Systematic modifications of the ligand spacer lead to helical and meso-helical supramolecular architectures in three \( \text{[Dy}_2 \text{]} \) single-molecule magnets with unique magnetic properties under applied field.

Solid-state nuclear magnetic resonance spectroscopy is a versatile method for probing many different types of inorganic materials using techniques including multi-pulse enhancement sequences, cross-polarization, non-spinning wideband acquisition and high-temperature magic-angle spinning.
Jeffrey S. Ovens, Leznoff group, Simon Fraser U.
The rarely-observed (thermally triggered) reductive elimination of bromine, from \([\text{Au}^{\text{III}}\text{Br}_2\text{CN}]^-\) to form \([\text{AuI}(\text{CN})_2]^-\), can be harnessed to convert Au(III)-based to Au(I)-based coordination polymers.
Abdullah Radi, UBC, Leung group, U. Waterloo.
DFT/B3LYP Optimized geometry of the inter-dimer [O, N] bidentate adsorbate-substrate configuration for the staggered conformer of ethanolamine on a model Si(100)2×1 surface.
M. Alex Radtke, Reber group, U. Montreal.

Variable-pressure luminescence spectra of gold(I) diethyldithiocarbamate and silver(I) diethyldithiocarbamate displaying differences in metal-metal bonds.

Baharak Bakhshaei, Potvin group, York U.

Ru dye for Dye-Sensitized Solar Cells: The ball-and-stick structure, the solid, a solution and the dye coated and uncoated TiO$_2$ plates are shown.
Bradley E. Cowie, Emslie group, McMaster U.
X-ray crystal structures of \([\text{Pd(dba)}(\text{FcPPP})]\) (dba = dibenzylideneacetone) and \([\text{Pd(FcPPB)}]\) obtained via reaction of \(\text{Pd}_2(\text{dba})_3\) with the new ferrocene based tris-phospine ligand, FcPPP, and the new borane-containing amphiphilic ligand, FcPPB.
Abdullah Radi, UBC, Leung group, U. Waterloo.
Shape evolution (left to right) of Copper Nanoparticles, electrodeposited on Si(100), at different growth rates along the (100) and (111) directions with the associated Scanning Electron Microscopy images.
Elizabeth McDonald, Burford group, Dalhousie U.
The sphere of enclosure for the molecular structure of ([Me$_2$PCH$_2$CH$_2$Me$_2$PMe$_3$Sn][AlCl$_4$])$_n$ where the sphere is centered at tin with a radius of 17.5 Å.

Ryan J. Roberts, Leznoff group, Simon Fraser U.
New dicyanoaurate-lanthanide 1-D coordination polymers \([\text{"Bu}_4\text{N}]_2[\text{Ln(NO}_3\text{)}_4\text{Au(CN)}_2]\): Co-doping \(\text{Ln} = \text{Eu}^{3+}, \text{Tb}^{3+}\) ions forms solid solutions allowing tunability of emission colour.

Marcus W. Drover, Kerton group, Memorial U.

$^7$Li($^1$H)NMR spectroscopy (solution and solid-state) along with single crystal X-ray diffraction was used to characterize a Li$_4$ amine-phenolate cluster.
V. Nicholas Vukotic, Loeb group, U. Windsor.
A tetra carboxylate benzyl-aniline [2]rotaxane forms a metal organic framework, designated UWDM-1. Upon activation (heating) the material exhibits rapid rotation of its macrocyclic wheels, as demonstrated by SSNMR.