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Recently superdeformed rotational bands have been discovered in ^{36}Ar [1], and ^{40}Ca [2]. The emergence of superdeformation in this mass region provides us with an opportunity to study the interplay between macroscopic and microscopic effects in light nuclear matter. The $N \neq Z$ nucleus ^{38}Ar lies 2 neutrons more than ^{36}Ar and 2 protons less than ^{40}Ca . Highly deformed bands, firmly linked to states in ^{38}Ar , have been observed[3]. A level scheme and $B(E2)$'s for the bands of interest in ^{38}Ar will be presented. The $^{24}\text{Mg}(^{20}\text{Ne}, \alpha 2p)^{38}\text{Ar}$ reaction was used to populate the nuclide in an experiment conducted with the GAMMASPHERE array in concert with the MICROBALL charged particle array.

* This work supported by the National Sciences and Engineering Research Council of Canada.

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2. E. Ideguchi *et al.*, Phys.Rev.Lett **87**, 222501 (2001).

3. D. Rudolph *et al.*, Phys.Rev.C **65**, 034305 (2002).