

On Generalized Continuous Maps in Čech Closure Spaces ¹

C. Boonpok

Abstract

The purpose of the present paper is to introduce the concept of generalized continuous maps by using generalized closed sets and investigate some of their characterizations.

2000 Mathematics Subject Classification: 54A05.

Key words and phrases: Čech closure operator, Čech closure space, generalized closed set, generalized continuous map.

References

- [1] K. Balachandran, P. Sundaram, H. Maki, *On generalized continuous maps maps in topological spaces*, Mem. Fac. Sci. Kochi Univ. Ser. A Math., 12, 1991, 5-13.
- [2] C. Boonpok, *On Continuous Maps in Closure Spaces*, General Mathematics, vol. 17, no. 2, 2009, 127-134.
- [3] E. Čech, *Topological Spaces*, Topological Papers of Eduard Čech, Academia, Prague, 1968, 436-472.
- [4] J. Chvalina, *On homeomorphic topologies and equivalent set-systems*, Arch. Math. 2, Scripta Fac. Sci. Nat. UJEP Brunensis, XII, 1976, 107-116.
- [5] J. Chvalina, *Stackbases in power sets of neighbourhood spaces preserving the continuity of mappings*, Arch. Math. 2, Scripta Fac. Sci. Nat. UJEP Brunensis, XVII, 1981, 81-86.

¹Received 07 August, 2009

Accepted for publication (in revised form) 21 February, 2011

- [6] M. C. Cueva, *On g -closed sets and g -continuous mapping*, Kyungpook Math. J., 33, 1993, 205-209.
- [7] N. Levine, *Semi-open sets and semi-continuity in topological spaces*, Amer. Math. Monthly, 70, 1963, 36-41.
- [8] N. Levine, *Generalized closed sets in topology*, Rend. Circ. Mat. Palermo, 19, 1970, 89-96.
- [9] N. Palaniappan, K. C. Rao, *Regular generalized closed sets*, Kyungpook Math. J., 33, 1993, 211-219.
- [10] L. Skula, *Systeme von stetigen abbildungen*, Czech. Math. J., 17 (92), 1967, 45-52.
- [11] J. Šlapal, *Closure operations for digital topology*, Theoret. Comput. Sci., 305, 2003, 457-471.

Chawalit Boonpok

Maharakham University

Faculty of Science

Department of Mathematics

Maharakham, Thailand 44150

e-mail: chawalit.b@msu.ac.th