What is claimed is:

1. An incubation chamber, comprising:

an incubation chamber housing, comprising:

an inlet port for receiving a fluid,

an outlet port for dispensing the fluid, and

an internal cavity;

a helical coil positioned in said internal cavity and in fluid communication with the inlet port and the outlet port;

wherein said incubation chamber has a top exterior surface having a first contour, and a bottom exterior surface having a second contour, wherein said top exterior surface can releasably mate with an incubation chamber having a bottom exterior surface having said second contour, and said bottom exterior surface can releasably mate with an incubation chamber having a top surface having said first contour.

2. The incubation chamber of claim 1, wherein said helical coil is skewed.

3. The incubation chamber of claim 1, wherein said helical coil has a first region positioned in said internal cavity in a first direction, and a second region positioned in said internal cavity in a second direction substantially orthogonal to said first direction.

4. A modular assembly, comprising first and second incubation chambers configured to communicate with each other fluidly,

said first incubation chamber comprising a first incubation chamber housing, comprising:

a first inlet port for receiving a fluid,

a first outlet port for dispensing the fluid, and

a first internal cavity;

a first helical coil positioned in said first internal cavity and in fluid communication with the first inlet port and the first outlet port;

a second incubation chamber comprising a second incubation chamber housing, comprising:

a second inlet port for receiving a fluid,

a second outlet port for dispensing the fluid,

a second internal cavity; and

a second helical coil positioned in said second internal cavity and in fluid communication with the second inlet port and the second outlet port;

wherein said first incubation chamber has a top exterior surface having a first contour, and said second incubation chamber has a bottom exterior surface having a second contour, wherein said top exterior surface can releasably interconnect with said bottom exterior surface.

5. The modular assembly of claim 4, wherein said first helical coil is configured to be in fluid communication with said second helical coil when said first and second incubation chambers are interconnected.

6. A method for inactivating one or more viruses in a sample containing a target molecule, wherein the method comprises causing the sample to flow in a helical coil positioned in an internal cavity of an incubation chamber while continuously exposing the sample to inactivation conditions during a process for purifying said target molecule, said incubation chamber having a top exterior surface having a first contour, and a bottom exterior surface having a second contour, wherein said top exterior surface can releasably mate with an incubation chamber having a bottom exterior surface having said second contour, and said bottom exterior surface can releasably mate with an incubation chamber having a top surface having said first contour.

7. The method of claim 6, further comprising subjecting said fluid sample to a Protein A affinity chromatography process, thereby to obtain an eluate; introducing a virus inactivation agent to said eluate, and continuously transferring said eluate to said helical coil and causing said eluate to flow in said helical coil for a time sufficient to inactive said virus.

8. The method of claim 6, further comprising subjecting said fluid sample to an ion exchange chromatography process, thereby to obtain an eluate; introducing a virus inactivation agent to said eluate, and continuously transferring said eluate to said helical coil and causing

said eluate to flow in said helical coil for a time sufficient to inactive said virus.