

INCREASING CO-RADIANT FUNCTIONS AND HERMITE–HADAMARD TYPE INEQUALITIES

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Abstract. In this paper, we study Hermite-Hadamard type inequalities for increasing co-radiant functions. Some examples of such inequalities for functions defined on a special domains are given.

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REFERENCES

- [1] G. R. ADILOV AND S. KEMALI, *Hermite-Hadamard-Type Inequalities for Increasing Positively Homogeneous Functions*, Journal of Inequalities and Applications, Vol. 2007, Article ID 21430, 10 pages, 2007.
- [2] S. S. DRAGOMIR, J. DUTTA, AND A. M. RUBINOV, *Hermite-Hadamard type inequalities for increasing convex along rays functions*, Analysis (Munich), **24**, 2, 171–181.
- [3] S. S. DRAGOMIR AND C. E. M. PEARCE, *Selected Topics on Hermite-Hadamard Inequalities and Applications*, RGMIA Monographs, Victoria University, 2000 [ONLINE: <http://rgmia.vu.edu.au/monographs/>].
- [4] S. S. DRAGOMIR AND C. E. M. PEARCE, *Quasi-convex functions and Hadamard's inequality*, Bull. Australian Math. Soc., **57** (1998), 377–385.
- [5] S. S. DRAGOMIR, J. E. PECARIC, AND L. E. PERSSON, *Some Inequalities of Hadamard Type*, Soochow J. of Math., **21** (1995), 335–341.
- [6] P. M. GILL, C. E. M. PEARCE, AND J. E. PECARIC, *Hadamard's Inequalities for r -convex functions*, J. Math. Anal. Appl., **215** (1997), 461–470.
- [7] C. P. NICULESCU, *A multiplicative mean value and its applications*, in Inequality theory and applications (Y. J. Cho, J. K. Kim and S. S. Dragomir (Eds.)), Nova Science Publishers, 2001, 249–261.
- [8] C. E. M. PEARCE AND A. M. RUBINOV, *P -functions, quasiconvex functions and Hadamard-type inequalities*, Journal of Mathematical Analysis and Applications, **240** (1999), 92–104.
- [9] J. E. PECARIC, F. PROSCHAN, AND Y. L. TONG, *Convex Functions, Partial Orderings and Statistical Applications*, Academic Press Inc. 1992.
- [10] A. M. RUBINOV, *Abstract convexity and global optimization*, Kluwer Academic Publishers, Dordrecht, 2000.
- [11] A. M. RUBINOV AND J. DUTTA, *Hadamard Type Inequality For Quasiconvex Functions in Higher Dimensions*, (Preprint) RGMIA Res. Rep. Coll., **4**, 1 (2001), Article 9. [ONLINE: <http://rgmia.vu.edu.au/v4n1.html>]
- [12] E. V. SHARIKOV, *Hermite-Hadamard Type Inequalities for Increasing Radiant Functions*, Journal of Inequalities in Pure and Applied Mathematics, **4**, 2 (2003), Article 47.