

Your Input Needed: Emerging Tech for 2026

Gear Technology has always attracted a sharp and forward-thinking audience—engineers and engineer-adjacent professionals who not only enjoy reading about new developments but are often the ones driving them. As we look ahead to 2026, we want to hear from you: Which emerging technologies should MPMA spotlight in the coming year?

Over the years, I've had the privilege of facilitating conversations around some of the most exciting advancements in our industry. One of our earliest forays into emerging tech came in 2017, when metal 3D printing was still in its infancy. At the time, we invited a scientist from Oak Ridge National Laboratory to speak at the AGMA SRN event (now known as SNL). That moment marked the beginning of what has become a long-standing exploration into additive manufacturing.

Since then, we've showcased breakthroughs in gear and hob printing, highlighted successes in 3D-printed jigs and fixtures, and even explored Skuld's new forging technique. Most recently, we covered a case study where a company successfully repaired a gear using Directed Energy Deposition (DED) technology—something that would not have been expected a decade ago.

But additive isn't the only tech frontier we've explored.

The IIoT committee has tackled a range of timely topics from cybersecurity frameworks like CMMC to the implications of artificial intelligence on manufacturing workflows. Meanwhile, our Robotics committee has hosted presentations from four different new gearbox innovations—two of which have now entered production.

And the conversation is far from over.

In September, we hosted a joint session between the EV and Robotics committees to discuss the Hoop Drive, a new gearing concept developed by a cutting-edge inventor with potential implications across multiple industries.

As 2026 approaches, we're more committed than ever to providing timely, relevant coverage of the technologies shaping the future of manufacturing. But to do that well, we need your input.

One area I'm strongly considering for 2026 is the creation of an Aerospace, Defense, & Space Emerging Technology Committee. I am closely watching both public and private capital flowing into next-generation products and services in this sector.

Joby is building eVTOLs in Ohio. Drone technology is now being deployed on the battlefields of Europe. The challenge now isn't discovering innovation—it's developing agile supply chains capable of scaling the innovations that break through. Gears and bearings will be needed on the front lines of these efforts—and more importantly, the people who really know how to design them will be essential to the conversation.

I will be speaking with the aerospace panelists at the upcoming Motion + Power Technology Expo, including Ted Angel, executive director of the National Advanced Air Mobility Center of Excellence; Amy Thompson, PhD, CTO at the Connecticut Center for Advanced Technology; and John Keogh, PhD, vice president, technology at LIFT. We'll explore how gear and bearing manufacturers can take a more active role in this sector—what companies to watch and which voices need to be part of the discussion.

So now, over to you.

What topics, trends, or tools do you want to learn more about? Whether it's breakthroughs in AI, sustainability in gear manufacturing, advanced sensors, or something we haven't yet imagined—reach out and let me know.

Let's shape the conversation together.

Send your thoughts to Mary Ellen Doran, VP, Emerging Technology at doran@motionpower.org

