

## NEW HERMITE–HADAMARD INEQUALITIES VIA FRACTIONAL INTEGRALS, WHOSE ABSOLUTE VALUES OF SECOND DERIVATIVES IS P-CONVEX

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*Abstract.* In this research article, authors have established a general integral identity for Riemann–Liouville fractional integrals. Some new results related to the left-hand side of Hermite–Hadamard type integral inequalities utilizing this integral identity for the class of functions whose second derivatives at some power are P-convex are obtained. The presented results have some closely connection with [M. E. Özdemir, C. Yıldız, A. O. Akdemir, E. Set, On some inequalities for s-convex functions and applications, Journal of Inequalities and Applications, 2013:333]

*Mathematics subject classification (2010):* 26A15, 26A51, 26D10.

*Keywords and phrases:* Hermite–Hadamard type inequality, convex functions, power-mean inequality, Riemann–Liouville fractional integral.

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