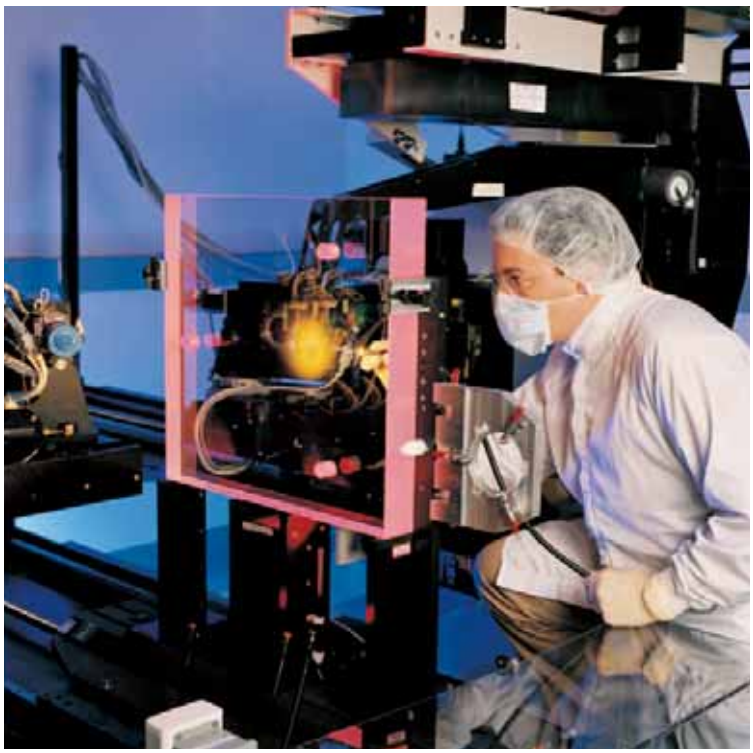

About the Cover:

Multilayer coatings on large substrates with increasingly complex spectral requirements are essential for a number of optical systems, placing stringent requirements on the error tolerances of individual layers. This issue features an article (p. 67) describing the method used to deposit highly uniform thin-film coatings on nearly meter-sized optical substrates appropriate for the National Ignition Facility (NIF). Both the cover photo and the photo to the left show Research Engineer James Oliver inspecting a NIF LM7B mirror on the LLNL-supplied Bauer photometer. This instrument maps transmission and reflection of an optical component over its clear aperture for a given angle and polarization for the standard NIF operating wavelengths (1053, 527, and 351 nm). When measuring an appropriately designed optical coating, the photometer may be used to create a high-resolution, low-noise map of film-thickness nonuniformities.

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