1012-14-99 V Lakshmibai* (lakshmibai@neu.edu), Northeastern University, Mathematics Department, Boston, MA 02115, and P Shukla (shukla@mcs.suffolk.edu). Cohen-Macaulayness of certain rings of invariants.

We consider the action of $SL_n(K)$ on the affine space X consisting of m-copies of $K^n, m > n, K$ being an algebraically closed field of arbitrary characteristic. We construct a standard monomial basis for the corresponding ring of invariants; as a consequence, we prove that the ring of invariants is Cohen-Macaulay. (Received September 12, 2005)