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Effects of pressure on the sturctural and magnetic properties on Sm based permanent magnets 1 SCOTT MCCALL, NICHOLAS BUTCH, JASON JEFFRIES, PATRICK HUANG, Lawrence Livermore National Laboratory — The magnetic properties of the rare earth-transition metal permanent magnets are sensitive to interatomic spacing and can be tuned by adjusting these parameters. We report the effects of high pressure on the crystal structure and magnetic properties of $\mathrm{Sm}_2\mathrm{Co}_{17}$ and $\mathrm{Sm}_2\mathrm{Fe}_{17}$ measured in diamond anvil cells.

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