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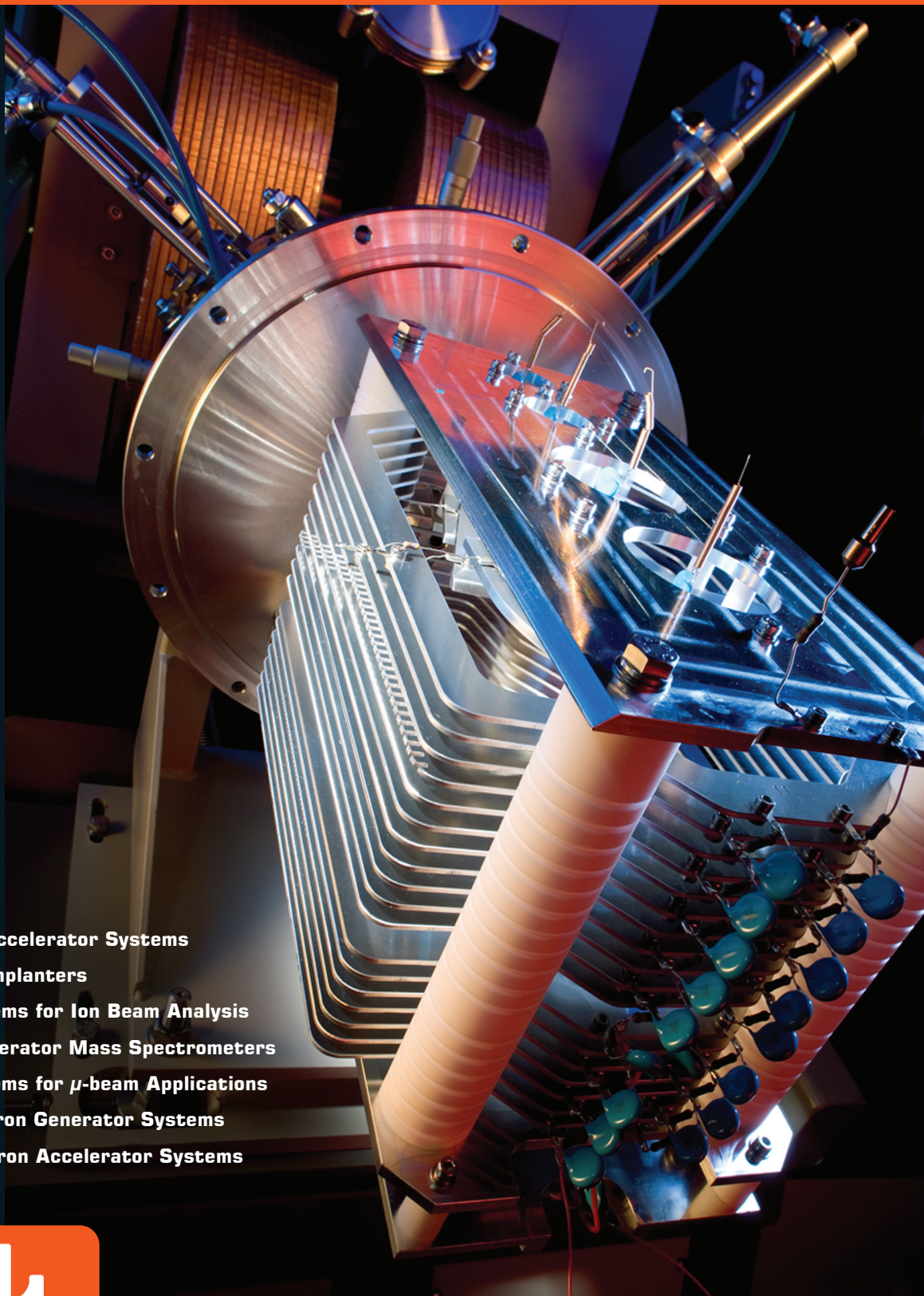
Mesoscale materials, phenomena, and functionality

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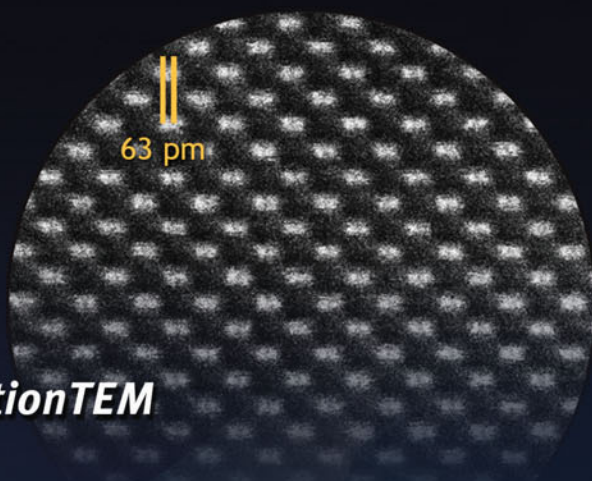
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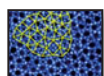
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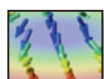
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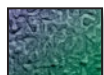


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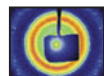


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ON THE COVER

Mesoscale materials, phenomena, and functionality. The mesoscale domain, where atomic granularity, quantization of energy, and simplicity of structure and function give way to continuous matter and energy, complex structures, and composite functionalities, represents a new scientific frontier. The articles in this issue of *MRS Bulletin* explore some of the hallmarks of mesoscale science and highlight current and new research

directions. On the cover is a mesoscale-structured lightweight honeycomb architecture created by 3D printing of a fiber-reinforced epoxy ink, where the structures at different length scales can be controlled. Credit: Lori K. Sanders, Brett G. Compton, and Jennifer A. Lewis, Harvard University. See the technical theme that begins on page 919.



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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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