

*Recently discovered ultra-thin materials such as graphene, and similar materials, have extraordinary properties, which are provoking a revolution in the field of light based electronics. Combinations of these materials have the potential to break the technological constraints present in current technology, paving the way for thinner, cheaper, faster and highly flexible components. A key remaining challenge in this field lies in packaging; how can these materials be integrated into systems so that light is efficiently channelled into/out of them, and how can they be protected against the effects of aging? We present a solution to both of these problems by using a micro-lens, which can be placed directly onto the surface of these materials, encapsulating them. This greatly enhances the optical performance, and provides protection from the ambient environment. The optical solution we have developed could become a key enabling technology for ultra-thin optical devices, such as LEDs.*