CLAIMS

1. A method for treating a lipid material comprising phosphorous and/or metal compounds, the method comprising

a) providing the lipid material,

b) preheating the lipid material, to obtain a preheated lipid material,

c) heat treating the preheated lipid material in a heat treatment step, to obtain a heat treated lipid material,

d) optionally post treating the heat treated lipid material in a post treatment step,

wherein the preheating step b) is conducted at a temperature of about 90 °C to about 160 °C, the heat treating step c) is conducted at a temperature of about 220 °C to about 300 °C, preferably about 220 °C to about 280 °C, more preferably about 260 °C to about 280 °C, and wherein the heat treating step c) is conducted at a pressure of about 0 bar(g) to about 20 bar(g), preferably about 1 bar(g) to about 10 bar(g), more preferably about 1 bar(g) to about 3 bar(g).

2. The method according to claim 1, wherein the heat treating step c) is conducted during a time of about 5 to about 300 minutes, preferably about 10 to about 180 minutes, more preferably about 15 to about 90 minutes, even more preferably about 30 to about 60 minutes.

3. The method according to any one of the previous claims, wherein the moisture content of the lipid material during the heat treatment is about 200 to about 2500 mg/kg, preferably about 200 to about 1500 mg/kg, more preferably about 200 mg/kg to about 1000 mg/kg.

4. The method according to any one of the previous claims, wherein the lipid material is renewable lipid material.

5. The method according to any one of the previous claims, wherein the lipid material is a plant based, a microbial based or an animal based lipid material, or any combination thereof.

6. The method according to any one of the previous claims, wherein the preheating step b) further comprises an air removal step.

7. The method according to any one of the previous claims, wherein phosphorous compounds are phospholipids selected from a group comprising phosphatidyl ethanolamines, phosphatidyl cholines, phosphatidyl inositols and phosphatidic acids.

8. The method according to any one of the previous claims, wherein the post treating step d) comprises addition of moisture to the lipid material.

9. The method according to any one of the previous claims, wherein the heat treating step c) takes place in at least one reactor.

10. The method according to claim 9, wherein the at least one reactor is selected from tube reactor and/or stirred tank reactor.

11. The method according to any one of the previous claims, wherein a portion of the lipid material that has been subject to the heat treating step c) is withdrawn, heated to a temperature of about 300 °C to about 350 °C and reintroduced into step c) where the lipid material is being subject to the heat treating step c).

12. The method according to any one of the previous claims, wherein the post treating step d) comprises cooling, settling, filtration, centrifugation and/or bleaching.

13. The method according to any one of the previous claims, wherein the post treating step d) is bleaching.

14. The method according to any one of the previous claims, wherein the lipid material provided in step a) comprises about 30 to about 2000 mg/kg phosphorous, preferably about 30 to about 1000 mg/kg phosphorous, more preferably about 50 mg/kg to about 600 mg/kg phosphorous.

15. The method according to any one of the previous claims, further comprising hydrotreatment of the heat treated lipid material in the presence of a hydrotreatment catalyst in order to obtain a hydrotreated lipid material.

16. The method according to claim 15, wherein the hydrotreatment may be selected from hydrodeoxygenation (HDO), hydrodesulfurisation (HDS), hydrodemetallization (HDM), hydrodenitrification (HDN) and/or hydrodearomatisation (HDA).

17. The method according to any one of the previous claims, further comprising a second heat treatment after the heat treating step c).

18. A method for producing hydrocarbons, comprising
x) treating a lipid material comprising phosphorous and/or metal compounds, using a method as claimed in any one of claims 1 to 20, and
y) subjecting the lipid material from step x) to an oil refinery conversion process.

19. A method as claimed in claim 18, wherein the oil refinery conversion process comprises altering the molecular weight of the lipid material, removal of heteroatoms from the lipid material, altering the degree of saturation of the lipid material, rearranging the molecular structure of the lipid material, or any combination thereof, to obtain at least one hydrocarbon.

20. A method as claimed in claim 18 or 19, wherein step y) comprises hydrocracking.

21. A method as claimed in claim 18 or 19, wherein step y) comprises steam cracking.

22. A method as claimed in claim 18 or 19, wherein step y) comprises isomerization.

23. A method as claimed in claim 18 or 19, wherein step y) comprises thermal catalytic cracking.

24. A method as claimed in claim 18 or 19, wherein step y) comprises fluid catalytic cracking.

25. The method according to any of the preceding claims, wherein the method further comprises a step a) for processing lipid material by settling, filtration, centrifugation prior to the preheating step b).