

Electronic Supplementary Information (ESI)

**Bio-Inspired Perylene Diimide Coated Super Paramagnetic Nano Particles
for Effective and Efficient Removal of Lead (II) from Aqueous Medium**

**Sucharita Dey,^a Shouvik Mahanty,^b Ankita Saha,^a Prince Kumar,^a Rajdeep Saha,^a
Chirantan Kar,^a Punarbasu Chaudhuri^b and Pradip Kr. Sukul^a ***

^aDepartment of Chemistry, Amity Institute of Applied Sciences, Amity University Kolkata,
Kolkata, Action Area-II, Kadampukur, New Town, Rajarhat, Kolkata-700135, India

^bDepartment of Environmental Science, University of Calcutta, Ballygunge Circular Road,
Kolkata-700019

E-mail ID: psukul@kol.amity.edu, sukul.ochem@gmail.com

Table of contents

1) Zeta Potentials of NPLD and NPLD-Pb	S2
2) Bar plot of pH (2-8) dependence adsorption of lead (II).....	S3
3) Reusability of NPLD for lead (II) adsorption	S4

Fig. S1:

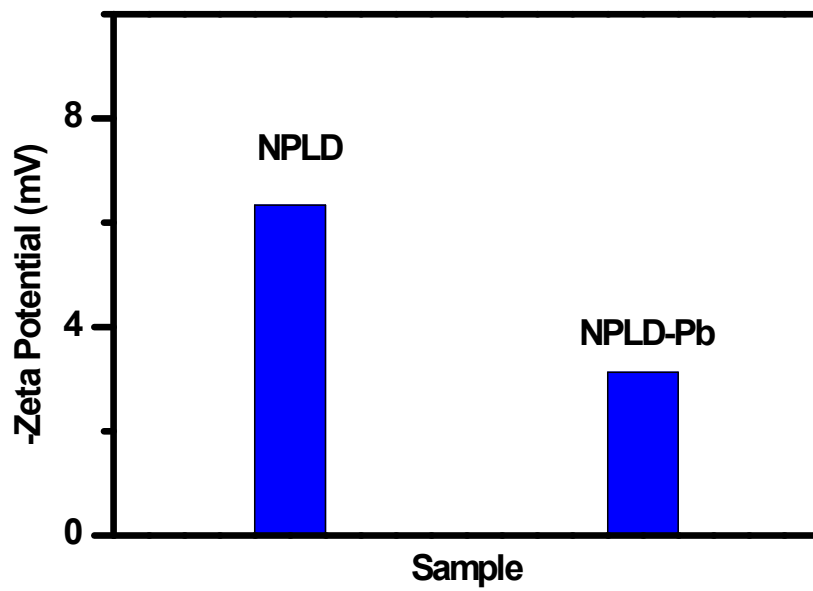


Fig. S1. Zeta Potentials of NPLD and NPLD-Pb.

Fig. S2

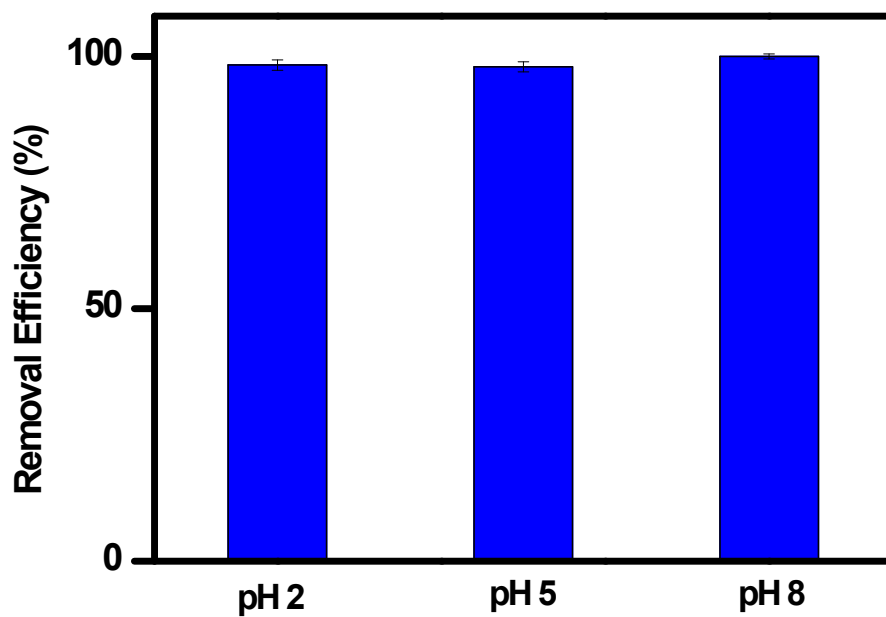


Fig. S2. Bar plot of pH (2-8) dependence adsorption of lead (II) (10 ppm) by NPLD measured by ICP-OES. In case of pH 2 & 5 adsorption capacities remained same almost around 96% whereas in basic medium the adsorption capacity showed maximum value.

Fig. S3

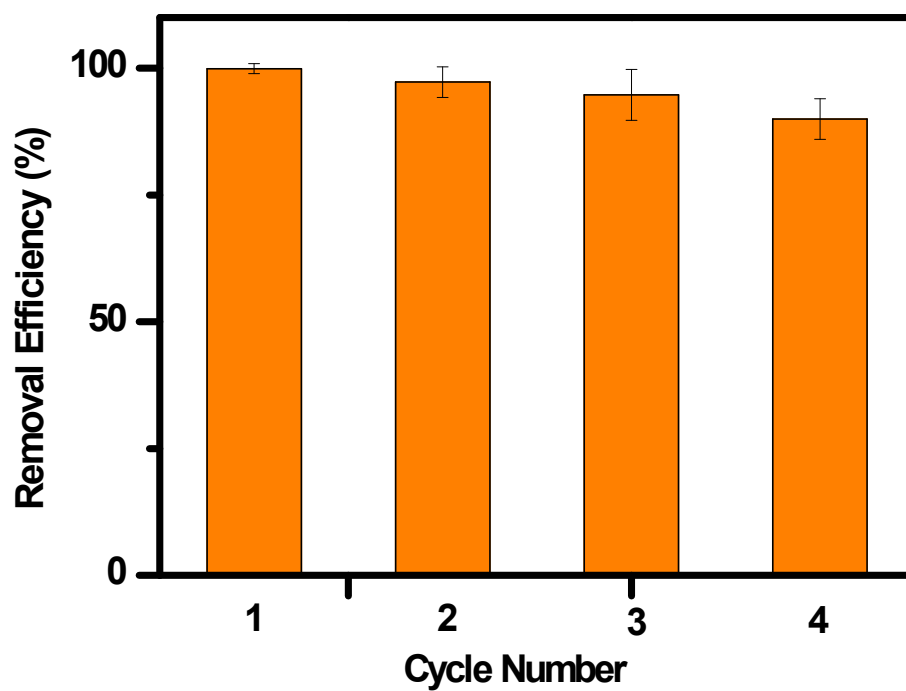


Fig. S3: (a) Reusability of NPLD for lead (II) adsorption repeated in 4 cycle, after 2 cycle regeneration of NPLD was approx. 98%, from cycle 3 & 4 regeneration reduced to 95%.