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Color-enhanced scanning electron micrograph of rust (iron oxide) on painted sheet metal (width of image field: 41.3 micrometers). When activated by a thin carbon layer doped with nitrogen atoms, iron oxide proves to be an efficient catalyst for selective hydrogenation of nitroarenes to anilines, a process that previously required noble metals. See pages 1054 and 1073.
Image: Eye of Science/Science Source

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