

# MRS Bulletin

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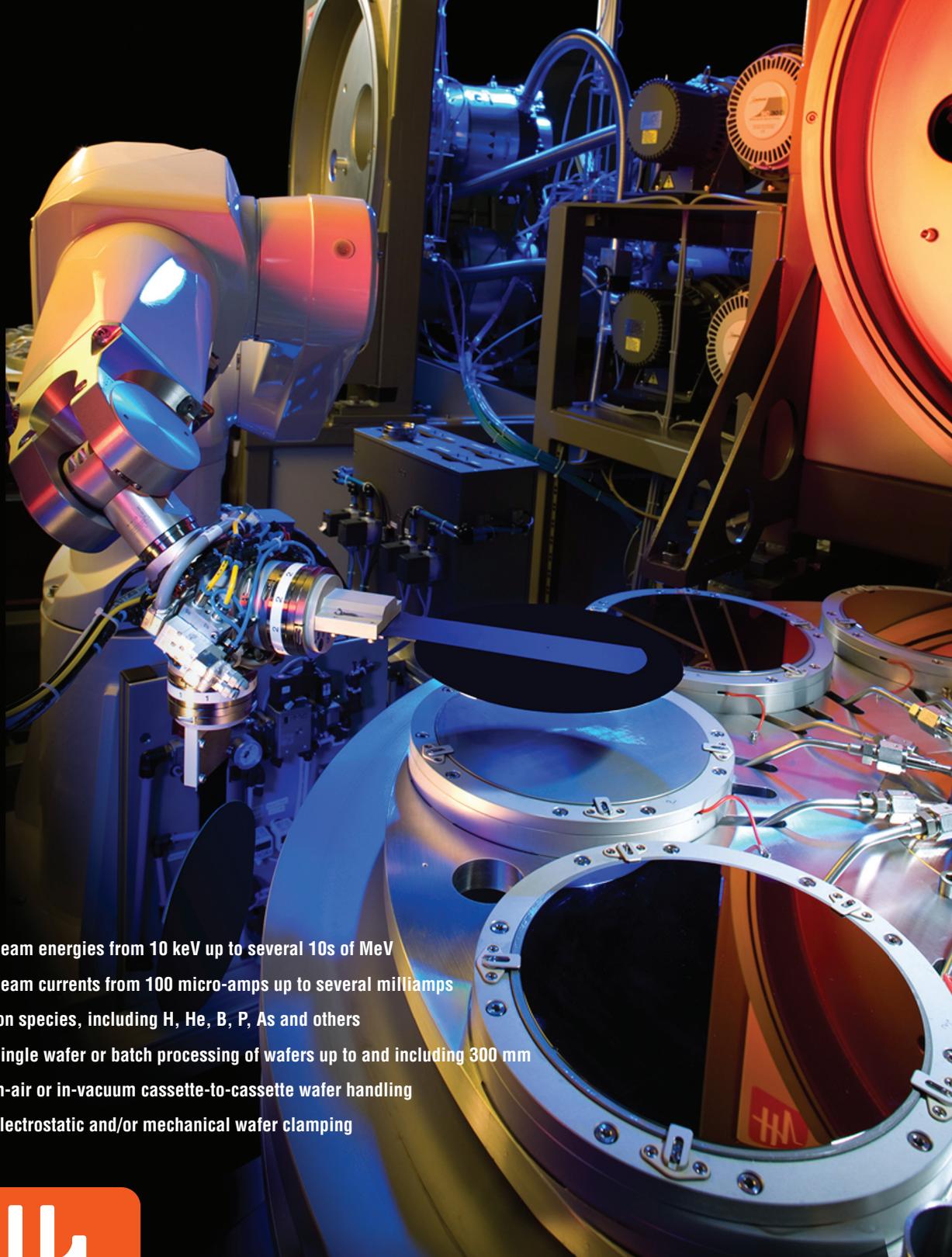
## Biomineralization

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## Biomineralization

Wednesday, June 24 | 12:00 pm - 1:30 pm (ET)

Biomineralization is the process by which living organisms orchestrate the synthesis and organization of minerals (biominerals), which can be viewed as an ancient process for the accumulation of metal ions in living systems. The structure and properties of biominerals is yet to be rivaled by any synthetic effort by scientists to date. The articles in the June issue of *MRS Bulletin* highlight some of the challenges in characterizing and replicating the biomimetic processes and the role of non-collagenous proteins in the biomimetic process, and the talks presented in this webinar are representative examples of the research detailed in this issue.

**Host:** Prasad Shastri, University of Freiburg

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- *In Situ* Transmission Electron Microscopy
- Nanodiamond and Diamond Electronics
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- Nanoindentation: Fundamentals and Frontiers

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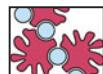
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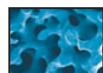
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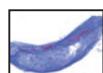
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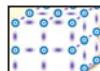
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**Biominerization.** This issue of *MRS Bulletin* highlights some of the challenges in characterizing and replicating biominerization processes observed in nature, and the role of non-collagenous proteins in the biominerization process. The seashells on the cover are representations of calcium carbonate that serves as the primary constituent of the protective armor that encases the soft bodies of mollusks and some bivalves. Biogenic calcite along with amorphous silica represent the two most common biominerals. The assembly of mineral phases achieved by living organisms is yet to be rivaled by any synthetic effort to date. See the technical theme that begins on page 473.

amorphous silica represent the two most common biominerals. The assembly of mineral phases achieved by living organisms is yet to be rivaled by any synthetic effort to date. See the technical theme that begins on page 473.



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The Materials Research Society (MRS), a not-for-profit scientific association founded in 1973 and headquartered in Warrendale, Pennsylvania, USA, promotes interdisciplinary materials research. Today, MRS is a growing, vibrant, member-driven organization of over 16,000 materials researchers spanning over 80 countries, from academia, industry, and government, and a recognized leader in the advancement of interdisciplinary materials research.

The Society's interdisciplinary approach differs from that of single-discipline professional societies because it promotes information exchange across many scientific and technical fields touching materials development. MRS conducts three major international annual meetings and also sponsors numerous single-topic scientific meetings. The Society recognizes professional and technical excellence and fosters technical interaction through University Chapters. In the international arena, MRS implements bilateral projects with partner organizations to benefit the worldwide materials community. The Materials Research Society Foundation helps the Society advance its mission by supporting various projects and initiatives.

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