CLAIMS:

1. A composition comprising polymer particles and functionalised stimulus responsive polymer;

the polymer particles (i) comprising block co-polymer, and (ii) having a core-shell structure, said block co-polymer comprising (a) a non-stimulus responsive polymer block that forms at least part of the core structure, and (b) a stimulus responsive polymer block that forms at least part of the shell structure;

wherein the stimulus responsive polymer of both the polymer particles and the functionalised stimulus responsive polymer are responsive to at least one common stimulus.

2. The composition according to claim 1 further comprising a liquid, wherein the stimulus responsive polymer associated with both the polymer particles and the functionalised stimulus responsive polymer are soluble within the liquid.

3. The composition according to claim 1 further comprising a liquid and being in the form of a gel, wherein the stimulus responsive polymer associated with both the polymer particles and the functionalised stimulus responsive polymer are insoluble within the liquid.

4. A cell culture system comprising the composition according to any one of claims 1 to 3.

5. A drug delivery system comprising the composition according to any one of claims 1 to 3.

6. A method of culturing cells, said method comprising:

(i) providing a liquid composition comprising polymer particles and cell functionalised stimulus responsive polymer;

CLAIMS:

1. A composition comprising polymer particles and functionalised stimulus responsive polymer;

the polymer particles (i) comprising block co-polymer, and (ii) having a core-shell structure, said block co-polymer comprising (a) a non-stimulus responsive polymer block that forms at least part of the core structure, and (b) a stimulus responsive polymer block that forms at least part of the shell structure;

wherein the stimulus responsive polymer of both the polymer particles and the functionalised stimulus responsive polymer are responsive to at least one common stimulus.

2. The composition according to claim 1 further comprising a liquid, wherein the stimulus responsive polymer associated with both the polymer particles and the functionalised stimulus responsive polymer are soluble within the liquid.

3. The composition according to claim 1 further comprising a liquid and being in the form of a gel, wherein the stimulus responsive polymer associated with both the polymer particles and the functionalised stimulus responsive polymer are insoluble within the liquid.

4. A cell culture system comprising the composition according to any one of claims 1 to 3.

5. A drug delivery system comprising the composition according to any one of claims 1 to 3, wherein the functionalised stimulus responsive polymer is functionalised with a drug.

6. A method of culturing cells, said method comprising:

(i) providing a liquid composition comprising polymer particles and cell functionalised stimulus responsive polymer;