MATERIALS SCIENCE AND ENGINEERING
DEPARTMENT GRADUATION CEREMONY

May 8, 2026

James B. Hunt Jr. Library
Hunt Auditorium

Order of Events

Processional	Bachelor's, Master's, Doctoral Candidates and Faculty
Welcome	Professor Donald Brenner Department Head Kobe Steel Distinguished Professor
Presentation of Bachelor's Candidates	Professor Yaroslava Yingling Associate Department Head Director of Undergraduate Programs Kobe Steel Distinguished Professor
	Hillary Stone, M.S. Academic Advisor
Undergraduate Student Speaker	Apolo Antonio Tobias Domingos '26
Senior Design Recognition	Professor Sharon Thorne Teaching Professor
Undergraduate Awards	Professor Yaroslava Yingling
Presentation of Master's Candidates	Professor Douglas Irving Director of Graduate Programs University Faculty Scholar Alumni Distinguished Undergraduate Professor
Presentation of Doctoral Candidates	Professor Douglas Irving
Graduate Student Speaker	Ramesh Lakshmi-Ratan, Ph.D. Master of Nanoengineering
Closing Remarks	Professor Donald Brenner

You are cordially invited to a reception at the conclusion of this program on the first floor atrium of Engineering Building I.

A Brief History of NC State MSE

The Department of Materials Science and Engineering at North Carolina State University traces its origins to 1923 with the creation of the Engineering Experiment Station — a cross-disciplinary hub for research and extension. Its academic roots grew from early School of Engineering programs in ceramics, mining and geology, which shaped materials-focused education at NC State.

Founded on May 28, 1923, under Dean Wallace Riddick, the School of Engineering quickly established leadership in ceramics. Under A. F. Greaves-Walker, the Department of Ceramic Engineering became the first of its kind in the American South, supporting North Carolina's ceramic industries. A dedicated Ceramics Building opened in 1926, and nearly half of the Engineering Experiment Station's publications from 1923 to 1946 focused on ceramics research.

The name of the department evolved over time to reflect shifts in the field:

- 1924: Department of Ceramic Engineering
- 1954: Department of Mineral Industries (merging ceramic, geological and metallurgical engineering)
- 1969: Department of Materials Engineering (shift toward materials properties and performance)
- 1986: Department of Materials Science and Engineering (integrating science and engineering)

Growth accelerated in the late 20th century through expanded research, facilities and interdisciplinary collaboration, positioning the department as a leader in modern materials innovation.

Undergraduate Student Speaker
Apolo Domingos



Apolo Domingos is a summa cum laude University Honors student pursuing a technical sales specialist role after graduation. Having grown up attending leadership schools in Raleigh, he aims to continue blending leadership and engineering, as he did at NC State.

During his undergraduate career, Apolo conducted research, completed multiple internships, coached youth soccer and worked at his family's restaurant.

He is eager to begin this next chapter and will cherish the memories made during his time at NC State.

Graduate Student Speaker
Ramesh Lakshmi-Ratan, Ph.D.



Ramesh Lakshmi-Ratan is a non-traditional graduate student in the Master of Nanoengineering program with a concentration in biomedical sciences.

He returned to academia after retiring as CEO and vice chairman of Bell and Howell. His career spans leadership roles at Pitney Bowes, Data & Marketing Association, and VocalTec Communications, as well as early technical and management positions at Nokia Bell Labs, where he helped launch new communications technologies.

Ramesh holds degrees in mathematics, physics and chemistry, along with graduate training and a Ph.D. in operations research. He began his career in academia as an assistant professor at the University of Wisconsin-Madison before moving into industry.

He now studies the integration of physical and digital systems, with a focus on how technology connects people, data and real-world applications.

Bachelor of Science
Materials Science and Engineering

Henna Deliah Aguilera
Eva Marie Boyce *
Tamia Michelle Burgess
Lucienne Sophie Chabaneix *** [B]
Dalia Mona Akamine Coffman ** [B]
Ava Brynn Darling * [B]
Apolo Antonio Tobias Domingos *** ‡‡
Lauren Amelia Dunlap * ‡
Stephanie Euceda Trujillo [B]
Kaden A. Figuerres [B]
Cooper Matthew Gandolfo
Alex Gilbert *** †
Olivia Nicole Haas ** [B]
Grace Ella Harvey *
Taylor Caroline Hildreth [B]
Colton King *
Alexander P. Lowell
Nicholas Allan Luke *
Jack Leonard Maggiore **
Claudia Lizzette Martinez-Martinez **
Cordelia Nhi Marie McKelvy **
Grace Anna Meyer **
Brayden Ashton Moore [B]
Anthony Landon Ottone ***
Kaden Panico ***
Vidhi Satyam Patel [B]
Joshua Gabriel Peacock *
Dennis Gene Reed III
Rachel Elizabeth Register
Jackson Davis Rivituso
Elijah James Rodrigues ***
Morgan F. Rooney
Reilly Jeanne Sellers **
Taylor Jordan Sharp *
Benjamin Andrew Sheldon ***
Jackson Cole Sitler
Nathaniel Evan Somppi
Stephen Thomas Stewart *
Nicholas Thaxton ***
Jonathan Michael Till **
Sebastian Zaatini *

Master of
Materials Science and Engineering

Emmanuel Omosegunfunmi Aikulola
Chukwuemeka Augustine
Sina Dehghan Toranposhti
Reza Ghanbari ShokraliKandi
Mahmoud Hawary
Konnor Louis Koons
Joshua Sawyer McClure §
Liam McWhorter §
Mohammad Shams Noor
Yusen Pei
Swaroop Saralkar
Abishec Sundar Senthilvel
Sarah June Trantham
Tajah Christine Trapier
Eduard Zahariev

***3.75 to 4.0 GPA - Summa Cum Laude | **3.5 to 3.749 GPA - Magna Cum Laude | *3.25 to 3.499 GPA - Cum Laude
† - Valedictorian | ‡ - Scholars Program | ‡‡ - University Honors
§ - Accelerated Bachelor's/Master's | [B] - Biomaterials Concentration

Master of
Nanoengineering

Michael Dayan
Ramesh Lakshmi-Ratan

Master of
Science

Grace Scott Kiel §
Phase Evolution in the x($BiFeO_3$) – (1-x)($PbTiO_3$) System Characterized through Advanced in situ X-Ray Diffraction Techniques
Under direction of Professor Jacob Jones

Diego Leonardo Valenzuela Espinoza
Spin Attributes of Point Defects in MgO for Quantum Applications
Under direction of Professor Douglas Irving

Doctor of Philosophy
Materials Science and Engineering

Nathanael Adam Edward Brown
Development of Functional Hydrogel Systems for Applications in Polymer Synthesis and Organophosphate Hydrolysis
Under direction of Professor Jan Genzer (CBE)

Masahiro Kamiyama
On the Surface-Mediated Phenomena during MOCVD Growth of III-Nitrides
Under direction of Professors Zlatko Sitar and Ramón Collazo

Cristyan Eduardo Quiñones García
Aluminum Nitride Devices For Extreme Environment Electronics
Under direction of Professors Zlatko Sitar and Ramón Collazo

Benjamin John Sekely
Development of SiC Low Gain Avalanche Detectors and Understanding of GaN Surface Quantum Well Surface Treatment
Under direction of Professor John Muth (ECE)

Dhanush Udayashankara Jamadgni
Design of GT-based Solid Lubricants
Under direction of Professor Martin Thuo

2025-2026

Senior Design Projects

Kaden A. Figuerres, Dennis Gene Reed III, Elijah James Rodrigues, Jackson Cole Sitler

Material and Process Optimization of Glue Joint on Five-Piece Door Frames

Industry partnership with American Woodmark.
Advised by Paul Steinhoff and Professor Franky So.

Lucienne Sophie Chabaneix, Lauren Amelia Dunlap, Morgan F. Rooney, Jonathan Michael Till

Characterizing and Improving Marble Sink Top

Industry partnership with American Woodmark.
Advised by John Calow, Jake Leavy, Paul Steinhoff and Professor Yin Liu.

Cooper Matthew Gandolfo, Jackson Davis Rivituso, David Szympruch, Nicholas Thaxton

Eliminating Grain Size Banding from A286 Iron-Nickel-Chromium Super Alloy

Industry partnership with ATI Specialty Materials.
Advised by Madeline Schroeder, Kristen Namminga and Professor Kinga Unocic.

Rachel Elizabeth Register, Taylor Jordan Sharp, Benjamin Andrew Sheldon, Stephen Thomas Stewart

Carbon Particle Size and Tube Structure Influence on Conductivity

Industry partnership with Eaton.
Advised by James Hicks and Professor Ruijuan Xu.

Dalia Mona Akamine Coffman, Stephanie Euceda Trujillo, Grace Ella Harvey, Grace Anna Meyer

Temperature and Cyclic Compression Study of Rubber Rollers

Industry partnership with Georgia Pacific.
Advised by Ryan Carignan and Professor Martin Thuo.

Henna Deliah Aguilera, Eva Marie Boyce, Ava Brynn Darling, Nathaniel Evan Somppi

Bio-Calcium Oxide Assisted Ferro-Silicon Magnesium for Magnesium Retention in Ductile Cast Iron

Industry partnership with Hallman Foundry.
Advised by William Vanness, Melanie Folks and Professor Bharat Gwalani.

Tamia Michelle Burgess, Olivia Nicole Haas, Brayden Ashton Moore, Vidhi Satyam Patel

Barrier Coating Strategies for Moisture Ingress Prevention in Electronic Housings

Industry partnership with Intake Health.
Advised by Brian Bender and Professor Aram Amassian.

Alexander P. Lowell, Claudia Lizzette Martinez-Martinez, Kaden Panico, Sebastian Zaatini

Additive Manufacturing of Crack-Resistant Molybdenum

Industry partnership with Kymera International.
Advised by Tom Pelletiers and Professor Rajeev Gupta.

Apolo Antonio Tobias Domingos, Colton King, Joshua Gabriel Peacock, Reilly Jeanne Sellers

Oxidation Kinetics of Tin vs. Silver Coatings for Electrical Contacts

Advised by Professors Sharon Thorne and Veronica Augustyn.

Alex Gilbert, Nicholas Allan Luke, Cordelia Nhi Marie McKelvy, Anthony Landon Ottone

Investigation of Oxide Layer Growth and Interface Characterization on Silicon Carbide for Semiconductor Device Applications

Industry partnership with Wolfspeed.
Advised by Simon Bubel and Professor Raymond Unocic.

Guest Information

Reception
You are cordially invited to a reception at the conclusion of this program on the first floor atrium of Engineering Building I.

@NCStateMSE
Follow the NC State Department of Materials Science and Engineering on social media to stay up to date on the department and graduates.

Photography
Professional photographers will be present to capture key moments of the ceremony, including each graduate receiving their ceremonial scroll, as well as candid photos throughout the procession and event. Photos will be available for viewing and download within a few weeks by scanning the QR code or by visiting **mse.ncsu.edu/graduation**.

Guests are welcome to take photos during the ceremony; however, we kindly ask that you remain mindful of others and avoid blocking the view of those seated nearby.

Video
The ceremony will be recorded. That full video of the ceremony will be available for free on the MSE website and YouTube in perpetuity.

Accessibility Services
Student ambassasdors and departmental staff are available to assist our guests with mobility concerns. If you need assistance, please notify the neast member of our staff.

FACULTY

Aram Amassian
Veronica Augustyn
Nina Balke
Donald Brenner
Ramón Collazo
Maude Cuchiara
Jerry Cuomo
Alexey Gulyuk
Rajeev Gupta
Bharat Gwalani
Douglas Irving
Jacob Jones
Albert Kwansa
Thomas LaBean
Yin Liu
Jagdish Narayan
Shelby Pillai
Martin Seifrid
Zlatko Sitar
Franky So
Richard Spontak
Sharon Thorne
Martin Thuo
Joseph Tracy
Raymond Unocic
Kinga Unocic
Ruijuan Xu
Yaroslava Yingling

STAFF

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Wendy Cox
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Maizie Woodall

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