**Table 2**: Results of statistical treatment of log IZD (mm) with σp, σpo, σp+, σp+/ σp,σp+/ σp-, σp+/ σp/ σp-substituent constants using single parameter equation

EXCLUDING -OH

EXCLUDING -OH

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Bacteria | Scale | ρ | r | s | F | Log(IZD)o | n |
| 1 | *Escherichia coli* | σP | 0.31±0.05 | 0.937 | 0.048 | 36.19 | 1.113±0.02 | 7 |
|  | σPo | 0.29±0.09 | 0.854 | 0.07 | 10.78 | 1.10±0.03 | 6 |
|  | σP+ | 0.21±0.02 | 0.969 | 0.034 | 76.36 | 1.159±0.01 | 7 |
|  | σP+/ σP | 0.25±0.02 | 0.977 | 0.03 | 104.92 | 1.135±0.01 | 7 |
|  | σP+/ σP- | 0.16±0.03 | 0.934 | 0.05 | 35.95 | 1.14±0.02 | 7 |
|  | σP+/ σP/ σP- | 0.18±0.03 | 0.929 | 0.05 | 31.38 | 1.12±0.02 | 7 |
| 2 | *Klebsiella oxytoca* | σP | 0.42±0.09 | 0.990 | 0.08 | 21.23 | 1.18±0.03 | 7 |
|  | σPo | 0.43±0.14 | 0.837 | 0.11 | 9.33 | 1.14±0.05 | 6 |
|  | σP+ | 0.28±0.05 | 0.926 | 0.07 | 29.94 | 1.23±0.03 | 7 |
|  | σP+/ σP | 0.36±0.02 | 0.993 | 0.02 | 360.60 | 1.20±0.01 | 7 |
|  | σP+/ σP- | 0.22±0.04 | 0.901 | 0.08 | 21.81 | 1.22±0.03 | 7 |
|  | σP+/ σP/ σP- | 0.26±0.04 | 0.945 | 0.06 | 41.80 | 1.18±0.02 | 7 |
|  |  |  |  |  |  |  |  |  |
| 3 | *Proteus mirabilis* | σP | 0.44±0.08 | 0.922 | 0.08 | 28.2 | 1.07±0.03 | 7 |
|  | σPo | 0.45±0.13 | 0.868 | 0.1 | 12.26 | 1.03±0.05  EXCLUDING -OH | 6 |
|  | σP+ | 0.28±0.06 | 0.911 | 0.08 | 25.5 | 1.13±0.03 | 7 |
|  | σP+/ σP | 0.36±0.05 | 0.959 | 0.06 | 57.12 | 1.1±0.02 | 7 |
|  | σP+/ σP- | 0.22±0.05 | 0.887 | 0.09 | 18.47 | 1.11±0.04 | 7 |
|  | σP+/ σP/ σP- | 0.26±0.05 | 0.915 | 0.08 | 25.73 | 1.08±0.03 | 7 |
| 4 | Pseudomonas aeruginosa | σP | 0.33±0.05 | 0.953 | 0.04 | 49.84 | 1.21±0.02 | 7 |
|  | σPo | 0.33±0.08 | 0.889 | 0.07 | 15.15 | 1.19±0.03  EXCLUDING -OH | 6 |
|  | σP+ | 0.21±0.03 | 0.940 | 0.05 | 38.35 | 1.26±0.02 | 7 |
|  | σP+/ σP | 0.26±0.04 | 0.950 | 0.05 | 46.15 | 1.24±0.02 | 7 |
|  | σP+/ σP- | 0.17±0.03 | 0.940 | 0.05 | 37.76 | 1.25±0.02 | 7 |
|  | σP+/ σP/ σP- | 0.19±0.03 | 0.944 | 0.05 | 40.59 | 1.22±0.02 | 7 |
| 5 | Shigella sonnei | σP | 0.35±0.06 | 0.923 | 0.06 | 28.74 | 1.09±0.02 | 7 |
|  | σPo | 0.36±0.11 | 0.860 | 0.09 | 11.32 | 1.06±0.04  EXCLUDING -OH | 6 |
|  | σP+ | 0.23±0.04 | 0.920 | 0.06 | 27.4 | 1.14±0.02 | 7 |
|  | σP+/ σP | 0.29±0.03 | 0.965 | 0.04 | 67.55 | 1.11±0.02 | 7 |
|  | σP+/ σP- | 0.18±0.04 | 0.908 | 0.07 | 23.36 | 1.12±0.03 | 7 |
|  | σP+/ σP/ σP- | 0.21±0.04 | 0.940 | 0.06 | 35.65 | 1.09±0.02 | 7 |
|  |  |  |  |  |  |  |  |  |
| 6 | Staphylococcus aureus | σP | 0.44±0.12 | 0.861 | 0.11 | 14.35 | 1.15±0.04 | 7 |
| σPo | 0.47±0.17 | 0.810 | 0.14 | 7.53 | 1.1±0.07 | 6 |
| σP+ | 0.29±0.07 | 0.873 | 0.1 | 16.09 | 1.21±0.04 | 7 |
| σP+/ σP | 0.39±0.05 | 0.962 | 0.06 | 62.09 | 1.18±0.02 | 7 |
| σP+/ σP- | 0.23±0.06 | 0.862 | 0.11 | 14.49 | 1.19±0.04 | 7 |
| σP+/ σP/ σP+ | 0.28±0.05 | 0.924 | 0.08 | 29.4 | 1.15±0.03 | 7 |