



Banach J. Math. Anal. 1 (2007), no. 2, 186–194

---

**BANACH JOURNAL OF MATHEMATICAL ANALYSIS**

ISSN: 1735-8787 (electronic)

<http://www.math-analysis.org>

---

## EXISTENCE RESULTS FOR QUASI VARIATIONAL INEQUALITIES

MUHAMMAD ASLAM NOOR<sup>1</sup>

*This paper is dedicated to Professor Dr. Themistocles M. Rassias.*

Submitted by M.S. Moslehian

**ABSTRACT.** It is well known that the quasi variational inequalities are equivalent to the fixed point problems. We this equivalent alternative formulation to discuss the existence of a solution of quasi variational inequalities under some mild conditions. Since the quasi variational inequalities include variational inequalities, implicit complementarity problems and optimization problems as special cases, results proved in this paper continue to hold these problems. This shows that results proved in this paper can be viewed as an important and significant improvement and refinement of the previous results.

<sup>1</sup> MATHEMATICS DEPARTMENT, COMSATS INSTITUTE OF INFORMATION TECHNOLOGY, ISLAMABAD, PAKISTAN.

*E-mail address:* [noormaslam@hotmail.com](mailto:noormaslam@hotmail.com)

---

*Date:* Received: 1 August 2007; Accepted 25 September 2007.

*2000 Mathematics Subject Classification.* Primary 49J40; Secondary 90C33.

*Key words and phrases.* Variational inequalities, fixed point problems, existence, applications.