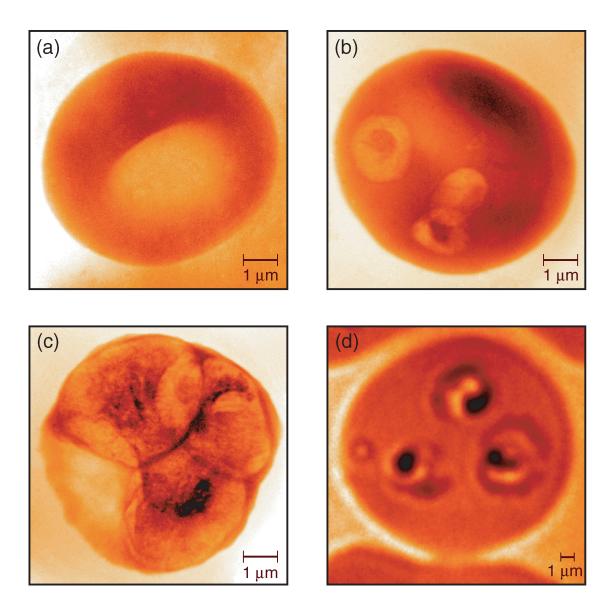


**COLORPLATE XIII.** Diffraction from a thick nickel zone plate lens calculated in the parabolic wave approximation. The zone plate thickness is 300 nm, the wavelength is 2.4 nm, the outer zone width is 30 nm, and the zone plate has 300 zones, an outer diameter of 36  $\mu$ m, and a focal length of 450  $\mu$ m in first order. (Courtesy of Yu.V. Kopylov and A.V. Popov, Moscow Optics Group.) See text, p. 357.



**COLORPLATE XIV.** Images of malaria infected red blood cells obtained at 2.4 nm wavelength with the high resolution soft x-ray microscope XM-1 at the Advanced Light Source in Berkeley. Image (a) shows an uninfected cell, (b) shows a newly infected cell, and (c) shows a cell 36 h after infection. All are chemically fixed. From C. Magowan, W. Meyer-Ilse, and J. Brown, LBNL. Image (d), obtained with visible light microscopy, is shown for comparison. See text, p. 372.