WHAT IS CLAIMED IS:

1. A method for preparing a bioactive ionic liquid composition, comprising:

a) providing one or more of the following:

i) one or more cations and one or more anions, wherein either the cations, anions, or both can have a bioactive property; or

ii) one or more cation precursors and one or more anion precursors, wherein either the cation precursors, anion precursors, or both have a bioactive property when the precursor has a net charge; and

b) combining the cations and anions or the cation precursors and anion precursors, thereby producing a co-ionic liquid $[B^1HB^2]A$ or $B[A^1HA^2]$ that is liquid at a temperature at or below about 150 °C, wherein B, B^1, and B^2 represent cations, and A, A^1, and A^2 represent anions.

2. A method for preparing a bioactive ionic liquid composition, comprising:

a) providing one or more of the following:

i) one or more cations and one or more anions, wherein either the cations, anions, or both can have a bioactive property; or

ii) one or more cation precursors and one or more anion precursors, wherein either the cation precursors, anion precursors, or both have a bioactive property when charged; and

b) combining the cations and anions or the cation precursors and anion precursors, thereby producing liquid ion pairs;

wherein from about 75% to about 100% of the composition comprises an ion pair having the formula $[B^1HB^2]A$ or $B[A^1HA^2]$.

3. The method according to either Claim 1 or 2, wherein from about 50% to about 100% of the composition comprises an ion pair.

4. The method according to either Claim 1 or 2, wherein from about 5% to about 100% of the composition comprises an ion pair.

5. The method according to either Claim 1 or 2, wherein from about 75% to about 100% of the composition comprises an ion pair when the ion pair is in solution.

6. The method according to either Claim 1 or 2, wherein from about 50% to about 100% of the composition comprises an ion pair when the ion pair is in solution.

7. The method according to to either Claim 1 or 2, wherein from about 5% to about 100% of the composition comprises an ion pair when the ion pair is in solution.

8. A method for preparing a bioactive ionic liquid composition, comprising:

a) providing one or more of the following:

i) one or more cations and one or more anions, wherein either the cations, anions, or both can have a bioactive property; or

ii) one or more cation precursors and one or more anion precursors, wherein either the cation precursors, anion precursors, or both have a bioactive property when charged; and

b) combining in the presence of one or more solvents the cations and anions or the cation precursors and anion precursors, thereby producing a solvate ionic liquid;

wherein at least a portion of the solvent provides direct solvation and wherein the composition is composed entirely of ions.

9. The method according to Claim 8, wherein water is used as the solvent.

10. The method according to Claim 1, wherein co-ionic liquids are formed by the addition of an acid or a base.

11. The method according to Claim 1, wherein co-ionic liquids are formed by adding either a corresponding acid HA or corresponding base B to an ionic liquid having the formula [BH]A, wherein further HA is the free acid form of the anions or anion precursors, and B is the free base form of the cations or cation precursors.

12. The method according to Claim 1, wherein co-ionic liquids are formed by adding a corresponding acid HA to an non-protic ionic liquid having the formula B^+A^-, wherein further HA is the free acid form of the anions or anion precursors.

13. The method according to Claim 1, wherein co-ionic liquids are formed by adding either an acid HA_1 or a base B_2 to an ionic liquid having the formula [BH]A, wherein

further HA_1 is a different acid that the acid which forms ionic liquid [BH]A, and B_2 is a different base than the base which forms ionic liquid [BH]A.

14. The method according to Claim 1, wherein co-ionic liquids are formed by adding either an acid HA_1 to an non-protic ionic liquid having the formula B^+A^-, wherein further HA_1 is a different acid that the acid which forms ionic liquid B^+A^-.

15. The method according to Claim 1, wherein the co-ionic liquid is formed by addition of an acid or a base to an ionic liquid [BH]A in a solvent-free synthesis in the molten state or by grinding.

16. The method according to Claim 1, wherein combining the cation precursor and anion precursor in step (b) is accomplished by an acid-base neutralization reaction wherein the ratio of acid to base used for the neutralization reaction is not 1:1.

17. The method according to Claim 1, wherein more than one cation precursors and one anion precursor are reacted to provide a co-ionic liquid having the formula $[B^1HB^2]A$.

18. The method according to Claim 1, wherein more than one cation precursors and one anion precursor are reacted in a solvent-free way via grinding in a ratio that is not 1:1.

19. The method according to Claim 1, wherein more than one cation precursors and one anion precursor are reacted in a solvent-free way via melting in a ratio that is not 1:1.

20. The method according to Claim 1, wherein more than one anion precursors and one cation precursor are reacted to provide a salt of the type $B[A^1HA^2]$.

21. The method according to Claim 1, wherein more than one anion precursors and one cation precursor are reacted in a solvent-free way via grinding in a ratio that is not 1:1.

22. The method according to Claim 1, wherein more than one anion precursors and one cation precursor are reacted in a solvent-free way via melting in a ratio that is not 1:1.

23. The method according to Claim 1, wherein combining the cation precursor and anion precursor is accomplished by addition of acid to hydroxide precursor of the cation in a ratio that is not 1:1.

24. The method according to Claim 1, wherein the composition further comprises a solvent, preservative, dye, colorant, thickener, surfactant, a viscosity modifier, or a mixture thereof at less than about 10 wt.% of the total ionic liquid composition.

25. The method according to Claim 1, wherein the at least one cation or at least one anion is the pharmaceutical active.

26. The method according to Claim 1, wherein the cation and the anion are both pharmaceutical actives.

27. The method according to Claim 1, wherein at least one cation is a pharmaceutical active and at least one anion is a taste modifier, or wherein at least one cation is a taste modifier and at least of anion is a pharmaceutical active.

28. The method according to Claim 1, wherein at least one cation is an antibacterial and at least one anion is a taste modifier, or wherein at least one cation is a taste modifier and at least one anion is an antibacterial.

29. The method according to Claim 1, wherein at least one cation is an antibacterial and at least one anion is a pain reliever or anti-inflammatory, or wherein at least one cation is a pain reliever or anti-inflammatory and at least one anion is an antibacterial.

30. The method according to Claim 1, wherein at least one cation is an antibacterial and at least one anion is a UV-blocker, or wherein at least one cation is a UV-blocker and at least one anion is an antibacterial.

31. The method according to Claim 1, wherein at least one cation is an anesthetic and at least one anion is an antibacterial, or wherein at least one cation is an antibacterial and at least one anion is an anesthetic.

32. The method according to Claim 1, wherein at least one cation is an anesthetic and at least one anion is a coagulator, or wherein at least one cation is a coagulator and at least one anion is an anesthetic.

33. The method according to Claim 1, wherein at least one cation is an antibacterial and at least one anion is a coagulator, or wherein at least one cation is a coagulator and at least one anion is an antibacterial.

34. The method according to Claim 1, wherein either the cation or anion or either the cation precursor or the anion precursor are chiral.

35. The method according to Claim 1, wherein both the cation and anion or both the cation precursor and anion precursor are chiral.

36. The method according to Claim 1, wherein the chiral cation comprises ephedrine or a diastereomer thereof.

37. The method according to Claim 1, wherein the chiral anion comprises camphorsulfonic acid.

38. The method according to Claim 1, wherein the cation or cation precursor is a pesticidal active or the anion or anion precursor is a pesticidal active.

39. The method according to Claim 1, wherein the cation and anion or the cation precursor and anion precursor are both pesticidal actives.

40. The method according to Claim 1, wherein the cation or cation precursor is a herbicidal active or the anion or anion precursor is a herbicidal active.

41. The method according to Claim 1, wherein the cation and anion or the cation precursor and anion precursor are both herbicidal actives.

42. The method according to Claim 1, wherein the cation or cation precursor is a nutraceutical or the anion or anion precursor is a nutraceutical.

43. The method according to Claim 1, wherein the cation and anion or the cation precursor and anion precursor are both nutraceuticals.

44. The method according to Claim 1, wherein the cation or cation precursor is a food additive or the anion or anion precursor is a food additive.

45. The method according to Claim 1, wherein the cation and anion or the cation precursor and anion precursor are both food additives.

46. The method according to Claim 1, wherein the composition is liquid at a temperature at or below about 125 °C.

47. The method according to Claim 1, wherein the composition is liquid at a temperature at or below about 75 °C.

48. The method according to Claim 1, wherein the composition is liquid at a temperature at or below about 50 °C.

49. The method according to Claim 1, wherein the composition is liquid at a temperature at or below about 25 °C.

50. The method according to Claim 1, wherein the composition is liquid at a temperature at or below about 0 °C.

51. The method according to Claim 1, wherein the composition is liquid at a temperature at or below about -25 °C.

52. The method according to Claim 1, wherein the composition is liquid at a temperature at or below about -50 °C.

53. The method according to Claim 1, wherein the composition is liquid at a temperature from about -30 °C to about 150 °C.

54. The method according to Claim 1, wherein the composition is liquid at a temperature from about 0 °C to about 120 °C.

55. The method according to Claim 1, wherein the composition is liquid at about 37 °C.

56. The method according to Claim 1, wherein the composition is liquid over a temperature range of at least 4 °C.

57. The method according to Claim 1, wherein the cation compromises a quaternary nitrogen or phosphor ion as cation.

58. The method according to Claim 1, wherein the at least one kind of cation comprises an aliphatic heteroaryl cation, an aliphatic benzylalkyl ammonium cation, a dialiphatic dialkyl ammonium cation, or a tetraalkyl ammonium cation.

59. The method according to Claim 1, wherein the cation compromises a protonated cation.

60. The method according to Claim 1, wherein the cation comprises choline, lidocaine, tramadolium, caffeine, cetylpyridinium, ephedrinium or promethazine.

61. The method according to Claim 1, wherein the anion comprises salicylate, ibuprofenate, lactate, camphorsulfonate, *trans*-cinnamate, docusate, niacinate or clofibrate.

62. The method according to Claim 1, wherein the cation comprises tetrabutylphosphonium and the anion comprises salicylate and ibuprofenate, cinnamate, camphorsulfonate, lactate or thiosalicylate.

63. The method according to Claim 1, wherein the cation comprises tetrabutylphosphonium and the anion comprises ibuprofenate and niacinate.

64. The method according to Claim 1, wherein the cation comprises cetylpyridinium and the anion comprise salicylate and ibuprofenate, cinnamate or clofibrate.

65. The method according to Claim 1, wherein the cation comprises lidocaine and the oligomeric anions comprises salicylate and ibuprofenate.

66. The method according to Claim 1, wherein the cation comprises tramadolium and the anion comprises salicylate and ibuprofenate.

67. The method according to Claim 1, wherein the cation comprises ephedrinium and lidocaine and the anion comprises ibuprofenate.

68. The method according to Claim 1, wherein the cation comprises tramadolium and lidocaine and the anions comprise salicylate or ibuprofenate.

69. The method according to Claim 1, wherein the oligomeric cation comprises promethazine and ephedrine and the anions comprise docusate or salicylate.

70. A method for the preparation of ionic liquid-immobilized active compounds:

a) providing one or more cations and one or more anions, wherein a biologically active neutral compound is covalently attached to either the cation or the anion, or both cation and anion; and

b) combining the cations and anions or the cation precursor and anion precursor, thereby producing an ionic liquid that is liquid at a temperature at or below 150 °C.

71. The method according to Claim 70, wherein combining the cations and anions is accomplished by a metathesis reaction.

72. The method according to Claim 70, wherein combining the cation precursor and anion precursor is accomplished by an acid-base neutralization reaction.

73. The method according to Claim 70, wherein the cation precursor is a pharmaceutical active or the anion precursor is a pharmaceutical active.

74. The method according to Claim 70, wherein the cation precursor and the anion precursor are both pharmaceutical actives.

75. The method according to Claim 70, wherein either the cation precursor or the anion precursor, or the cation precursor and the anion precursor have bioactive properties and the bioactive property comprises sensory, therapeutic, prophylactic, nutritional, pesticidal or herbicidal activity.

76. The method according to Claim 70, wherein either the cation precursor or the anion precursor, or the cation precursor and the anion precursor are food additives, flavors or fragrances.

77. The method according to Claim 70, wherein the composition is liquid at a temperature at or below about 150 °C.

78. The method according to Claim 70, wherein the composition is liquid at a temperature at or below about 125 °C.

79. The method according to Claim 70, wherein the composition is liquid at a temperature at or below about 100 °C.

80. The method according to Claim 70, wherein the composition is liquid at a temperature at or below about 75 °C.

81. The method according to Claim 70, wherein the composition is liquid at a temperature at or below about 50 °C.

82. The method according to Claim 70, wherein the composition is liquid at a temperature at or below about 37 °C.

83. The method according to Claim 70, wherein the composition is liquid at a temperature at or below about 0 °C.

84. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to a cation selected from the group of ammonium, imidazolium, pyrrolidinium, pyridinium, phosphonium or sulfonium ion.

85. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to an anion selected from the group of carboxylate, alkylphosphate, alkylsulfate, alkylsulfonate, alkylborate.

86. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to a cation that is pharmaceutical or biological active.

87. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to a cation that is used as nutraceutical, food additive.

88. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to a cation that is used as fragrance or flavor.

89. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to an anion that is pharmaceutical or biological active.

90. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to an anion that is used as nutraceutical or food additive.

91. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to an anion that is used as fragrance or flavor.

92. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is paired with an anion selected from the group of halide, phosphate, alkylphosphate, nitrate, sulfate, alkylsulfate, arylsulfate, sulfonate, alkylsulfonate, arylsulfonate, alkylborate, tosylate, saccharinate, alkylcarboxylate and alkoxycarboxylate.

93. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is paired with a cation selected from the group of ammonium, imidazolium, pyrrolidinium, pyridinium, phosphonium or sulfonium ion.

94. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is paired with a biological or pharmaceutical active counterion.

95. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is paired with nutraceutical or food additive counterion.

96. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is paired with a flavor or fragrance counterion.

97. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released under hydrolytic conditions.

98. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released depending on the pH value.

99. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released at a pH<7.

100. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released at a pH<5.

101. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released at a pH<3.

102. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released at a pH>7.

103. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released at a pH>9.

104. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released at a pH>11.

105. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released under thermic conditions.

106. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released >37 °C.

107. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released >50 °C.

108. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released >75 °C.

109. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released >100 °C.

110. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released under light. Irradiation.

111. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released under UV light irradiation.

112. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released via electrodecomposition.

113. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound can be selectively released at physiological conditions.

114. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is attached to the ionic compound with an ester bond.

115. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is an alcohol or phenol.

116. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound comprises analgesics.

117. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound comprises acetaminophen.

118. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound comprises antitumor, antioxidant, antiarthritic, anti-amyloid, anti-ischemic or anti-inflammatory properties.

119. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is paired with an emmolient.

120. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is paired with docusate.

121. A compound prepared according to Claim 70, wherein the compound is in the form of a salt and the biological active neutral compound is transferred into a hemisuccinate anion.

122. A compound prepared according to Claim 121, wherein the compound is in the form of a salt and the hemisuccinate is paired with a cation selected from the group of ammonium, imidazolium, pyrrolidinium, pyridinium, phosphonium or sulfonium ion.

123. A compound prepared according to Claim 121, wherein the compound is in the form of a salt and the hemisuccinate is paired with choline.

124. The composition prepared according to Claim 70, wherein the composition further comprises a solvent, preservative, dye, colorant, thickener, surfactant, a viscosity modifier, or a mixture thereof at less than about 10 wt.% of the total ionic liquid composition.

125. The composition prepared according to Claim 70, wherein the composition further comprises a nonionic pharmaceutical active, nutraceutical, food additive, or mixture thereof.

126. A method for the preparation of ionic liquid-immobilized fragrances or flavors comprising:

a) providing one or more kinds of cation and one or more kinds of anion, wherein a fragrance or flavor is covalently attached to either the cation or the anion, or both cation and anion;

b) combining the cations and anions or the cation precursor and anion precursor, thereby producing an ionic liquid that is liquid at a temperature at or below 100 °C.

127. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to a cation selected from the group of ammonium, imidazolium, pyrrolidinium, pyridinium, phosphonium or sulfonium ion.

128. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to an anion selected from the group of carboxylate, alkylphosphate, alkylsulfate, alkylsulfonate, alkylborate.

129. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to a cation that is pharmaceutical or biological active.

130. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to a cation that is used as nutraceutical, food additive.

131. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to a cation that is used as second fragrance or flavor.

132. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to an anion that is pharmaceutical or biological active.

133. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to an anion that is used as nutraceutical or food additive.

134. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor is attached to an anion that is used as second fragrance or flavor.

135. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the cationic fragrance is paired with an anion selected from the group of halide, phosphate, alkylphosphate, nitrate, sulfate, alkylsulfate, arylsulfate, sulfonate, alkylsulfonate, arylsulfonate, alkylborate, tosylate, saccharinate, alkylcarboxylate and alkoxycarboxylate.

136. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the anionic fragrance is paired with a cation selected from the group of ammonium, imidazolium, pyrrolidinium, pyridinium, phosphonium or sulfonium ion.

137. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the ionic fragrance is paired with a biological or pharmaceutical active counterion.

138. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the ionic fragrance is paired with nutraceutical or food additive counterion.

139. A compound prepared according to Claim 126, wherein the ionic fragrance is paired with a second flavor or fragrance counterion.

140. A compound prepared according to Claim 126, wherein the fragrance can be selectively released under hydrolytic conditions.

141. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released depending on the pH value.

142. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released at a pH<7.

143. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released at a pH<5.

144. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released at a pH<3.

145. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released at a pH>7.

146. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released at a pH>9.

147. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released at a pH>11.

148. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released under thermic conditions.

149. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released >37 °C.

150. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released >50 °C.

151. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released >75 °C.

152. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released >100 °C.

153. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released under light irradiation.

154. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released under UV light irradiation.

155. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavor can be selectively released via electrodecomposition.

156. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance can be selectively released at physiological conditions.

157. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance or flavour is an alcohol.

158. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance is a terpene.

159. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance comprises geraniol, prenol, menthol, citronellol or arnesol.

160. A compound prepared according to Claim 126, wherein the compound is in the form of a salt and the fragrance is attached to the ionic compound with an ester bond.

161. A compound prepared according to Claim 160, wherein the compound is in the form of a salt and the hemisuccinate is paired with a cation selected from the group of ammonium, imidazolium, pyrrolidinium, pyridinium, phosphonium or sulfonium ion.

162. A compound prepared according to Claim 160, wherein the compound is in the form of a salt and the hemisuccinate is paired with a cation selected from the group of ammonium, imidazolium, pyrrolidinium, pyridinium, phosphonium or sulfonium ion.

163. A compound prepared according to Claim 160, wherein the compound is in the form of a salt and the hemisuccinate is paired with quaternary phosphonium or ammonium compounds present in detergents, phase transfer catalyst or any other laundry compounds.

164. A product comprising one or more compounds prepared according to Claim 126, wherein the product is a fine perfume, bodycare composition, toiletry, detergent perfume, fabric softener perfume, laundry detergent or a scent to mask industrial odors.