What we claimed is:

1.A composite material comprising:

(A) a base layer comprising perfluoroalkoxy alkane and carbon fiber,

(B) an intermediate layer and

(C) a polytetrafluoroethylene cover layer,

wherein the intermediate layer comprises perfluoroalkoxy alkane.

2. The composite material of claim 1, wherein the coefficient of linear expansion of the base layer (A) is from 3 to 15 $X10^{-6}$/degrees C and the coefficient of linear expansion of the PTFE cover layer is 120 to 220 $X10^{-6}$/degrees C.

3. The composite material of claim 1, wherein the base layer and PTFE cover layer is bonded after thermal shock test, by placing the composite material at 50 degrees C then heated at 200 degrees C as a cycle, repeated 2,000 times.

4. The composite material of claim 1, wherein the thickness of layer (B) is from 10 to 2,000 micrometers.

5. A process of preparing the composite material of claim 1 using consolidated mats comprising PFA and carbon fiber, the method comprising the steps of:

(a) setting a cover layer, an intermediate layer and the multiple consolidated mats in a mold, then

(b) hot press the three components in the mold to form the composite material.

6. A process of preparing the composite material of claim 1using consolidated mats comprising PFA and carbon fiber, the method comprising the steps of:

(c) setting multiple consolidated mats in a mold,

(d) hot press the multiple consolidated mats to form a molded material,

(e) setting a cover layer, an intermediate layer and the molded material in a mold,

(f) hot press the three components in the mold to form the composite material.

7.An article formed from the composite material of claim 1.

8. The article of claim 7 used for semiconductor manufacturing process.

9. The article of claim 7 used for chemical processing process.