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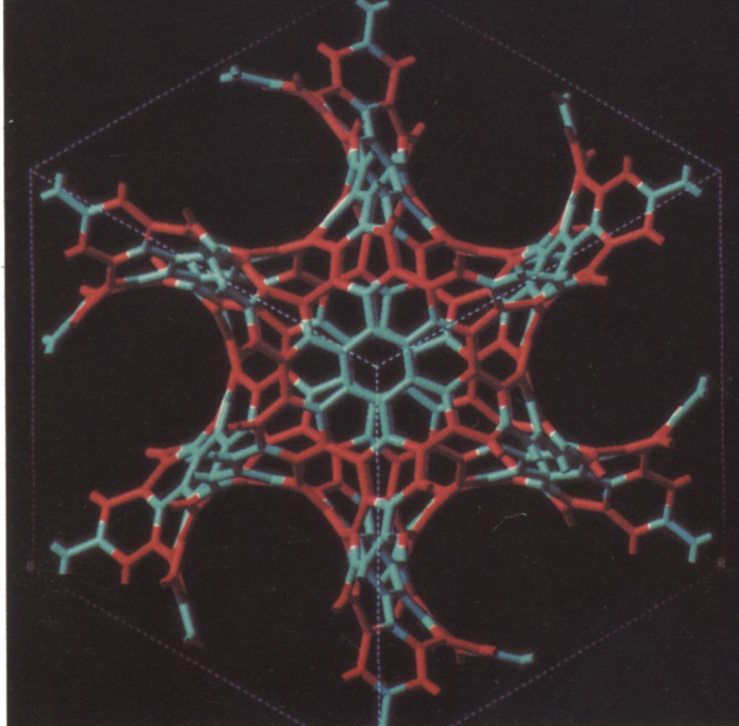
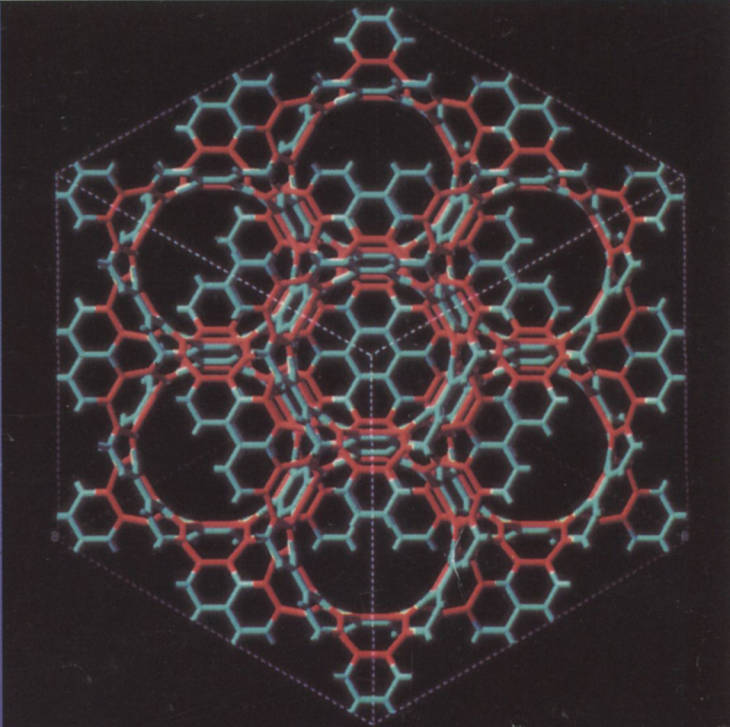
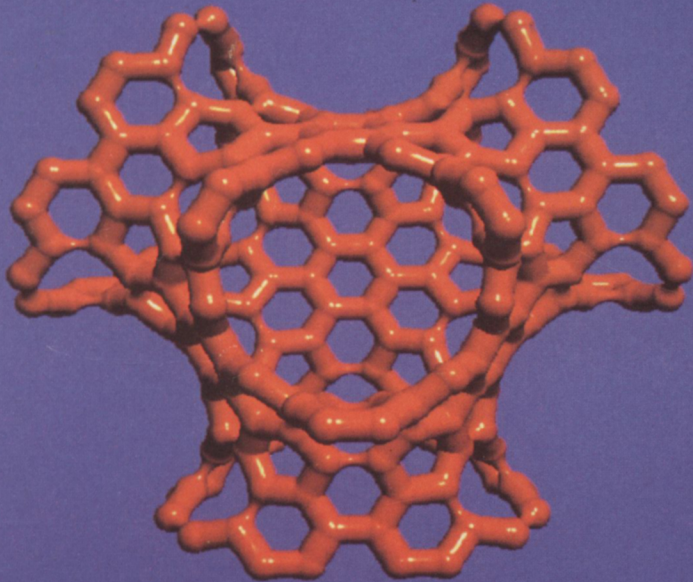
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November 1994, Volume XIX, No. 11



Fullerenes



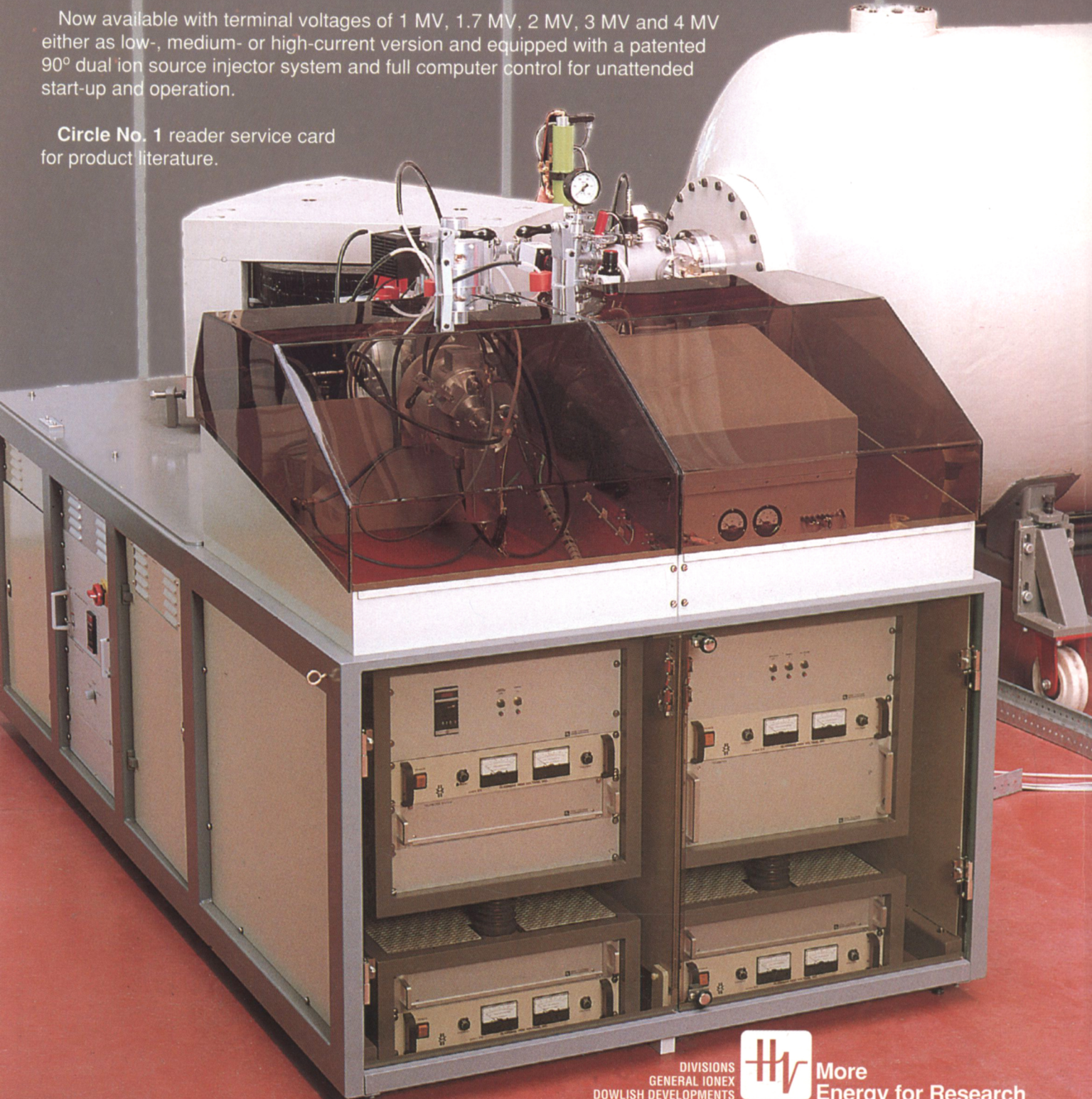
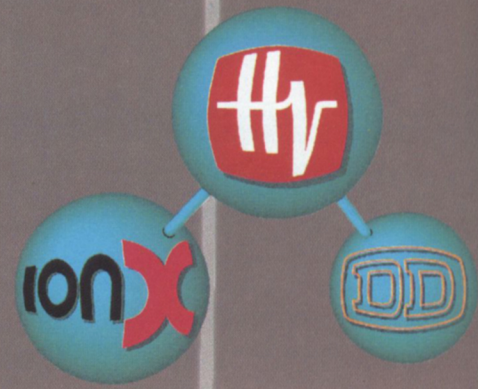
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November 1994

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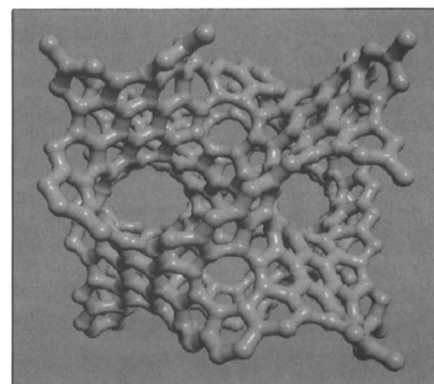
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ON THE COVER: By the introduction of pentagonal rings of carbon, the flat layers of graphite are bent to form fullerenes with positive curvature. Introducing heptagonal or octagonal rings, periodic structures with saddle shape and negative curvature can be constructed. These hypothetical arrangements have the same shape and symmetry as some of the triply periodic minimal surfaces observed in water-lipid-surfactant mesophases. The figures show different cases of negatively curved graphite. For more information on fullerenes, please see the section that begins on page 21.

The Materials Research Society (MRS), a non-profit scientific association founded in 1973, promotes interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes nearly 11,600 scientists, engineers, and research managers from industrial, government, and university research laboratories in the United States and nearly 50 countries.

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