Nanocavitation during deformation of polyethylene with/without carbon nanotubes

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In this report the behaviour of the systems of polymer chains with or without carbon nanoinclusions under uniaxial deformation are examined using molecular dynamics (MD). Stress-strain curves were obtained for these systems. There is a description of primitive path (PP) analysis and a comparison between our calculation and z1-code calculation is given. Using this method our systems were researched and an explanation of the results was proposed.