

GEORGIA INSTITUTE OF TECHNOLOGY
TWO HUNDREDTH AND TWENTY EIGHTH COMMENCEMENT EXERCISE
ALEXANDER MEMORIAL COLISEUM

August 4, 2007, 3:00 P.M.

(Faculty and President's Party will assemble at 2:00 p.m. in the Hyder Room, second level of the Coliseum).

Processional	Georgia Tech Commencement Ensemble
Master of Ceremonies	Dr. Gary B. Schuster, Provost and Executive Vice President for Academic Affairs
Reflection	Rev. Chris Hannum Episcopal Campus Ministry
National Anthem	Georgia Tech Commencement Ensemble
Commencement Address	Dr. Mostafa A. El-Sayed Julius Brown Chair and Regents Professor, Director of the Laser Dynamics Lab
Presentation of Doctoral Degree Candidates	Dr. Charles Liotta, Vice Provost for Research and Dean of Graduate Studies
Conferring of Degrees	Dr. Schuster

Presentation of
Master's Degree Candidates

Dr. Charles Liotta

Conferring of Degrees

Dr. Schuster

Induction into
Alumni Association

C. Meade Sutterfield, Class of 1972
Chair, Georgia Tech Alumni Association

Alma Mater

Georgia Tech Commencement Ensemble

Faculty Recessional

Georgia Tech Commencement Ensemble

"Ramblin' Wreck"

Graduates and audience

August 4, 2007 - Ceremony Script (MASTER'S & PHD CEREMONY)

(Dr. Schuster)

Good afternoon, ladies and gentlemen. Will everyone please stand for the reflection by Rev. Chris Hannum, from the Episcopal Campus Ministry at Georgia Tech, and remain standing for our national anthem.

(Rev. Chris Hannum)

Reflection

(Commencement Ensemble)

National Anthem

(Dr. Schuster)

Please be seated. Once again, good afternoon. It is my pleasure to welcome everyone to Georgia Tech's two-hundred twenty eighth commencement exercises. Today we are celebrating with the individual recognition of just over 800 graduates. Fortunately for you, we have already awarded some 375 bachelor's degrees at the undergraduate ceremonies this morning. This afternoon we are focused on awarding the graduate degrees.

This ceremony takes me back to when I completed my own PhD. The difference between then and now is greater than simply the years that have elapsed, because when I finished in 1971 more things than just academics were happening on campuses around the country. Nevertheless, 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 stress 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 investigating a tough problem for days and weeks at a time and finding a solution, is intoxicating.

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. I know that when you got reports or tests back you did not always feel loved by the faculty, but today they are here to testify that you earned their respect. So now is the time for all of our graduates to say thanks for all the help they received 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)

The highest honor that Georgia Tech can bestow upon any member of its faculty is the Distinguished Professor Award, which is presented each spring to a professor whose teaching, research, and mentoring of students have been especially outstanding. It is a Georgia Tech tradition that the faculty member who has been chosen as Distinguished Professor has the honor of delivering the summer commencement address. This year, the

recipient of that high honor is Dr. Mostafa El-Sayed. It is a special pleasure for me to introduce Dr. El-Sayed because he is not only my colleague in the School of Chemistry but also a dear personal friend of many years.

Dr. El-Sayed completed his undergraduate work in his home country of Egypt, and then earned his Ph.D. at Florida State University. He was on the faculty at Harvard, Yale, CalTech, and UCLA before he came to Georgia Tech in 1994. What attracted him here to Tech after serving at so many prestigious universities, was our openness and encouragement to engage in a wide array of genuinely interdisciplinary research. And it did not take long for Georgia Tech to feel the impact of his leadership. He came to us as the Julius Brown Professor of Chemistry and Biochemistry, which is one of Georgia Tech's oldest endowed chairs. And he came specifically to establish the Laser Dynamics Lab, of which he is the director. That, he says, is when the future began.

The Laser Dynamics Lab allowed Dr. El-Sayed to work with faculty and students from a wide variety of disciplines to study and energize chemicals and materials. Energy is an important dynamic in chemical reactions. And because lasers are a very focused energy source, they can help scientists understand and transform materials at the nano-level.

Lasers opened the door for Mostafa El-Sayed to enter the world of nanoscience, and he stepped through that door with great enthusiasm. His work ranges from exploring new materials for the next generation of computers to pioneering new ways to detect and potentially treat cancer. He is collaborating with his son, a professor at the University of California, San Francisco, in ground-breaking research using nanorods made of gold that bond with cancer cells. The gold nanorods irradiate the cancer cells so they can be identified with a simple microscope by their luminescence. In the process the cells are weakened, enabling them to be destroyed by low-powered lasers. The goal is a medical technique that identifies cancer cells and paves the way for them to be destroyed without causing damage to surrounding tissue.

Ground-breaking work like this earned Mostafa El-Sayed the 2002 Irving Langmuir Award in Chemical Physics, the highest honor of both the American Chemical Society and the American Physical Society. He is also Georgia Tech's first member of the National Academy of Sciences, and he is an elected Fellow of the American Association for the Advancement of Science, the American Academy of Arts and Sciences, and the American Physical Society.

He has been a visiting scholar at the University of Paris and the Technical University of Munich. He has also served as editor-in-chief of the *Journal of Physical Chemistry*. He has many more honors and awards, and the list of his publications is too long to recount here.

He has been a leader and role model here at Georgia Tech for more than a decade, conducting innovative research and helping us make the educational experience we offer more dynamic. He has passed the age when most people retire to play golf or sit in a rocking chair on the porch sipping iced tea. But he still keeps a vigorous work and teaching schedule, and his enthusiasm and devotion to his students and his research continue to be an inspiration to his younger colleagues, including me.

(DR. EL-SAYED'S REMARKS)

Thank you, Dr. El-Sayed. As a token of our appreciation for taking time to speak and enduring the rigors of Georgia Tech's commencement day, 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 your degrees. Dr. Charles Liotta, Senior Vice Provost for Research and Innovation, will present the candidates for the doctor of philosophy degree.

(Dr. Liotta) Will the candidates for the doctoral degrees please rise.

(Dr. Liotta) Mr. Provost, I have the honor of presenting to you for the doctoral degrees those candidates who have completed all requirements for those degrees.

(Dr. Schuster) 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. Schuster shakes hands, and advisors step on stage to hood their students.)

(Dr. Schuster) Please join me in congratulating these doctoral graduates.
(LEAD APPLAUSE)

(Dr. Schuster) Dr. Liotta will now present the candidates for the Master's degree.

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

(Dr. Liotta)

Mr. Provost, 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. Schuster)

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 thereunto appertaining.

(Dr. Schuster)

We shall now present the diplomas. Will the faculty marshals please bring the candidates forward.

(Dr. Liotta presents diplomas, Dr. Schuster shakes hands.)

(Dr. Schuster)

Please join me in congratulating these master's graduates.

(LEAD APPLAUSE)

(Dr. Schuster)

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... the role models for future generations of aspiring scientists and engineers.

I would like to offer my personal congratulations on your accomplishment in attaining a degree from one of the top institutions of higher education in the nation. Be assured that your degree from Georgia Tech will open doors for you.

You have helped Tech achieve the highest national rankings of its storied history. So you can see that you are leaving our campus with a degree that means something special. Still, the pace of change today means that education has become a “K to Gray” activity. Anyone who does not continue to learn will be left behind, so I encourage you to never stop learning.

You are primed to be the technological leaders of tomorrow. Nurture your talents, balance your career with your family and service to your community, and you will become one of those Tech graduates we read about and brag about as great success stories. I wish you all the best in the future!

(LEAD APPLAUSE)

To induct our graduates into this special group, I would like to present Mr. C. Meade Sutterfield, class of 1972. He is president and CEO of SSPCS Corporation, a holding company that he co-founded after he sold the first company he founded to Nextel Communications. As this year’s chair of the Georgia Tech Alumni Association, Mr. Sutterfield will welcome the members of this graduating class into the fellowship of Tech alumni.

(Mr. Sutterfield)

Induction of graduates into the Alumni Association.

(Dr. Schuster)

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. Britta Kallin for calling the graduates' names. And many thanks to all my associates for arranging this important event.

At this time, the Georgia Tech Commencement Ensemble will lead us in the alma mater, followed immediately by the faculty recessional. The graduates and the 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. Schuster will follow immediately, then the remainder of the President's Party, Deans, and Faculty.)