1086-54-654 **Gangadhar R Hiremath*** (gangadhar.hiremath@uncp.edu), Dept of Math and Comp Sci, PO Box 1510, One University Drive, UNCP, Pembroke, NC 28372. *Countable Paracompactness, Invariance under Clopen Mappings, and Metrization.* Preliminary report.

A topological space X is said to have a topological property $(*)$ if and only if each countable closed discrete subset $A = \{x_n | n$ is a natural number$\}$ of X admits a countable locally finite open collection $\{G_n | n$ is a natural number$\}$ such that for each n, $G_n \cap A = \{x_n\}$. Every countably paracompact space satisfies $(*)$. This article contains the following results:

1. A topological space X is regular if the space is either a Hausdorff first countable space with $(*)$ or a countably paracompact space in which points are regular G_δ.

2. A second countable space is metrizable if and only if the space is a Hausdorff space with $(*)$ (and hence, the space is a Hausdorff countably paracompact space).

3. A T_1 completely regular space is countably compact if and only if the space is a pseudocompact space with $(*)$.

4. The following spaces are invariant under clopen (= continuous closed and open) mappings:

(i) Countably paracompact Moore spaces

(ii) Hausdorff countably paracompact developable spaces

(iii) T_1 countably paracompact developable spaces

(iv) T_1 second countable spaces satisfying $(*)$

(v) Hausdorff isocompact wM spaces (Received September 10, 2012)