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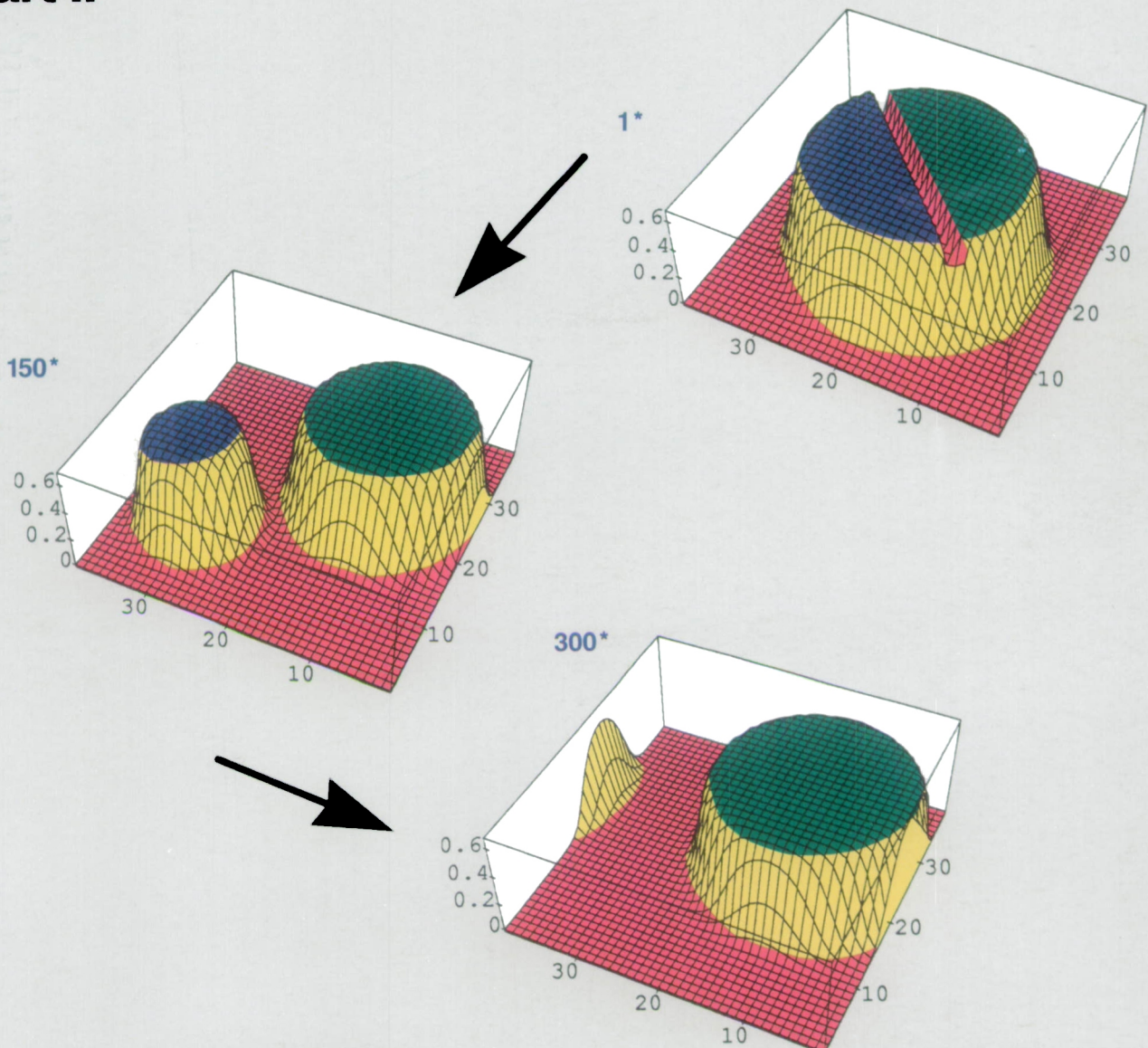
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December 1991, Volume XVI, No. 12



Point Defects

Part II



* Fluence in reduced units.

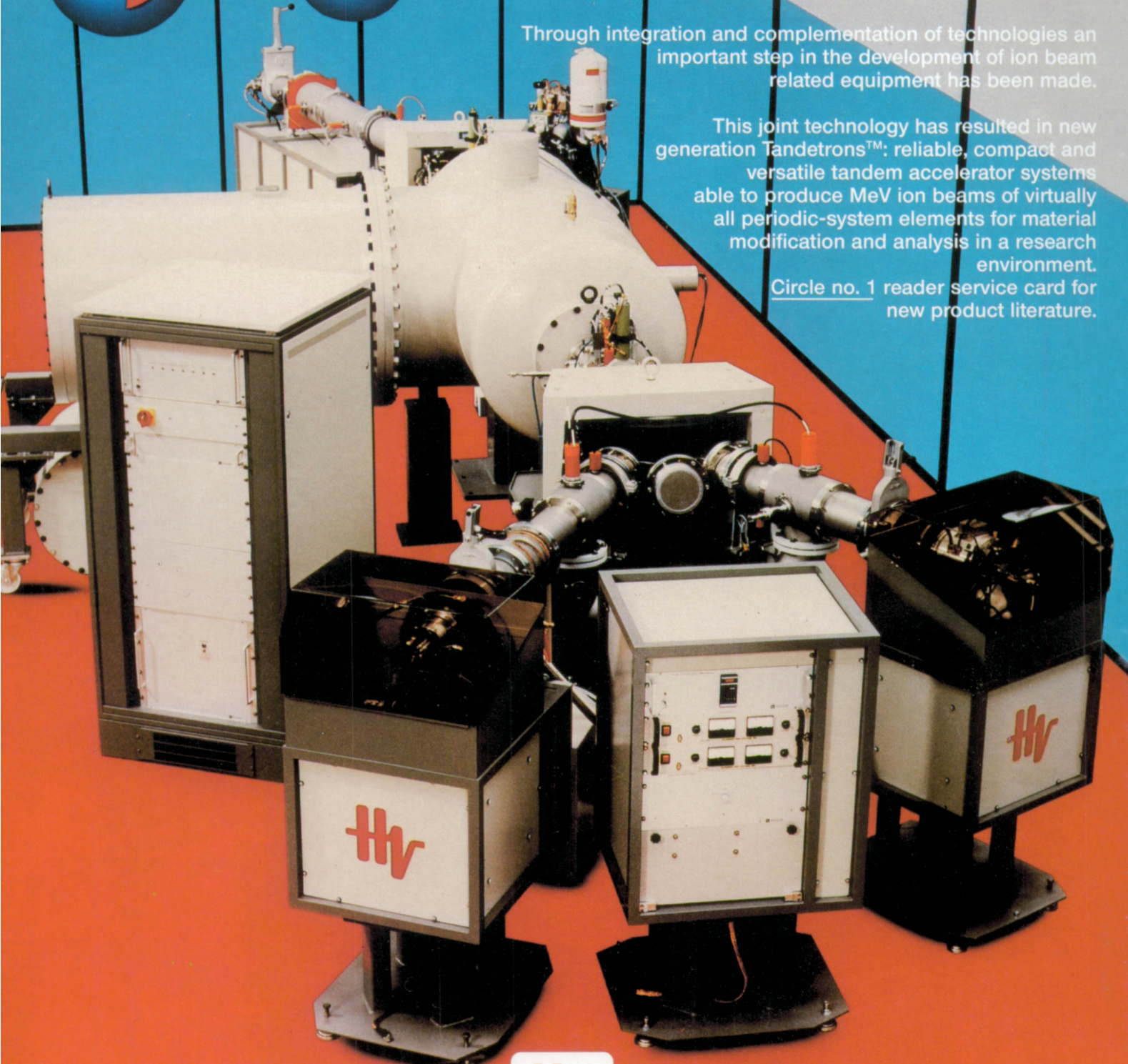
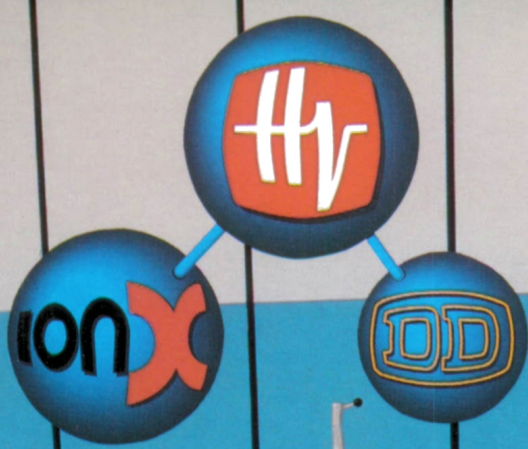
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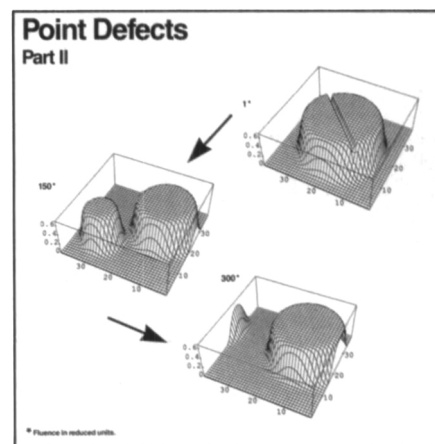
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ON THE COVER: An ordered compound is represented by the nonzero value of the long-range order parameter, in equilibrium with the solid solution (red). The precipitate is sheared by an antiphase boundary. As irradiation proceeds, the competition between forced atomic exchanges (replacement collisions) and thermally activated jumps induces an unexpected mechanism of healing the precipitate. As time passes (expressed in reduced units), the solid solution invades the antiphase boundary, and the smaller precipitate then redissolves to the benefit of the larger one. For more information about this topic, see "Antisite Defects and Nonequilibrium Phase Transitions in Intermetallics" by G. Martin and P. Bellon on p. 33.

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About the Materials Research Society

The Materials Research Society (MRS), a nonprofit scientific association founded in 1973, promotes interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes more than 10,000 scientists, engineers, and research managers from industrial, government, and university research laboratories in the United States and more than 40 countries.

The Society's interdisciplinary approach differs from that of single-discipline professional societies because it promotes information exchange across the many technical fields touching materials development. MRS sponsors two major international annual meetings encompassing approximately 50 topical symposia, and also sponsors numerous single-topic scientific meetings. The Society recognizes professional and technical excellence, conducts short courses, and fosters technical interaction in local geographic regions through Sections and University Chapters.

MRS participates in the international arena of materials research through the International Union of Materials Research Societies (IUMRS). MRS is an affiliate of the American Institute of Physics.

MRS publishes symposium proceedings, *MRS Bulletin*, *Journal of Materials Research*, and other publications related to current research activities.

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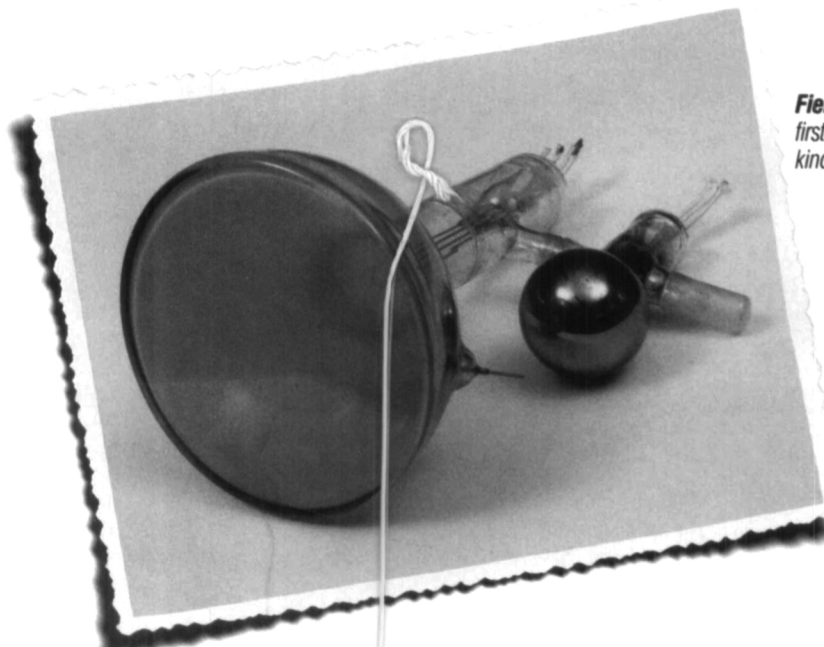
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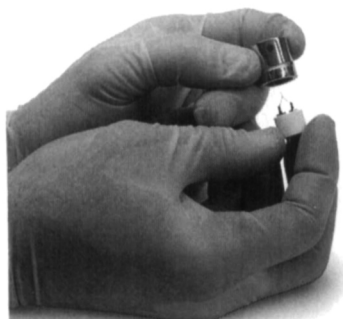
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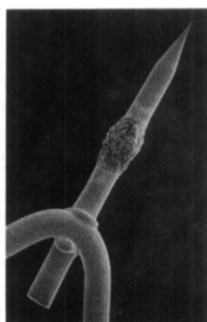


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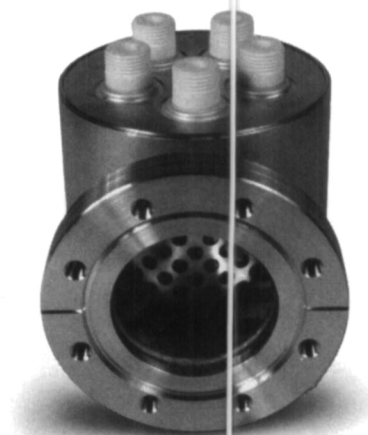
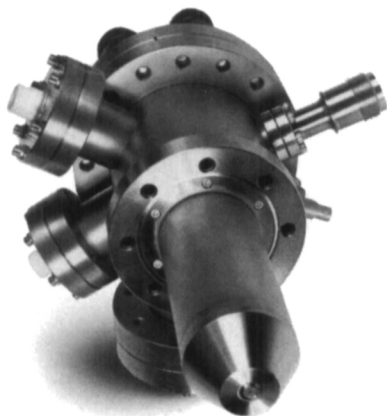


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