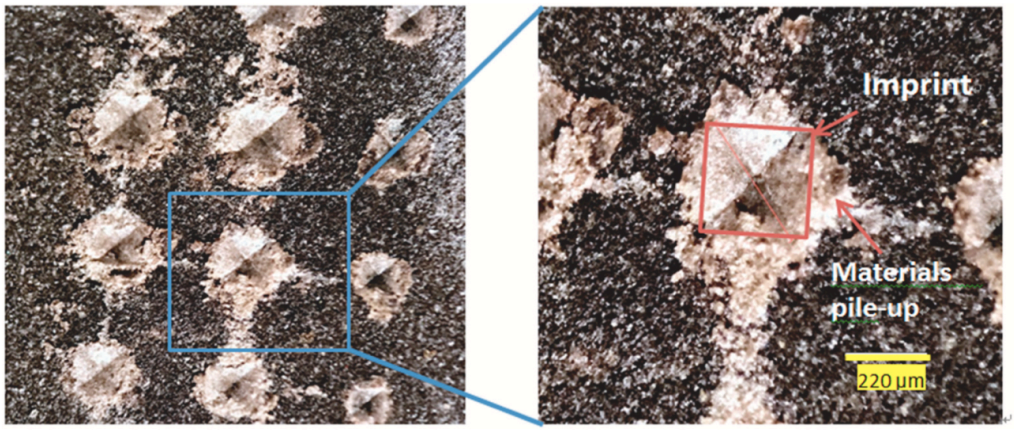


Fig. 3. Optical images of Marcellus shale taken by Echo Revolve optical microscope, indentation grid is parallel to the bedding direction. Left: the grid of the indentation imprints grid, right: zoom in to a single imprint.