Supplementary Materials

Explaining stability of transition metal carbides –and why TcC does not exist

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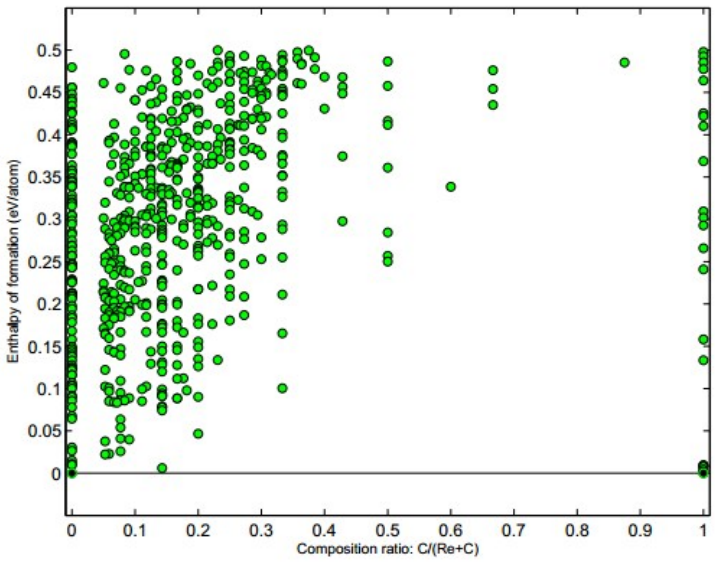

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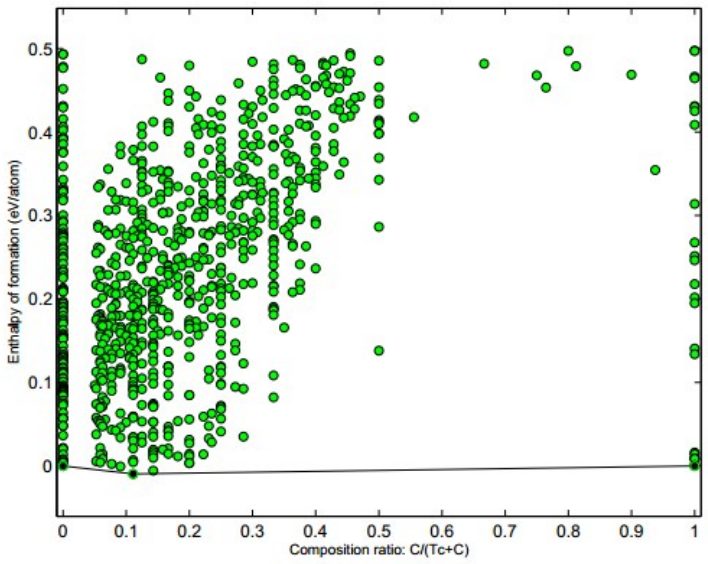

Figure caption 1: the convex hulls of Re-C and Tc-C systems, respectively, in which there is no Re carbide.

Figure caption 2: the CIF files of Tc_6C , cubic Tc, $Tc_{10}C$ and Tc_8C.