

**APPENDIX B Duplication data for optimisation of washing pre-treatment**

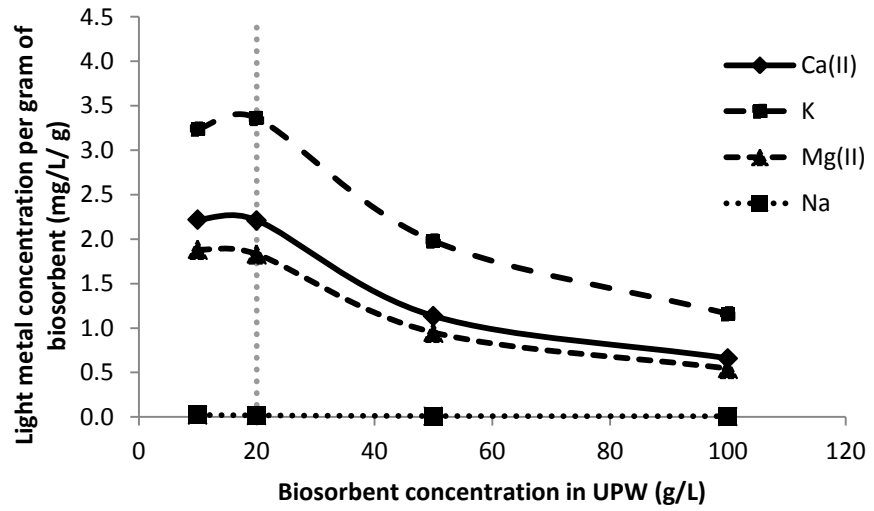


Figure B1 Light metal concentration leached out per gram of biosorbent for different biosorbent concentration in 200 mL UPW

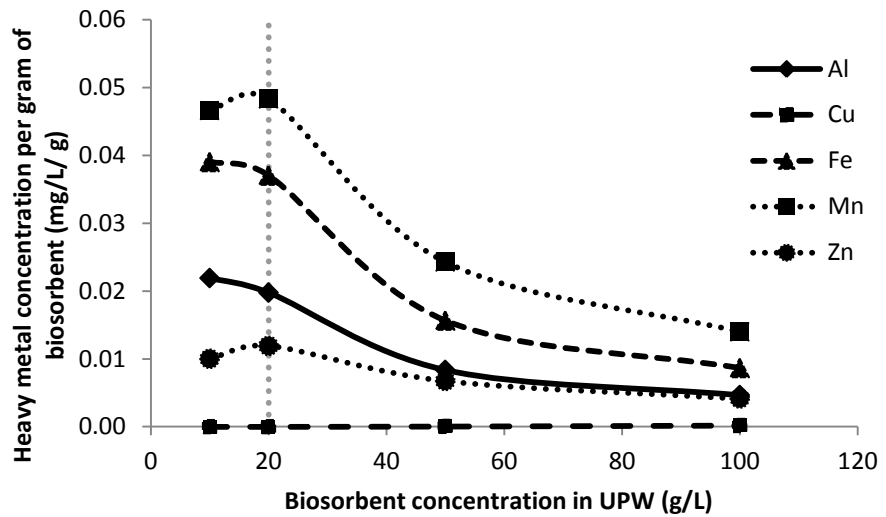


Figure B2 Heavy metal concentration per gram of biosorbent for different biosorbent concentration in 200 mL UPW

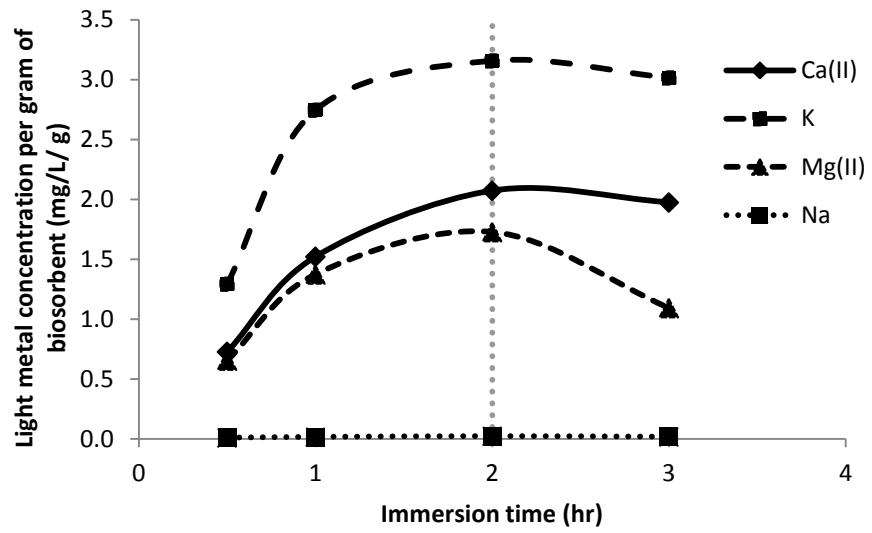


Figure B3 Light metal concentration per gram of biosorbent for different immersion time

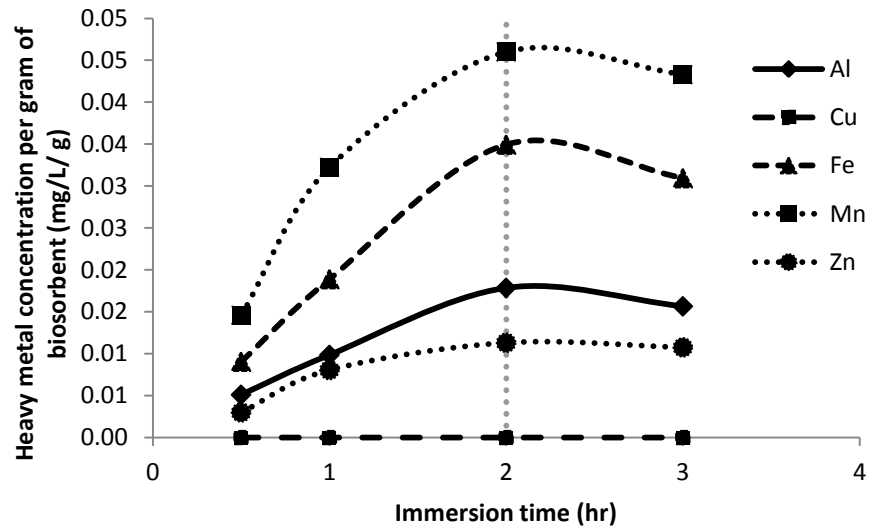


Figure B4 Heavy metal concentration per gram of biosorbent for different immersion time

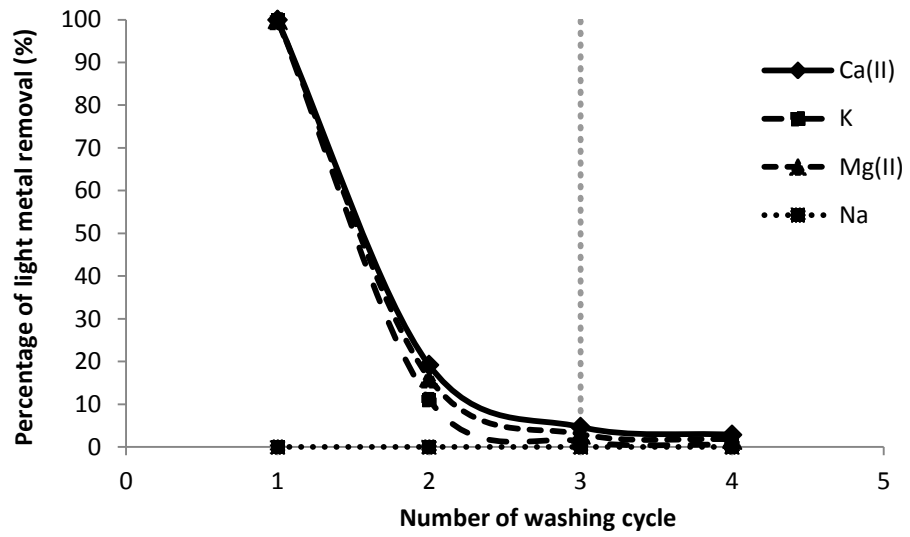


Figure B5 Percentage of light metal removal for different number of washing cycle

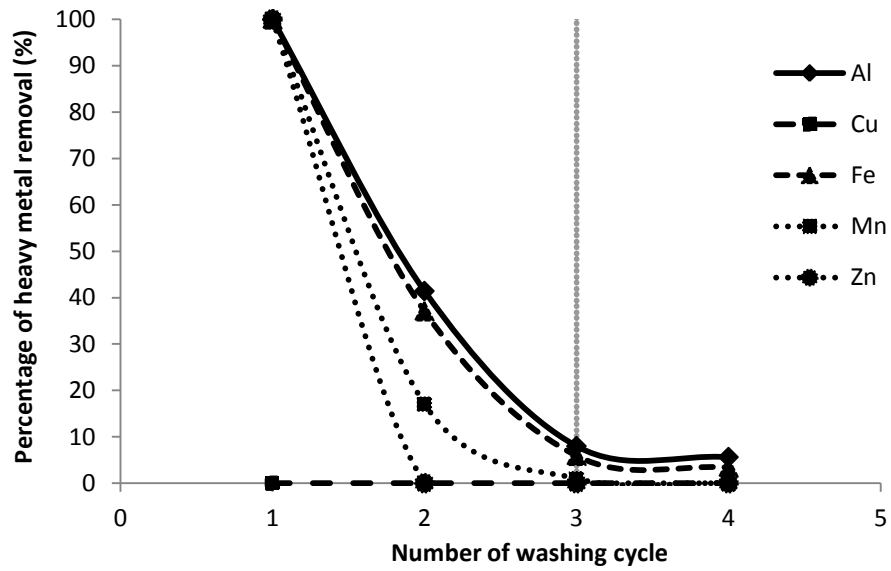


Figure B6 Percentage of heavy metal removal for different number of washing cycle

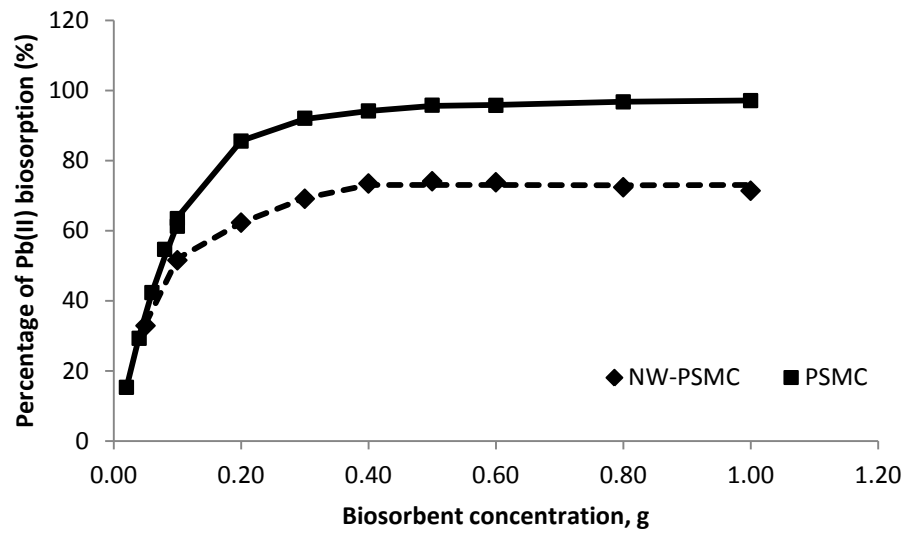


Figure B7 The effect of NW-PSMC and PSMC on Ni(II) biosorption efficiency