

# JOURNAL OF SOLID STATE CHEMISTRY

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*Cover Art.* (Left) Representation of the  $\text{GdO}_8$  and  $\text{ZrO}_6$  polyhedra in the  $\text{Gd}_2\text{Zr}_2\text{O}_7$  pyrochlore structure as determined by refinement against powder neutron diffraction data. The larger spheres represent the Gd (Purple) and Zr (green) cations. The 48f and 8b anion sites are occupied by the oxygen anions (shown in red) whilst the 8a sites (shown in yellow) are vacant in the ideal pyrochlore. (Right) View of the crystal structure of  $\text{Gd}_2\text{Zr}_2\text{O}_7$  illustrating interpenetration of the  $\text{GdO}_8$  polyhedra ( $\text{Gd}_2\text{O}$  chains) and the corner sharing of the  $\text{ZrO}_6$  octahedra. Article by Kennedy *et al.* on pp. 1695–1698 of this issue.