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Selective Heating Effect of Microwave Irradiation on Binary Mixture of Water and Polyethylene Oxide: Molecular Dynamics Simulation Approach

Junhe Chen^a, Matthew J. Warner^b, Benjamin Sikora^c, Daniel Kiddle^c, Danielle Coverdell^c, Omar Allam^{a,d}, Paul A. Kohl^b, and Seung Soon Jang^{a,*}

* Corresponding authors:

Seung Soon Jang - seungsoon.jang@mse.gatech.edu

Keywords: microwave, electric field, selective heating, water, polyethylene oxide, molecular dynamics simulation

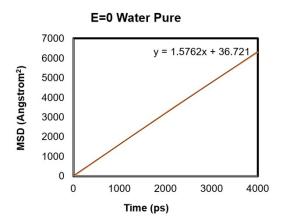
^a School of Materials Science and Engineering, Georgia Institute of Technology, 771 Ferst Drive NW, Atlanta, 30332-0245, USA

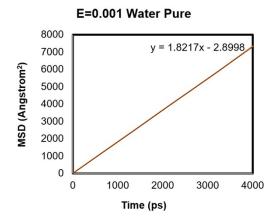
^b School of Chemical & Biomolecular Engineering, Georgia Institute of Technology, 311 Ferst Drive NW, Atlanta, GA 30332-0100, USA

^c Department of Energy's Kansas City National Security Campus managed by Honeywell, 14520 Botts Road, Kansas City, MO 64147, USA

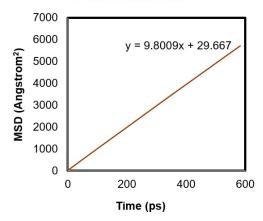
^d The George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, 801 Ferst Drive NW, Atlanta, Georgia 30332-0405, United States

SUPPLEMENTAL INFORMATION

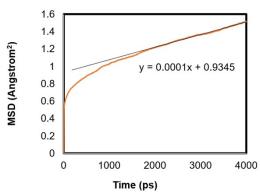




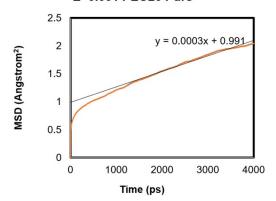


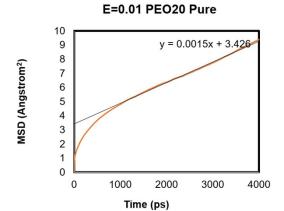


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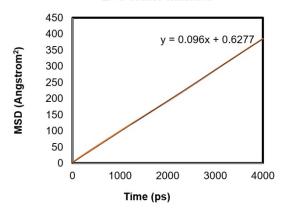


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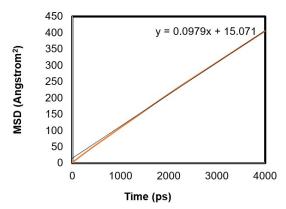


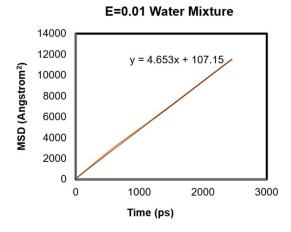


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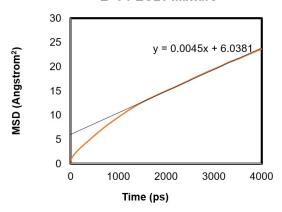


E=0.001 Water Mixture

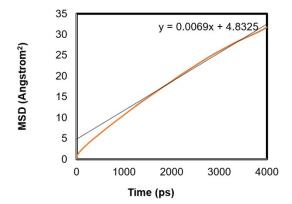




E=0 PEO20 Mixture



E=0.001 PEO20 Mixture



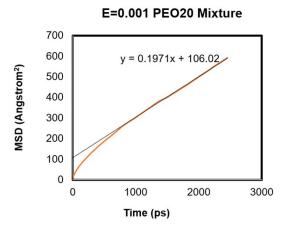


Figure 1. Time-dependent MSD and linear fit of water and PEO in their pure system and the mixture under external oscillating electric field with E0 = , $0.001 \, V/Å$ and $0.01 \, V/Å$.