6. *Future scope*
This study shows the developments of potential leads against metalloenzymes. There are some immense future scopes for further development of isoglutamine derivatives as dual MMP-2/HDAC-8 inhibitors with higher potency and isoform selectivity. Moreover, the HDAC-8 inhibitors may be tested against T-lymphoma cells, which have been reported to be highly sensitive towards HDAC-8 inhibitors. In addition, compounds showing higher anti-invasive and anti-migratory potentials may be screened against other highly invasive cancer cell lines. These may also be screened for anti-metastatic and anti-angiogenic properties against human cancer cell lines. Additionally, the compounds may be evaluated in animal models to confirm the *in vitro*/*in vivo* correlations.

These isoglutamine derivatives may also be evaluated against APN enzyme to confirm the theoretical predictions performed in the dissertation. On the other hand, the glutamine compounds may also be tested in various *in vitro* and *in vivo* models to confirm their potential to become possible anticancer agents. Furthermore, different *in silico* models reported in the thesis may be utilized to understand the SAR of inhibitors as well as to design novel anticancer agents. Since the biomolecular targets (MMPs and HDACs) addressed in the current study have implications in several diseases apart from cancer, there is opportunity to develop these potent molecules as potential leads for the treatment of these disorders.