Literaturverzeichnis

[1] Aubin, J.-P.: Optima and equilibria: An introduction to nonlinear analysis. Berlin Heidelberg, 1993.

[2] Aubin, J.-P.; Ekeland, I.: Applied nonlinear analysis. New York, 1984.

[3] Breckner, W. W.: Derived sets in multiobjective optimization. Z. Anal. Anw. **13** (1994), 725–738.

[4] Breckner, W. W.: Derived sets for weak multiobjective optimization problems with state and control variables. J. Optim. Theory Appl. **93** No. 1 (1997), 73–102.

[5] Breckner, W. W.; Göpfert, A.: Multiplier rules for weak Pareto optimization problems. Optimization **38** No. 1 (1996), 23–37.

[6] Breckner, W. W.; Göpfert, A.; Sekatzek, M.: Lagrange multipliers in vector optimization. Zeitschr. Angew. Math. Mech. **77** Suppl. 2 (1997), 525–526.

[7] Breckner, W. W.; Sekatzek, M.; Tammer, Chr.: Approximate saddle point theorems for a general class of approximation problems. (in Vorbereitung)

[8] Clarke, F. H.: Generalized gradients and applications. Trans. Amer. Math. Soc. **205** (1975), 247–262.

[9] Clarke, F. H.: Optimization and nonsmooth analysis. New York, 1983.

[10] Craven, B. D.; Ralph, D.; Glover, B. M.: Small convex–valued subdifferentials in mathematical programming. Optimization **32** (1995), 1–21.

[11] Ekeland, I.: On the variational principle. J. Math. Analysis Appl. **47** (1974), 324–353.

[12] El Abdouni, B.; Thibault, L.: Lagrange multipliers for Pareto nonsmooth programming problems in Banach spaces. Optimization **26** (1992), 277–285.

[13] Gianessi, F.: Semidifferentiable functions and necessary optimality consitions. J. Optim. Theory Appl. **60** (1989), 191–241.

[14] Gittleman, A.: A general multiplier rule. J. Optim. Theory Appl. **7** No. 1 (1971), 29–38.

[15] Göpfert., A; Nehse, R.: Vektoroptimierung. Leipzig, 1990.

[16] Göpfert, A.; Sekatzek, M.; Tammer, Chr.: Novelties around Ekeland's variational principle. *Reports of the Institute of Optimization and Stochastics.* Martin–Luther–Universität Halle–Wittenberg, Report No. 23 (1998). (erscheint in: Proc. of the Intern. Conf. of Operat. Research at Liberec 1998)

[17] Hamel, A.: A generalized Lagrange multiplier rule. (erscheint in Optimization)

[18] Hestenes, M. R.: On variational theory and optimal control theory. SIAM J. Control **3** No. 1 (1965), 23–48.

[19] Hestenes, M. R.: Optimization theory: The finite dimensional case. New York, 1975.

[20] Ioffe, A. D.: Nonsmooth analysis: Differential calculus in nonsmooth optimization. Trans. Amer. Math. Soc. **266** (1981), 1–56.

[21] Ioffe, A. D.: Necessary conditions in nonsmooth optimization. Math. Operat. Research **9** (1984), 159–189.

[22] Ioffe, A. D.: A Lagrange multiplier rule with small convex–valued subdifferentials for problems of mathematical programming involving equaltity and nonfunctional constraints. Math. Programming **58** (1993), 137–145.

[23] Ioffe, A. D.; Tichomirov, V. M.: Theorie der Extremalaufgaben. Berlin, 1979.

[24] Jahn, J.: Mathematical vector optimization in partially ordered linear spaces. Frankfurt Bern New York, 1986.

[25] Jahn, J.: Introduction to the theory of nonlinear optimization. 2nd rev. ed. Berlin Heidelberg, 1996.

[26] Jourani, A.: Constraint qualifications an Lagrange multipliers in nondifferentiable programming problems. J. Optim. Theory Appl. **81** No. 3 (1994), 533–548.

[27] Jourani, A.; Thibault, L.: Verifiable conditions for openness and regularity of multivalued mappings in Banach spaces. Trans. Amer. Math. Soc. **347** No. 4 (1985), 1255–1268.

[28] Jourani, A.: Necessary conditions for extremality and separation theorems with applications to multiobjective optimization. (erscheint in Optimization)

[29] Kruger, A. Y.; Mordukhovich, B. S.: Extremal points and Euler equations in nonsmooth optimization. (russisch) Dokl. Akad. Nauk BSSR **24** (1980), 684–687.

[30] Loridan, P.: ϵ–solutions in vector minimization problems. J. Optim. Theory Appl. **43** No. 2 (1984), 265–276.

[31] Luc, D. T.: Theory of vector optimization. Berlin, 1989.

[32] Mangasarian, O. L.: Nonlinear Programming. New York, 1969.

[33] McLinden, L.: An application of Ekeland's theorem to minimax problems. Nonlinear analysis. **6** No. 2 (1982), 189–196.

[34] Mordukhovich, B. S.: Complete characterization of openness, metric regularity, and Lipschitzian properties of multifunctions. Trans. Amer. Math. Soc. **340** No. 1 (1993), 1–35.

[35] Mordukhovich, B. S.; Shao, Y.: Extremal characterizations of Asplund spaces. Proc. Amer. Math. Soc. **124** No. 1 (1996), 197–205.

[36] Neustadt, L. W.: An abstract variational theory with applications to a broad class of optimization problems. I. General theory. SIAM J. Control **4** No. 3 (1966), 505–527.

[37] Nieuwenhuis, J. W.: A general multiplier rule. J. Optim. Theory Appl. **31** (1980), 167–176.

[38] Oettli, W.: Epsilon–solutions and epsilon–supports. Optimization **16** (1985), 491–496.

[39] Pourciau, B. H.: Modern multiplier rules. Amer. Math. Monthly **87** (1980), 433–452.

[40] Rockafellar, R. T.: Convex analysis. Princeton, 1970.

[41] Rockafellar, R. T.: The theory of subgradients and its applications to problems of optimization: convex and nonconvex functions. Berlin 1981.

[42] Rockafellar, R. T.; Wets, R. J.-B.: Variational analysis. Berlin Heidelberg, 1998

[43] Sekatzek, M.: Multiplikatorenregeln für die multikriterielle Optimierung. Diplomarbeit. Halle, 1996.

[44] Sekatzek, M.: A normal form for the feasible set of optimization problems. *Reports of the Institute of Optimization and Stochastics.* Martin–Luther–Universität Halle–Wittenberg, Report No. 26 (1997).

[45] Sekatzek, M.: Contributions to a multiplier rule for multiobjective optimization problems. *Reports of the Institute of Optimization and Stochastics.* Martin–Luther–Universität Halle–Wittenberg, Report No. 35 (1998). (erscheint in: Proc. of the 9th Belgian–French–German Conf. on Optimization. Namur, 1998)

[46] Strodiot, J.-J.; Nguyen, V. H.; Heukemes, N.: ϵ–optimal solutions in nondifferentiable convex programming and some related questions. Math. Programming **25** (1983), 307–328.

[47] Tammer, Chr.: A generalization of Ekeland's variational principle. Optimization **25** (1992), 129–141.

[48] Tammer, Chr.; Tammer, K.: Generalization and sharpening of some duality relations for a class of vector optimization problems. Zeitschr. Operat. Research **35** (1991), 249–265.

[49] Tammer, Chr.; Tammer, K.: Duality results for convex vector optimization problems with linear restrictions. In: Kall, P. [Ed.]: System modelling and optimization. Lect. Notes Control Inf. Sci. 180. Berlin, 1992.

[50] Tammer, Chr..: Lagrange–Kuhn–Tucker multipliers for general mathematical programming problems. In: Göpfert, A.; Seeländer, J.; Tammer, Chr. [Eds.]: Methods of multicriteria decision theory. Deutsche Hochschulschriften 2398. Egelsbach, 1997.

[51] Thibault, L.: Lagrange–Kuhn–Tucker multipliers for general mathematical programming problems. In: Ioffe, A.; Marcus, M.; Reich, S. [Eds.]: Optimization and nonlinear analysis. Pitman Research Notes in Mathematics. Series 244. Harlow New York, 1992.

[52] Tuy, H.: On the convex approximation of nonlinear inequalities. Math. Operationsforsch. Stat. **5** (1974), 451–466.

[53] Vályi, I.: Approximate saddle–point theorems in vector optimization. J. Optim. Theory Appl. **55** No. 3 (1987), 435–448.

[54] White, D. J.: Epsilon efficiency. J. Optim. Theory Appl. **49** No. 2 (1986), 319–337.

[55] Yokoyama, K.: Epsilon approximate solutions for multiobjective programming problems. J. Math. Analysis Appl. **203** (1996), 142–149.