CLAIMS

1. A swellable packer assembly for positioning in a wellbore, the swellable packer assembly comprising:

a mandrel;

a swellable sealing element disposed radially about the mandrel, the sealing element formed of a material responsive to exposure to a trigger fluid to radially expand from the mandrel;

at least one retaining element fixedly coupled to the mandrel adjacent the sealing element such that the at least one retaining element limits longitudinal movement of the sealing element along the mandrel; and

a shroud sealingly coupled to the at least one retaining element to fluidly isolate the sealing element from an exterior of the shroud and to define an annular cavity disposed radially between the sealing element and the shroud, the shroud selectively removable from the mandrel downhole, and configured to dissolve the material of the shroud with wellbore fluid disposed at a predetermined downhole location, so as to expose the sealing element to the trigger fluid in the wellbore.

2. The swellable packer assembly of claim 1, wherein the shroud member is constructed of a dissolvable metal material

3. The swellable packer assembly of claim 2, wherein the dissolvable material is a metal comprising at least one of a magnesium alloy, an aluminum alloy, nickel, copper, and tin.

4. The swellable packer assembly of claim 3, wherein the dissolvable metal material exhibits a thickness of at least about 0.45 mm.

5. The swellable packer assembly of claim 1, wherein the annular cavity is filled with a substantially non-compressible fluid.

6. The swellable packer assembly of claim 1, wherein the mandrel defines a longitudinal passageway therethrough.

7. A method of using a swellable packer assembly comprising:

running the swellable packer assembly into a wellbore on a conveyance to position the swellable packer assembly at a predetermined downhole location with a swellable sealing element of the swellable packer assembly in an inactivated configuration wherein a shroud is sealingly

coupled to retaining elements disposed on each longitudinal side of the sealing element to define an annular cavity radially between the sealing element and the shroud;

removing the shroud from the retaining elements, subsequent to running the swellable packer assembly into the wellbore;

flooding the annular cavity with a wellbore fluid disposed at the predetermined downhole location in response to removing the shroud; and

exposing the sealing element to a trigger fluid in the wellbore at the predetermined location to thereby activate the sealing element to induce swelling of the sealing element; wherein removing the shroud further comprises dissolving a dissolvable material of the shroud with wellbore fluid disposed at the predetermined downhole location; and

wherein exposing the sealing element to the trigger fluid further comprises pumping the trigger fluid into the wellbore from a surface location subsequent to running the swellable packer assembly into the wellbore.

8. The method of claim 7, further comprising fluidly isolating at least two adjacent portions of the wellbore with the sealing element subsequent to exposing the sealing element to the trigger fluid.

9. The method of claim 8, further comprising producing a wellbore fluid from or injecting an injection fluid into an individual one of the adjacent portions of the wellbore.

10. A downhole swellable packer system comprising:

a conveyance;

a mandrel coupled within the conveyance;

a swellable sealing element disposed about the one mandrel, the sealing element formed of a material responsive to exposure to a trigger fluid to radially expand from the mandrel;

at least one retaining element coupled to the mandrel adjacent the sealing element such that the at least one retaining element limits longitudinal movement of the sealing element along the mandrel; and

a shroud coupled to the at least one retaining element to fluidly isolate the sealing element from an exterior of the shroud and to define an annular cavity disposed radially between the sealing element and the shroud, the shroud constructed of a dissolvable material and substantially spaced in a radial direction from an outer surface of the sealing element; wherein

the downhole swellable packer system further comprising a downhole tool coupled within the conveyance, wherein the downhole tool is longitudinally spaced from the sealing element such that the sealing element may fluidly isolate the downhole tool in an individual portion of a wellbore.

11.The downhole swellable packer system of claim10, wherein the conveyance is a tubing string and the downhole tool is an inflow control valve operable to selectively permit fluid communication between the wellbore and the tubing string.

12. The downhole swellable packer system of claim 10, further comprising a first source of trigger fluid selectively deliverable to the sealing element.

13.The downhole swellable packer system of claim 12, further comprising a second sealing element and a source of a second distinct trigger fluid, wherein the second sealing element is formed of a material responsive to exposure to the second distinct trigger fluid to radially expand.