We claim:

1. A cementitious composite reinforcing fiber, comprising:

an extruded, reinforcing fiber strand composed of a substantially uniform mixture, comprising :

a synthetic polymer resin; and

a fiber component selected from the group consisting of pulp fiber, nano-fiber, and mixtures or blends thereof.

2. The cementitious composite reinforcing fiber of claim 1, wherein the nano-fiber comprises a material selected from the group consisting of carbon nano-fiber, carbon nano-tube, graphene nano-ribbon and mixtures thereof.

3. The cementitious composite reinforcing fiber of claim 1, wherein the cementitious composite reinforcing fiber has a higher tensile strength, as compared to a reinforcing fiber absent of said fiber component.

4. The cementitious composite reinforcing fiber of claim 1, wherein the pulp fiber comprises a material selected from the group consisting of mica, polyacrylonitrile, aramid and mixtures or blends thereof.

5. The cementitious composite reinforcing fiber of claim 1, wherein the fiber component has a length from 0.5 to 1.0 mm.

6. The cementitious composite reinforcing fiber of claim 1, wherein the synthetic polymer resin comprises a polymer selected from the group consisting of polyethylene, polypropylene, and mixtures or blends thereof.

7. A method of preparing a composite reinforcing fiber, comprising:

obtaining a water soluble resin;

obtaining a synthetic polymer resin;

compounding the water soluble resin with a fiber component selected from the group consisting of pulp fiber, nano-fiber composed of one or more

materials selected from the group consisting of carbon, aramid, polyacrylonitrile, and mixtures thereof,

wherein a master batch is formed;

feeding the master batch and the synthetic polymer resin into an extruder to form an extruded composite;

forcing the extruded composite through an extruder die; and

producing the composite reinforcement fiber.

8. The method of claim 7, wherein the water-soluble resin is selected from the group consisting of polyethylene, polypropylene and mixtures thereof.

9. The method of claim 7, wherein the extruder includes a barrel and screw.

10. A fiber reinforced cementitious material, comprising:

a cementitious material; and

an extruded, reinforcing fiber composed of a substantially uniform mixture, comprising:

a synthetic polymer resin; and

a fiber component selected from the group consisting of pulp fiber, nano-fiber, and mixtures or blends thereof,

wherein the plurality of extruded reinforcing fibers is distributed in the cementitious material.