



FIGURE 19.10. Dissolution and replacement fabrics. (A) A partially dissolved potassium feldspar grain (arrow). Width of field 2 mm. Courtesy of Tim Lowenstein. (B) Ooids and calcite cement replaced by anhydrite. Width of field 2 mm. Courtesy of Tim Lowenstein. (C) Silicified stems of the Lower Devonian vascular plant *Rhynia*, one of the earliest vascular plants known. Considerable detail of the plant structure was preserved during silicification. Width of stem ~3 mm. From www.uni-muenster.de/GeoPalaeontologie/Palaeo/Palbot/rhynneu3.htm. (D) Silica-replaced ooids. Some of the ooids nucleated on quartz grains. Inclusions of carbonate preserved in the chert preserve a “ghost” of the ooid structure, but some dissolution is implied by the displaced nuclei of some ooids (white arrows). Width of field 6 mm. From Scholle and Ulmer-Scholle (2003) AAPG © 2003 reprinted by permission of the AAPG, whose permission is required for further use. (E) Crinoid stems, showing various degrees of replacement by dark-colored iron oxide. Width of field 5.5 mm. From Adams *et al.* (1984). (F) A neospar mosaic that probably represents aggrading neomorphism of an original carbonate mud. Note the embayment of many pelloid boundaries. Compare this with Table 19.2. Width of field ~3 mm. From Adams and MacKenzie (1998).