Title: Supplementary Dataset 1:
Description: CIF file for VCl$_2$(pyz)$_2$ from powder diffraction data

Title: Supplementary Dataset 2:
Description: CIF file for TiCl$_2$(pyz)$_2$ from powder diffraction data

Title: Supplementary Dataset 3:
Description: CIF file for VCl$_2$(py)$_4$ from single-crystal diffraction data

Title: Supplementary Dataset 4:
Description: CIF file for VCl$_2$(pyz)$_2$ from single-crystal diffraction data