What is claimed is:

1. A method for removing a toxic or undesirable molecule from an environment comprising administering to the environment a composition of microparticles, said microparticles comprising an aqueous phase, wherein said aqueous phase comprises (i) a system for generating NAD^+ from NADH comprising NADH oxidase (NOX), and (ii) one or more enzymes that are involved in one or more NAD^+-dependent reactions that remove said toxic or undesirable molecules from said environment.

2. The method of claim 1 wherein the microparticles comprise a polymeric or lipid membrane.

3. The method of claim 1, wherein the microparticles are liposomes.

4. The method of claim 1, wherein the system of generating NAD^+ from NADH consists of NADH oxidase (NOX).

5. The method of claim 1, wherein said system for generating NAD+ from NADH comprises NADH oxidase (NOX) and oxygen.

6. The method of claim 1, wherein the environment is a water supply system, a food packaging, a bioreactor, a chemical reactor, a body cavity or a subject's blood.

7. The method of claim 6, wherein the subject is a human or animal.

8. The method of claim 1, wherein the toxic or undesirable molecule is ethanol.

9. The method of claim 8, wherein said microparticles continuously convert ethanol to acetate.

10. The method of claim 8, wherein said enzymes that are involved in the NAD^+-dependent reactions comprise alcohol dehydrogenase (ADH) and acetaldehyde dehydrogenase (ALDH).

11. The method of claim 10, wherein the ADH, ALDH and NOX are present in a ratio of about 1 part ADH to about 500 parts ALDH to about 70 parts NOX.

12. The method of claim 10, wherein the ADH, ALDH and NOX are present in a ratio of about 1:44:2.

13. The method of claim 7, wherein the composition of microparticles is administered to the subject intravenously, intramuscularly, intraperitoneally, or by inhalation.

14. The method of claim 1, wherein the NAD+ dependent ADH or NAD+ dependent ALDH is from bacteria, yeast, plants, or mammals.

15. The method of claim 14, wherein the NAD+ dependent ADH or the NAD+ dependent ALDH is yeast ADH.

16. The method of claim 1, wherein the NAD+ dependent ADH or NAD+ dependent ALDH is expressed recombinantly.

17. The method of claim 1, wherein the NOX is Streptococcus pyogenes NOX.

18. A composition of microparticles for removing toxic or undesirable molecules from an environment, said microparticles comprising an aqueous phase, wherein said aqueous phase comprises (i) a system of generating NAD^+ from NADH comprising NADH oxidase (NOX), and (ii) one or more enzymes that are involved in one or more NAD^+-dependent reactions that remove said toxic or undesirable molecules from said environment.

19. The composition of claim 18 wherein the microparticles comprise a polymeric or lipid membrane.

20. The composition of claim 18 wherein the microparticles are liposomes.

21. The composition of claim 18, wherein the system of generating NAD^+ from NADH consists of NADH oxidase (NOX).

22. The composition of claim 18, wherein the toxic or undesirable molecule is ethanol.

23. The composition of claim 22, wherein said enzymes that are involved in the NAD^+-dependent reactions comprise alcohol dehydrogenase (ADH) and acetaldehyde dehydrogenase (ALDH).

24. The composition of claim 23, wherein the ADH, ALDH and NOX are present in a ratio of about 1:44:2.

25. A composition of microparticles for removing toxic or undesirable molecules from an environment, said microparticle comprises an aqueous phase, wherein said

aqueous phase comprises (i) a system of generating $NADP^+$ from NADPH comprising NADPH oxidase, and (ii) one or more enzymes that are involved in one or more $NADP^+$- dependent reactions that remove said toxic or undesirable molecules from said environment.

26. The composition of claim 25, wherein the microparticles comprise a polymeric membrane, a lipid membrane, or liposomes.

27. The composition of claim 25, wherein the system of generating $NADP^+$ from NADPH consists of NADPH oxidase.

28. The composition of claim 25, wherein the toxic or undesirable molecule is ethanol.

29. A method for removing a toxic or undesirable molecule from an environment, comprising the step of administering to the environment the composition of any one of claims 25-28.

30. The composition of any one of claims 18 to 28 for use as a medicament.