Supplementary Information

Composition dependent structure and catalytic activity of nanostructured Cu-Ni bimetallic oxides

S.Vivek [a], S.Preethi [a], Ashok K. Sundramoorthy[b], K. Suresh Babu [a,*]

[a] Centre for Nanoscience and Technology, Madanjeet School of Green Energy Technologies, Pondicherry University (A Central University), Puducherry, 605014, India

[b] Department of Chemistry, SRM Institute of Science and Technology, Kattankulathur, 603203 Tamil Nadu, India

* Corresponding Author

Email: sureshbabu.nst@pondiuni.edu.in

Phone: +91-413-2654976

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SEM-EDX Mapping

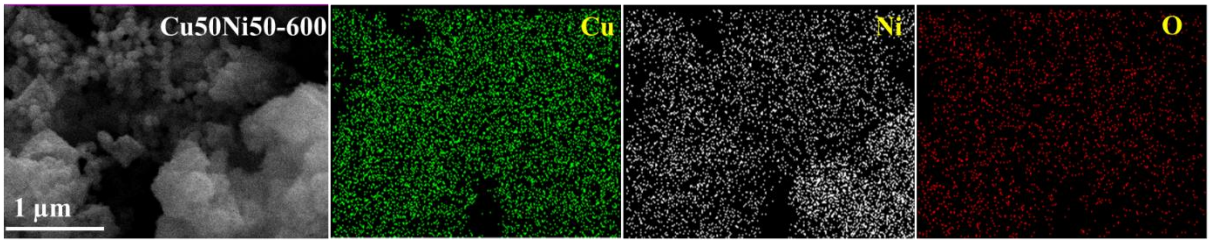

Fig.S1. SEM image of Cu50Ni50-600 along with the corresponding elemental mapping of Cu50Ni50-600 shows the presence of homogenous distributed Cu and Ni

Recyclability Test

Fig. S2 shows the recyclability test carried out for Cu50Ni50-600 which showed the best catalytic activity among the various samples.

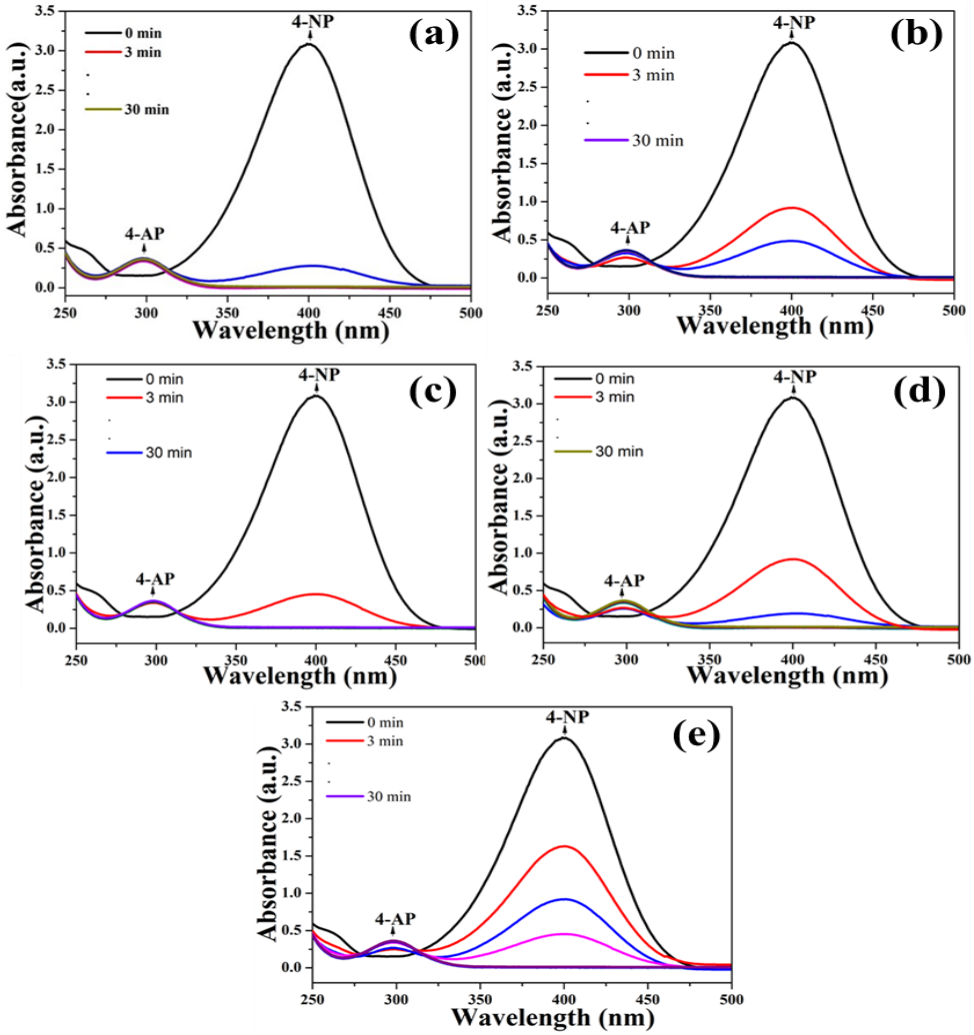

Fig. S2. UV-Visible spectroscopy of Cu50Ni50-600 for 4-nitrophenol reduction after (a) 1(b) 2 (c) 3 (d) 4 and (e) 5 cycles

After each cycle, the sample was collected carefully without any loss of material and used for the upcoming cycles. The bar diagram shown in Fig.S3. gives the efficiency of catalyst up to 5 cycles for the complete conversion of 4-NP

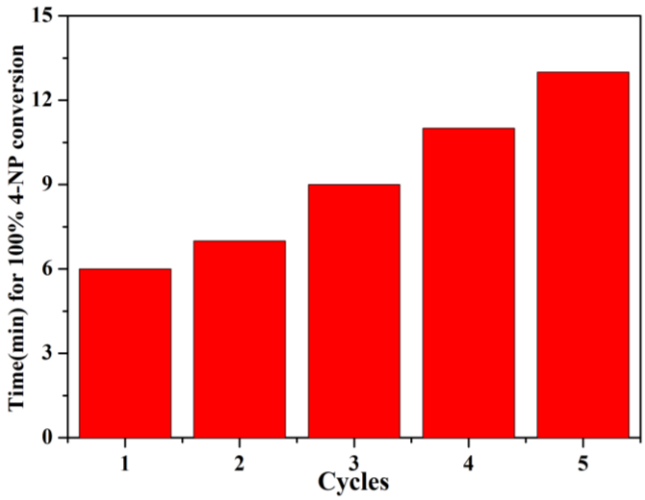

Fig. S3. Recyclability of Cu50Ni50-600 catalyst for complete degradation of 4-NP