

List of Abbreviations

| | |
|----------------------------|--|
| 2D | - 2-dimensional |
| aq | - Aqueous |
| aqua | - aqueous |
| Ar-H | - Aromatic-hydrogen |
| as in ν_{as} (in FTIR) | - Asymmetric |
| asym | - Asymmetric |
| BZ | - Benzo hydrazide |
| CIE | - “Commission Internationale de l’Éclairage” |
| comp | - complex / compound |
| CV | - Cyclic Voltammogram |
| DFT | - Density Functional Theory |
| DMB | - 3,5-dimethylbenzoyl |
| DMF | - N, N-Dimethylformamide |
| DMSO | - Dimethylsulphoxide |
| DPV | - Differential Pulse Voltammogram |
| DTG | - Derivative Thermogravimetry |
| ED | - Electric Dipole |
| eq | - equivalent |
| ESI | - Electron Spray Ionization |
| Et | - Ethyl |
| eV | - electron volt |
| FTIR | - Fourier-Transform Infrared Spectroscopy |
| HOMO | - Highest Occupied Molecular Orbital |
| HSAB | - Hard and Soft Acid Base |
| ISC | - Inter System Crossing |
| J-O parameters | - Judd-Ofelt Parameters |
| keV | - kilo electron volt |
| LMCT | - Ligand to Metal Charge Transfer |
| LUMO | - Lowest Unoccupied Molecular Orbital |
| m (in NMR write up) | - Multiplet |
| M. P. | - Melting Point |
| max | - maximum |
| MD | - Magnetic Dipole |

List of Abbreviations

| | |
|------------------------|--|
| Me | - Methyl |
| MHz | - Megahertz |
| NBs | - nearby complex molecules |
| NMR | - Nuclear Magnetic Resonance Spectroscopy |
| OLED | - Organic Light Emitting Diode |
| ORTEP | - Oak Ridge Thermal Ellipsoid Plot |
| PCB | - p-chlorobenzoyl |
| phen | - 1,10-phenanthroline |
| ppm | - Parts Per Million |
| pyz | - Pyrazolone |
| q (in NMR write up) | - quartet |
| R.B. flask | - Round bottom flask |
| rad | - radiative |
| s (in NMR write up) | - Singlet |
| s in ν_s (in FTIR) | - symmetric |
| Sal | - salicylaldehyde |
| SCXRD | - Single Crystal X-Ray Diffraction |
| sym | - Symmetric |
| t (in NMR write up) | - Triplet |
| TBAP | - Tetrabutylammonium phosphate |
| TGA | - Thermogravimetric Analysis |
| TG-DTA | - Thermogravimetry Differential Thermal Analysis |
| TMS | - Tetramethyl silane |
| UV | - Ultraviolet |
| UV-VIS | - Ultraviolet-Visible |
| WLED | - White Light Emitting Diode |
| wt | - weight |
| XRD | - X-Ray Diffraction |
| λ_{em} | - Emission wavelength |
| λ_{exc} | - Excitation wavelength |

*Other abbreviations and symbols are explained in the text.