Flow and temperature field visualization photographs have been obtained of the free convection about a heated louvered blind adjacent to an isothermal vertical plate. This configuration, shown in Fig. 1, is an approximate model of an indoor window glazing with a venetian blind that is heated by absorbed solar radiation. The absorbed solar heat flux ($q$) was simulated by heating the blind slats using thin foil electric heaters. Flow visualization photographs were taken using a sheet of laser light and cigarette smoke. Full-field temperature visualization and local heat transfer measurements were obtained using a Mach-Zehnder interferometer.

These images were obtained as part of an ongoing project that examines the effect of shading devices on the thermal performance of windows. The results are being used to develop numerical models of the complex thermal interaction between the blind and window.