

## *Abbreviations*

CSIR	Council of Scientific & Industrial Research
NET	National Eligibility Test
VU	Vidyasagar University
USIC	University science instrumentation centre
C	Carbon
Na	Sodium
K	Potassium
Fe	Iron
N	Nitrogen
Mn	Manganese
Zn	Zinc
Ni	Nickel
H	Hydrogen
S	Sulfur
O	Oxygen
Cu	Copper
Pt	Platinum
Ag	Silver
AgCl	Silver chloride
CV	Cyclic voltammetry
TEAM	Tetraethylammonium perchlorate
H <sub>2</sub> O	Water molecule
KBr	Potassium bromide
NaOH	Sodium hydroxide
KOH	Potassium hydroxide
Tris-HCl	tris-(hydroxymethyl)-aminomethane-hydrochloric acid
DMF	Dimethylformamide
MeOH	Methanol
DNA	Deoxyribonucleic acid
FT-IR	Fourier transformed-Infrared spectroscopy
UV-Vis	Ultraviolet-Visible
XRD	X-ray diffraction
ESI-MS	Electro spray ionization mass spectroscopy
CHNS	Carbon hydrogen nitrogen sulphur analyser
A	Absorbance
A <sub>260</sub>	Absorbance at 260 nm Wavelength
A <sub>280</sub>	Absorbance at 280 nm Wavelength
NMR	Nuclear magnetic resonance
<sup>13</sup> C NMR	Carbon Nuclear magnetic resonance
<sup>1</sup> H NMR	Proton Nuclear magnetic resonance
ref	Reference
wt	Weight

g	Gram
mg	Milligram
h	Hour
min.	Minute
Eq	Equation
L	Liter
mL	Milli liter
$\mu\text{M}$	Micro molar
kCal	Kilocalorie
$^{\circ}\text{C}$	Degree centigrade
mA	Milliampere
cm	Centimeter
mm	Millimetre
etc.	Etcetera
i.e.	That is
e.g.	Example
v/v	Volume/volume
v/w	Volume/weight
vs.	Versus
kg	Kilogram
%	Percentage
sec	Second
T	Temperature
1D	One dimensional
2D	Two dimensional
3D	Three dimensional
$m/z$	Mass to charge ratio
USA	United States of America
SRL	Sisco Research Laboratories
$\Phi_s$	Quantum yield
SQUID	Superconducting quantum interference device
MHz	Megahertz
ppm	Parts per million
$\text{CDCl}_3$	Chloroform-D
vw	Very weak
vs	Very strong
s	Strong
w	Weak
CCD	Charged coupled device
CCDC	Cambridge crystallographic data centre
Z	Total number of molecules present in the asymmetric unit
$\tau$	The trigonality parameter
D	Density
$\epsilon$	Extinction co-efficient
$\chi$	Magnetic susceptibility
$\chi_M$	Molar magnetic susceptibility

$\gamma$	Gamma
$\theta$	Theta
$\lambda$	Wavelength
$\pi$	Pie
$\eta$	Refractive index
$K_{sv}$	Stern-Volmer constant
$k_q$	Quenching rate constant
$K_a$	Apparent association constant
$K_{bin}$	Binding constant
$\tau_0$	Fluorescence lifetime
TIP	Temperature-independent paramagnetism
HSA	Human serum albumin
BSA	Bovine serum albumin
fum	Fumarate
tp	Terephthalate
pv	Pivalate
ssal	5-Salfosalicylate
sq	Squarate
HEPES	(4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid
SA	Serum albumin
CT-DNA	Calf thymus DNA
[DNA]	Concentration of CT-DNA
PDB	Protein data bank
RCSB	Research collaboratory for structural bioinformatics
LMCT	Ligand to metal charge transfer
$K_{ib}$	Intrinsic binding constant
EB	Ethidium bromide
$K_{EB}$	DNA binding constant of ethidium bromide
Arg	Arginine
Lys	Lysine
Asp	Aspartic acid
Glu	Glutamic acid
Gln	Glutamine
Asn	Asparagine
His	Histidine
Ser	Serine
Thr	Threonine
Tyr	Tyrosine
Cys	Cysteine
Trp	Tryptophan
Ala	Alanine
Ile	Isoleucine
Leu	Leucine
Met	Methionine
Phe	Phenylalanine
Val	Valine
Pro	Proline
Gly	Glycine