

# Department of Chemical and Biomolecular Engineering

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Like the field of chemical engineering itself, our department's work transcends disciplinary lines. Our students, faculty, and alumni work with colleagues across the academic and engineering spectrum in fields such as biotechnology, polymers, nanotechnology, energy and environmentally responsive processes, and biomanufacturing. Our students learn by doing in cutting-edge labs and facilities. They work hand-in-hand with industry and government partners to get things done, from sponsored research that advances our understanding of the world to senior design projects that tackle real-life problems. When they graduate, our students are ready for the next step: roughly 85% go into the chemical or pharmaceutical industries, and 15% pursue graduate or professional studies.

## Department Highlights:

- Undergraduate students have the option to pursue concentrations within the curriculum, including Biomolecular, Biomanufacturing, Nanoscience, and Sustainable Engineering, Energy, and the Environment. We also offer a departmental Honors Program.
- The American Institute of Chemical Engineers (AIChE) student chapter has been consistently recognized as one of several Outstanding Chapters for the last 25 years.
- Almost 20% of NCSU CHE students have a university, college, or departmental scholarship.
- Many internship and co-op opportunities are available, with almost 15% of our students completing a co-op.

For more information about our department, including contact information, visit our website (<https://www.cbe.ncsu.edu/>).

## Department of Chemical and Biomolecular Engineering

North Carolina State University  
Campus Box 7905  
Raleigh, NC 27695-7905

## Contact

### Dr. Sindee Simon

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Raleigh, NC 27695-7905  
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## Faculty

### Department Head

Sindee Simon, *Distinguished Professor and Department Head*

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## Professors

Milad Abolhasani, *ALCOA Professor, University Faculty Scholar & Director of Graduate Programs*

Ruben Carbonell, *Frank Hawkins Kenan Distinguished Professor*

Michael Dickey, *Camille and Henry Dreyfus Professor & University Faculty Scholar*

Peter Fedkiw, *Alumni Distinguished Graduate Professor*

Jan Genzer, *S. Frank and Doris Culberson Distinguished Professor*

Harvinder Gill

Christine Grant

Carol Hall, *Worley H. Clark, Jr. Distinguished University Professor in Engineering*

Jason Haugh

Robert Kelly, *Alcoa Professor, Director of NCSU Biotechnology Program*

Saad Khan, *INVISTA Professor*

Fanxing Li, *Thomas M. Clausi Distinguished Professor in Chemical Engineering & University Faculty Scholar*

Gregory Parsons, *Celanese Acetate Professor*

Balaji Rao

Rich Spontak, *Distinguished Professor of Chemical & Biomolecular Engineering*

Orlin Velev, *S. Frank and Doris Culberson Distinguished Professor*

Phil Westmoreland

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## Research Professor

Gregory McKenna

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## Associate Professors

Lilian Hsiao, *University Faculty Scholar*

Albert Keung, *University Faculty Scholar & Goodnight Distinguished Scholar*

Stefano Menegatti, *University Faculty Scholar*

Adriana San Miguel

Erik Santiso, *University Faculty Scholar*

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## Associate Research Professors

Cristiana Boi

Kirill Efimenko

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## Assistant Professors

Nathan Crook

Artem Rumyantsev

Wentao Tang

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## Assistant Research Professor

Luke Neal

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## Alcoa Scholar

Qingshan Wei

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## Teaching Professors

Lisa Bullard, *Teaching Professor & Director of Undergraduate Studies*

Matthew Cooper

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## Teaching Assistant Professor

Hassan Golpour

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## Adjunct Professors

Anthony Andradý

Erich Müller

Blake Rasor

Malgorzata Sliwinskia-Bartowiak

James Trainham

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## Adjunct Associate Professors

Orlando Rojas

Krassimir Velikov

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## Adjunct Assistant Professor

Alexandra Easley

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## Adjunct Teaching Professor

Leah Granger

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## Emeritus Faculty

Joseph Desimone, *William R. Kenan Jr. Distinguished Professor in Chemistry and Chemical Engineering*

Richard Felder, *Hoechst Celanese Professor*

Michael Flickinger, *Professor*

Keith Gubbins, *W.H. Clark Distinguished University Professor*

Hal Hopfenberg, *Camille Dreyfus Professor*

H. Henry Lamb, *Professor*

Phooi Lim, *Professor*

Steven Peretti, *Associate Professor*

Hubert Winston, *Associate Professor*

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## Plans

- Biomanufacturing (Certificate) (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/biomanufacturing-certificate/>)
- Biomanufacturing (Certificate) (For Post-Baccalaureate Students) (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/biomanufacturing-certificate-post-baccalaureate/>)
- Biomanufacturing (Minor) (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/biomanufacturing-minor/>)
- Chemical Engineering (BS) (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-bs/>)
- Chemical Engineering (BS): Biomanufacturing Sciences Concentration (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-bs-biomanufacturing-sciences-concentration/>)
- Chemical Engineering (BS): Biomolecular Concentration (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-bs-biomolecular-concentration/>)
- Chemical Engineering (BS): CHE/TE Dual Major (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-bs-textile-dual-major/>)
- Chemical Engineering (BS): Honors Concentration (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-bs-honors-concentration/>)
- Chemical Engineering (BS): Nanoscience Concentration (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-bs-nanoscience-concentration/>)
- Chemical Engineering (BS): Sustainable Engineering, Energy, and the Environment (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-bs-sustainable-engineering-energy-environment/>)
- Chemical Engineering (Minor) (<http://catalog.ncsu.edu/undergraduate/engineering/chemical-biomolecular/chemical-engineering-minor/>)
- Paper Science and Engineering (BS): Dual Major (<http://catalog.ncsu.edu/undergraduate/natural-resources/forest-biomaterials/paper-science-engineering-bs-dual-major/>)