What is claimed is:

1. A surface-modified polymer composition comprising:

a) an oligomeric or polymeric additive formed from:

i) a polyalkylene glycol monomer;

ii) a fluorocarbon monomer; and

iii) an alkyl substituted methacrylate, acrylate, acrylamide, or vinyl monomer, or combinations thereof;

b) a base polymer comprising a polymer backbone, wherein the base polymer comprises a thermosplastic polyurethane; and

c) an antimicrobial additive comprising a protonated guanidine compound, where some portion of said protonated guanidine compound is hydrogen bonded to the polymeric backbone of said base polymer;

wherein component (a) and component (c) are incorporated into the base polymer by melt processing.

2. The surface-modified polymer composition of claim 1, wherein said protonated guanidine compound comprises a protonated guanidine compound, a protonated biguanidine compound, or a mixture thereof.

3. The surface-modified polymer composition of claim 1 wherein said base polymer comprises a thermoplastic polyurethane derived from (a) diphenylmethane diisocyanate, (b) a polyether polyol, and (c) a butane diol chain extender component.

4. A method of making a surface-modified polymer composition according to claim 1, comprising the steps of:

i. forming (a) an oligomeric or polymeric additive comprising i) a polyalkylene glycol monomer; ii) a fluorocarbon monomer; and iii) an alkyl substituted methacrylate, acrylate, acrylamide, or vinyl monomer, or combinations thereof; and

ii. incorporating component (a), (b) a base polymer comprising a thermoplastic polyurethane, and (c) an antimicrobial additive into one another;

wherein said antimicrobial additive (c) comprises a protonated guanidine compound, where some portion of said protonated guanidine compound is hydrogen bonded to the polymeric backbone of said base polymer;
resulting in a surface-modified polymer composition with non-fouling and antimicrobial properties.

5. The method of claim 4, wherein the incorporation of components (a), (b), and (c) comprises melt processing of components (a) and (c) into (b) the base polymer.

6. The method of claim 4, wherein the surface-modified polymer composition is coated onto a material.

7. The method of claim 6, wherein the surface-modified polymer composition is coated onto the material utilizing a dip coating, a roll to roll coating, a spin coating or a spray coating process.

8. The method of claim 4, further comprising annealing, wherein annealing is performed at a temperature of from 50°C to 150°C for a time of 2 hours up to 72 hours.

9. An article comprising a surface-modified polymer composition according to claim 1, said surface-modified polymer composition comprising:

a) an oligomeric or polymeric additive formed from:

i) a polyalkylene glycol monomer;

ii) a fluorocarbon monomer; and

iii) an alkyl substituted methacrylate, acrylate, acrylamide, or vinyl monomer, or combinations thereof;

b) a base polymer comprising a polymer backbone, wherein the base polymer comprises a thermosplastic polyurethane; and

c) an antimicrobial additive comprising a protonated guanidine compound, where some portion of said protonated guanidine compound is hydrogen bonded to the polymeric backbone of said base polymer;
wherein component (a) and component (c) are incorporated into the base polymer by melt processing.

10. An article formed from a material, wherein said article comprises a coating of the surface-modified polymer composition as defined in any one of claims 1 to 3.

11. The article of claim 10 obtained by coating the surface-modified polymer composition onto the material utilizing dip coating, roll to roll coating, spin coating or spray coating.

12. The article of claim 10 or claim 11, wherein the article is selected from the group consisting of a medical device, a personal care article, a pharmaceutical article, a health care product article, or a marine article.

13. The article of claim 12, wherein the article is a medical device selected from the group consisting of one or more of an angiography catheter, an angioplasty catheter, a urology catheter, a catheter connector, or medical tubing.