1124-54-197 **John Porter*** (jporter@murraystate.edu), Department of Mathematics & Statistics, Faculty Hall 6c, Murray State University, Murray, KY 42071. *On Well-ranked Pair-bases.* Preliminary report.

Well-ranked pair-bases are introduced as a generalization of both Gruenhage and Nyikos' well-ranked bases and Chase and Gruenhage's property (A). Let $\mathcal{P}$ be the set of all pairs (B_1, B_2) of subsets of a topological space X with $B_1 \subset B_2$. If $\mathcal{B} \subset \mathcal{P}$, denote $\mathcal{B}(i) = \{B_i : (B_1, B_2) \in \mathcal{B}\}$. Let X be a topological space, then $\mathcal{B} \subset \mathcal{P}$ is a pair-base on X provided every element of $\mathcal{B}(1)$ is open and if U is an open neighborhood of a point x, then there is a $(B_1, B_2) \in \mathcal{B}$ such that $x \in B_1 \subset B_2 \subset U$.

A family of pairs of subsets of $\mathcal{A} \subset \mathcal{P}$ is said to be a NSR pair-family if for any $\mathcal{A}' \subset \mathcal{A}$ such that $\cap\mathcal{A}'(1) \neq \emptyset$, there is a finite $\mathcal{F} \subset \mathcal{A}'$ such that for every $(A_1, A_2) \in \mathcal{A}'$, $A_1 \subset F_2$ for some $(F_1, F_2) \in \mathcal{F}$. We say a pair-base $\mathcal{B}$ is a well-ranked pair-base if $\mathcal{B}$ is a countable union of NSR pair-families.

A space with a well-ranked pair-base is σ-metacompact and is a D-space. Furthermore, if a compact or separable space X has a well-ranked pair-base, then X is metrizable, generalizing recent results by Chase and Gruenhage and some older results of Gruenhage and Nyikos. (Received September 08, 2016)