CLAIMS:

1. A coke reducing additive composition for simultaneously: reducing coke formed and increasing yield of distillate formed during processing of a plastic material, or a feedstock, or a combination of a plastic material and a feedstock in a processing unit, wherein the coke reducing additive composition comprises at least a combination of:
   (a) diisodecyl phenyl phosphite (DIDPP); and
   (b) metal salt including calcium salt, sodium salt, calcium salt of organic acid, sodium salt of organic acid or a mixture thereof,
   wherein the calcium salt is calcium naphthenate (CaNaphthenate); and
   wherein the sodium salt is Sodium naphthenate (NaNaphthenate).

2. The composition as claimed in **claim 1**, wherein the plastic material comprises a waste plastic material, an olefin polymer (OP), a low-density polyethylene (LDPE), a high-density polyethylene (HDPE), a mix plastic, a polystyrene, a polypropylene plastic (PP), a polyethylene, or a mixture thereof.

3. The composition as claimed in **claim 1 or claim 2**, wherein the feedstock comprises crude oil, vacuum residue, atmospheric residue, asphalted pitch, shale oil, coal tar, clarified oil, residual oils, heavy waxy distillates, foots oil, slop oil, or mixture thereof.

4. The composition as claimed in any one of the preceding **claims 1 to 3**, wherein the component (a) and the component (b) are present in equal amounts.

5. The composition as claimed in any one of the preceding **claims 1 to 3**, wherein the component (a) and the component (b) are present in a weight ratio varying from about 0.1 to 99.9 to about 99.9 to 0.1 (percent by weight).

6. The composition as claimed in any one of the preceding **claims 1 to 5**, wherein the additive composition is added to the processing unit in an amount varying from about 1 ppm to about 5000 ppm.

7. The composition as claimed in claim 1, wherein the plastic material comprises a waste plastic material, an olefin polymer (OP), polypropylene plastic (PP) material.

8. The composition as claimed in claim 1, wherein the feedstock comprises a vacuum residue (VR).

9. The composition as claimed in claim 1, wherein the additive composition is added to the processing unit in an amount varying from about 5 ppm to about 3000 ppm.

10. The composition as claimed in claim 1, wherein the additive composition is added to the processing unit in an amount varying from about 5 ppm to about 2000 ppm.

11. The composition as claimed in claim 1, wherein the additive composition is added to the processing unit in an amount varying from about 5 ppm to about 1000 ppm.

12. The composition as claimed in claim 1, wherein the additive composition is added to the processing unit in an amount varying from about 5 ppm to about 500 ppm.

13. A method for simultaneously: reducing coke formed and increasing distillate formed during processing of a plastic material, or a feedstock, or a combination of a plastic material and a feedstock in a processing unit, wherein the method comprises a step of adding the coke reducing additive composition as claimed in any one of the preceding **claims 1 to 12** in a processing unit containing the plastic material, or the feedstock, or the combination of the plastic material and the feedstock.

14. A method for using a coke reducing additive composition for simultaneously: reducing coke formed and increasing distillate formed during processing of a plastic material, or a feedstock, or a combination of a plastic material and a feedstock in a processing unit, wherein the method comprises a step of treating the plastic material, or the feedstock, or the combination of the plastic material and the feedstock contained in the processing unit with the coke reducing additive composition as claimed in any one of the preceding **claims 1 to 12**.

15. A method for converting a waste plastic material to a distillate, wherein the method comprises a step of treating a plastic material, or a feedstock, or a combination of the plastic material and the feedstock contained in a processing unit with the coke reducing additive composition as claimed in any one of the preceding **claims 1 to 12**.

16. A method for reducing formation of coke deposits on walls of a processing unit, wherein the method comprises a step of adding to a plastic material, or a

feedstock, or a combination of the plastic material and the feedstock contained in the processing unit the coke reducing additive composition as claimed in any one of the preceding **claims 1 to 12**.

17. A method for reducing fouling caused due to deposits of coke products on walls of a processing unit, wherein the method comprises a step of treating a plastic material, or a feedstock, or a combination of the plastic material and the feedstock contained in the processing unit with the coke reducing additive composition as claimed in any one of the preceding **claims 1 to 12**.