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**Cover Figure:** The bow fibula (garment clasp) of Wittislingen, Bavaria, is dated to the 7<sup>th</sup> century A.D. and belonged to an Alemannic aristocrat. It consists of gold-plated silver and was originally adorned with 182 inlays of garnet and glass. The photo shows the set-up used to characterize the garnets by non-destructive particle-induced X-ray emission (PIXE) for provenance studies. A 3 MeV hydrogen proton beam with 20  $\mu\text{m}$  beam size is focused on a garnet inlay via the small beam tube in the background. The emitted characteristic X-ray spectra are registered with He-flushed Si(Li)-detectors for light and for heavier elements with the lower square tube and the upper, black round tube in the foreground, respectively. (Fibula: Archaeological State Collection Munich. PIXE: Centre de recherche et de restauration des musées de France, Louvre, Paris. Courtesy of Norbert Gast, TU Munich, Dept. of Engineering Geology).