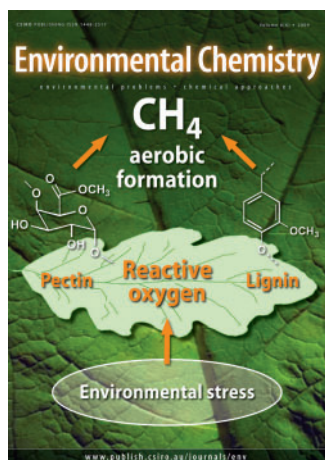




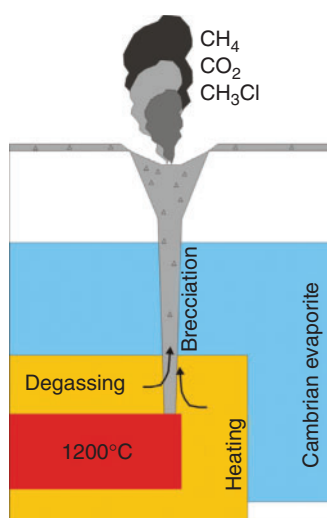
Environmental Chemistry

environmental problems • chemical approaches



Cover

Methane's atmospheric concentration has drastically increased since pre-industrial times. Biological methane formation was always thought to arise only from anoxic environments and microbial activity. Keppler et al. discuss the evidence for methane formation in aerobic environments, and suggest that non-microbial methane formation may be ubiquitous in terrestrial and marine ecosystems (see pp. 459–465). Image: F. Keppler.



What caused the biggest known mass extinction on Earth ~252 million years ago? A possible killer mechanism was the release of halocarbons, which destroyed the ozone layer. New experiments support this hypothesis – explosive gas eruptions from 252 million years ago were reconstructed by heating rocks from East Siberia (Russia), generating ozone-destroying gases. See Svensen et al. (pp. 466–471). Image: H. Svensen.

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