE)*

(Dr. Clough)

Near the close of the 1800s, a young man sent a sheaf of poems to the foremost American writer of the day to be critiqued. Ralph Waldo Emerson read the manuscript, which was entitled “Leaves of Grass” and was destined to become one of America’s best-loved volumes of poetry. And he wrote back to the young Walt Whitman: “I greet you at the beginning of a great career.”

And as I look out over this sea of newly minted Georgia Tech alumni, I echo his words. I greet you at the beginning of a great career.

As of this moment, you are no longer merely graduate students. You are the scholars and technological leaders of tomorrow… and the role models for future generations of aspiring scientists and engineers.

And to start you off on that path, I am pleased to introduce Allen Robertson, class of 1969 and president of the Georgia Tech Alumni Association, who will welcome the members of this graduating class into the fellowship of Tech alumni.

(Mr. Robertson) Induction of graduates into the Alumni Association...

(Dr. Clough)

I would like to express my appreciation to the Georgia Tech Music Department for their participation in our program this morning. Thanks also to Dr. Bill Johnson for the calling of graduates’ names. And many thanks go to all my associates for arranging this important event.
At this time the Georgia Tech Chorale will lead in the singing of the alma mater, and the faculty recessional will follow immediately. The graduates and audience are requested to remain standing for the faculty recessional, then I invite all of you to join in the singing of the “Ramblin' Wreck,” which will accompany the student recessional.

Thank you for your attendance this afternoon.

(At the end of the alma mater, the mace bearer will be the first one off the stage. Dr. Clough will immediately follow then the remainder of the President’s Party, Deans, and Faculty.)