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SOUND RESONANCE AND WAVE PROPERTIES IN GASES AND LIQUIDS INVESTIGATING THE NATURE OF SOUND WAVES

Ruslan Pozinkevych¹ and Thaned Rojsiraphisal²

¹Lesya Ukrainka Eastern European National University, Ukraine

²Chiang Mai University, Thailand

Author's research is an attempt to derive mathematical formula to describe the state of a system created by two or more waves resulting in a shockwave production. The shockwave produced is a carrier of an energy that can be used for motion in gases and liquids. To be able to utilize this energy they must be able to describe the state of a system of two or more waves at any given time thus deriving a formula that links energy produced to the component characteristics of the wave e.g. frequency amplitude etc. A mathematical model is used which presents a system of waves as a sum or difference of two vectors which is the resulting vector or a shockwave. It is a model that has been obtained after using detailed analysis of both longitudinal and transverse waves.

BIOGRAPHY

Ruslan Pozinkevych was born in Lutsk city, Ukraine. He has two majors in Linguistics and Computers and Maths. He is Teacher of English and Maths, formerly he graduated from Computer and Maths department at Faculty of Informatics at Volyn State University named after Lesya Ukrainka in Ukraine. From past few years he has been working on the problem of waves and propagation of waves under the supervision of Dr Thaned Rojsiraphisal at the Department of Mathematics, Faculty of Science, Chiang Mai University, Thailand.

zambezimission@protonmail.com