**Statistical Modelling and Optimisation of the Biosorption of Cd(II) and Pb(II) onto Dead Biomass of *Pseudomonas Aeruginosa***

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**Supplementary Material**

Dataset for the study [[1](#_ENREF_1)]

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **Initial Conc of Cd(II) or Pb(II) (ppm)** | **pH** | **Temperature (ºC)** | **Time (minutes)** | **Dead cell mass (mg)** | **% Cd(II) removal** | **% Pb(II) removal** |
| 1 | 1 | 5 | 35 | 90 | 75 | 63.9 | 75.3 |
| 2 | 1 | 6 | 35 | 90 | 75 | 66.0 | 77.3 |
| 3 | 1 | 7 | 35 | 90 | 75 | 67.7 | 79.1 |
| 4 | 1 | 8 | 35 | 90 | 75 | 69.0 | 80.7 |
| 5 | 1 | 9 | 35 | 90 | 75 | 70.0 | 81.9 |
| 6 | 2 | 5 | 35 | 90 | 75 | 55.7 | 67.1 |
| 7 | 2 | 6 | 35 | 90 | 75 | 57.4 | 68.8 |
| 8 | 2 | 7 | 35 | 90 | 75 | 58.8 | 70.2 |
| 9 | 2 | 8 | 35 | 90 | 75 | 59.8 | 71.3 |
| 10 | 2 | 9 | 35 | 90 | 75 | 60.5 | 72.2 |
| 11 | 3 | 5 | 35 | 90 | 75 | 47.6 | 59.2 |
| 12 | 3 | 6 | 35 | 90 | 75 | 49.0 | 60.5 |
| 13 | 3 | 7 | 35 | 90 | 75 | 50.1 | 61.5 |
| 14 | 3 | 8 | 35 | 90 | 75 | 50.8 | 62.2 |
| 15 | 3 | 9 | 35 | 90 | 75 | 51.1 | 62.6 |
| 16 | 4 | 5 | 35 | 90 | 75 | 39.7 | 51.6 |
| 17 | 4 | 6 | 35 | 90 | 75 | 40.7 | 52.4 |
| 18 | 4 | 7 | 35 | 90 | 75 | 41.5 | 53.0 |
| 19 | 4 | 8 | 35 | 90 | 75 | 41.9 | 53.3 |
| 20 | 4 | 9 | 35 | 90 | 75 | 41.9 | 53.3 |
| 21 | 5 | 5 | 35 | 90 | 75 | 31.9 | 44.1 |
| 22 | 5 | 6 | 35 | 90 | 75 | 32.6 | 44.5 |
| 23 | 5 | 7 | 35 | 90 | 75 | 33.1 | 44.7 |
| 24 | 5 | 8 | 35 | 90 | 75 | 33.1 | 44.6 |
| 25 | 5 | 9 | 35 | 90 | 75 | 33.0 | 44.2 |
| 26 | 1 | 7 | 25 | 90 | 75 | 64.9 | 76.6 |
| 27 | 1 | 7 | 30 | 90 | 75 | 67.1 | 78.7 |
| 28 | 1 | 7 | 35 | 90 | 75 | 67.7 | 79.1 |
| 29 | 1 | 7 | 40 | 90 | 75 | 66.5 | 78.0 |
| 30 | 1 | 7 | 45 | 90 | 75 | 63.6 | 75.2 |
| 31 | 2 | 7 | 25 | 90 | 75 | 53.4 | 65.0 |
| 32 | 2 | 7 | 30 | 90 | 75 | 56.9 | 68.4 |
| 33 | 2 | 7 | 35 | 90 | 75 | 58.8 | 70.2 |
| 34 | 2 | 7 | 40 | 90 | 75 | 59.0 | 70.4 |
| 35 | 2 | 7 | 45 | 90 | 75 | 52.4 | 68.9 |
| 36 | 3 | 7 | 25 | 90 | 75 | 42.0 | 53.6 |
| 37 | 3 | 7 | 30 | 90 | 75 | 46.9 | 58.3 |
| 38 | 3 | 7 | 35 | 90 | 75 | 50.1 | 61.5 |
| 39 | 3 | 7 | 40 | 90 | 75 | 51.6 | 63.0 |
| 40 | 3 | 7 | 45 | 90 | 75 | 51.3 | 62.9 |
| 41 | 4 | 7 | 25 | 90 | 75 | 30.8 | 42.4 |
| 42 | 4 | 7 | 30 | 90 | 75 | 37.0 | 48.5 |
| 43 | 4 | 7 | 35 | 90 | 75 | 41.5 | 53.0 |
| 44 | 4 | 7 | 40 | 90 | 75 | 44.3 | 55.9 |
| 45 | 4 | 7 | 45 | 90 | 75 | 45.4 | 57.1 |
| 46 | 5 | 7 | 25 | 90 | 75 | 19.7 | 31.4 |
| 47 | 5 | 7 | 30 | 90 | 75 | 27.2 | 38.9 |
| 48 | 5 | 7 | 35 | 90 | 75 | 33.1 | 44.7 |
| 49 | 5 | 7 | 40 | 90 | 75 | 37.2 | 48.9 |
| 50 | 5 | 7 | 45 | 90 | 75 | 39.6 | 51.5 |
| 51 | 1 | 7 | 35 | 25 | 75 | 40.8 | 52.5 |
| 52 | 1 | 7 | 35 | 50 | 75 | 52.9 | 64.5 |
| 53 | 1 | 7 | 35 | 75 | 75 | 62.8 | 74.3 |
| 54 | 1 | 7 | 35 | 100 | 75 | 70.5 | 81.9 |
| 55 | 1 | 7 | 35 | 125 | 75 | 75.9 | 87.4 |
| 56 | 1 | 7 | 35 | 150 | 75 | 79.1 | 90.6 |
| 57 | 2 | 7 | 35 | 25 | 75 | 30.9 | 42.7 |
| 58 | 2 | 7 | 35 | 50 | 75 | 43.4 | 54.9 |
| 59 | 2 | 7 | 35 | 75 | 75 | 53.7 | 65.1 |
| 60 | 2 | 7 | 35 | 100 | 75 | 61.7 | 73.1 |
| 61 | 2 | 7 | 35 | 125 | 75 | 67.5 | 79.0 |
| 62 | 2 | 7 | 35 | 150 | 75 | 71.1 | 82.6 |
| 63 | 3 | 7 | 35 | 25 | 75 | 21.2 | 32.9 |
| 64 | 3 | 7 | 35 | 50 | 75 | 34.1 | 45.5 |
| 65 | 3 | 7 | 35 | 75 | 75 | 44.7 | 56.2 |
| 66 | 3 | 7 | 35 | 100 | 75 | 53.2 | 64.6 |
| 67 | 3 | 7 | 35 | 125 | 75 | 59.4 | 70.8 |
| 68 | 3 | 7 | 35 | 150 | 75 | 63.3 | 74.8 |
| 69 | 4 | 7 | 35 | 25 | 75 | 13.6 | 23.2 |
| 70 | 4 | 7 | 35 | 50 | 75 | 24.9 | 36.4 |
| 71 | 4 | 7 | 35 | 75 | 75 | 35.9 | 47.4 |
| 72 | 4 | 7 | 35 | 100 | 75 | 44.7 | 56.2 |
| 73 | 4 | 7 | 35 | 125 | 75 | 51.3 | 62.8 |
| 74 | 4 | 7 | 35 | 150 | 75 | 55.6 | 67.3 |
| 75 | 5 | 7 | 35 | 25 | 75 | 5.1 | 14.0 |
| 76 | 5 | 7 | 35 | 50 | 75 | 15.9 | 27.5 |
| 77 | 5 | 7 | 35 | 75 | 75 | 27.3 | 38.9 |
| 78 | 5 | 7 | 35 | 100 | 75 | 36.5 | 48.1 |
| 79 | 5 | 7 | 35 | 125 | 75 | 43.4 | 55.1 |
| 80 | 5 | 7 | 35 | 150 | 75 | 48.1 | 59.9 |
| 81 | 1 | 7 | 35 | 90 | 30 | 49.0 | 60.7 |
| 82 | 1 | 7 | 35 | 90 | 50 | 57.4 | 69.0 |
| 83 | 1 | 7 | 35 | 90 | 70 | 65.6 | 77.1 |
| 84 | 1 | 7 | 35 | 90 | 90 | 73.6 | 85.1 |
| 85 | 1 | 7 | 35 | 90 | 110 | 81.4 | 92.9 |
| 86 | 1 | 7 | 35 | 90 | 125 | 87.0 | 98.5 |
| 87 | 2 | 7 | 35 | 90 | 30 | 38.0 | 49.5 |
| 88 | 2 | 7 | 35 | 90 | 50 | 47.3 | 58.8 |
| 89 | 2 | 7 | 35 | 90 | 70 | 56.5 | 67.9 |
| 90 | 2 | 7 | 35 | 90 | 90 | 66.9 | 75.5 |
| 91 | 2 | 7 | 35 | 90 | 110 | 74.2 | 85.7 |
| 92 | 2 | 7 | 35 | 90 | 125 | 80.6 | 92.1 |
| 93 | 3 | 7 | 35 | 90 | 30 | 27.1 | 38.5 |
| 94 | 3 | 7 | 35 | 90 | 50 | 37.5 | 48.8 |
| 95 | 3 | 7 | 35 | 90 | 70 | 47.6 | 59.0 |
| 96 | 3 | 7 | 35 | 90 | 90 | 57.5 | 68.9 |
| 97 | 3 | 7 | 35 | 90 | 110 | 67.2 | 78.7 |
| 98 | 3 | 7 | 35 | 90 | 125 | 74.3 | 86.0 |
| 99 | 4 | 7 | 35 | 90 | 30 | 16.3 | 27.7 |
| 100 | 4 | 7 | 35 | 90 | 50 | 27.7 | 39.0 |
| 101 | 4 | 7 | 35 | 90 | 70 | 45.2 | 39.8 |
| 102 | 4 | 7 | 35 | 90 | 90 | 49.6 | 61.2 |
| 103 | 4 | 7 | 35 | 90 | 110 | 60.0 | 72.0 |
| 104 | 4 | 7 | 35 | 90 | 125 | 68.1 | 80.0 |
| 105 | 5 | 7 | 35 | 90 | 30 | 5.8 | 17.1 |
| 106 | 5 | 7 | 35 | 90 | 50 | 18.0 | 29.5 |
| 107 | 5 | 7 | 35 | 90 | 70 | 30.1 | 41.7 |
| 108 | 5 | 7 | 35 | 90 | 90 | 41.9 | 53.7 |
| 109 | 5 | 7 | 35 | 90 | 110 | 55.5 | 53.5 |
| 110 | 5 | 7 | 35 | 90 | 125 | 62.1 | 74.3 |

**Reference**

[1] M. Karimpour, S. D. Ashrafi, K. Taghavi, A. Mojtahedi, E. Roohbakhsh, and D. Naghipour, "Adsorption of cadmium and lead onto live and dead cell mass of Pseudomonas aeruginosa: A dataset," *Data in brief,* vol. 18, pp. 1185-1192, 2018.