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GREETINGS FROM NORTHWESTERN ENGINEERING

Creating and maintaining a world-class research and education system requires both conviction and agility. We must invest deeply in our existing strengths while also placing bold bets on what the future demands. This issue of the magazine highlights just a few of the ways we do that at Northwestern Engineering.

Minerals such as copper, lithium, and graphite are essential to many of the technologies we use today, but meeting demand requires innovative approaches for both acquiring and preparing them for use. From inventing new ways to recover or reuse minerals to exploring methods for quantifying and reducing the pollution that fuels local opposition to mines, our faculty are pioneering ways to build a supply to meet the needs of today and tomorrow.

In this issue, you'll also see how a once-emerging idea can, with sustained investment and vision, become a defining strength. In the early 2000s, synthetic biology was a nascent field. We saw its promise early and chose to lead—expanding our faculty and launching the Center for Synthetic Biology in 2016 to push the boundaries of how biological systems can be engineered to perform entirely new functions. Since then, the center has produced new technologies, spurred several startups, and educated hundreds of students. I hope you'll read more about our successes in this area.

This same forward-looking mindset extends to how we educate. To meet the evolving needs of students, we have undergone a comprehensive redesign of our undergraduate core curriculum. Effective for incoming first-year students this fall, the new curriculum emphasizes data and statistics, programming, and entrepreneurial thinking. We have also launched a bachelor of science in engineering degree program and an AI major. I look forward to seeing how these changes enhance the experience of our students and prepare them not just for today's challenges, but for those to come.

Throughout this academic year, I have enjoyed connecting with many alumni and friends, and I'm continually inspired by our community. Our shared spirit of innovation and problem-solving propels us forward toward new horizons, and I hope you'll continue to be a part of this journey.

CHRISTOPHER A. SCHUH
Dean, McCormick School of Engineering and Applied Science

On the Cover
Northwestern Engineering researchers are discovering new sources and innovative techniques for gathering high-value minerals to meet growing demand. Read more on page 10.

Northwestern Engineering is published by the Robert R. McCormick School of Engineering and Applied Science, Northwestern University, for its alumni and friends.

Northwestern | McCORMICK SCHOOL OF ENGINEERING

Executive Director of Strategic Initiatives and Marketing: Kyle Delaney

Editorial Team: Christa Battaglia, Julianne Beck, Michelle Mohney, Brian Sandalow, Emily Ayshford

Produced by The Grillo Group, Inc.