CLAIMS:

1. A processor-implemented method for certifying and verifying gemstones , including the steps of:

capturing at least three magnified images of a first gemstone, wherein the at least three magnified images include a top view, a side view, and a 10x to 100x magnified internal view of one or more internal inclusions of the first gemstone using a first microscope;

identifying the location of a volume within the first gemstone, wherein the volume includes the one or more internal inclusions within the first gemstone, the volume is defined by an x-y-z axis of the first gemstone, the top view of the first gemstone includes a first grid defining two axes of the x-y-z axis, and the side view of the first gemstone includes a second grid defining one axis of the x-y-z axis;

storing the at least three magnified images and the location of the volume within the first gemstone that includes the one or more internal inclusions in a database;

allocating each of the at least three magnified images to a respective field of an electronic certificate template using the processor to access the database and process the at least three magnified images to generate an electronic certificate, the electronic certificate including the at least three magnified images that are each allocated to the respective field of the electronic certificate template;

displaying the top view with an indication of the corresponding two axes, the side view with an indication of the corresponding one axis, the 10x to 100x magnified internal view of the one or more internal inclusions, and the location of the volume within the first gemstone that includes the one or more internal inclusions within the first gemstone to a consumer;

identifying the location of the volume within the first gemstone that includes the one or more internal inclusions within a second gemstone based on the x-y-z axis; and

verifying that the first gemstone and the second gemstone are the same in response to the volume within the second gemstone including the one or more internal inclusions of the first gemstone based on the 10x to 100x magnified

internal view of one or more internal inclusions of the first gemstone.

2. The method of claim 1, wherein the at least three stored magnified images and the location is displayed to a consumer on one or more of a smartphone or web application and a printed certificate.

3. The method of claim 2, further including displaying the magnification level of the magnified image of the one or more internal inclusions.

4. The method of claim 3, further including displaying physical identification data of the first gemstone to the consumer, the physical identification data comprising one or more of the first gemstone's appearance, shape, size, weight, measurements, colour, refractive index, specific gravity and absorption spectrum.

5. The method of claim 4, wherein the inclusion includes one or more of solid, liquid or gas inclusions, zones of crystal growth, striation, healed fractures, hollow growth tubes, needle-shaped crystals, twin-planes, internal fissures, cleavages, stress cracks, doubling effect, bubbles, cleavage fault, curved striae, dark ball like inclusions, feather, fingerprint, flash effect, halo inclusions, internal growth patterns, liquid filled or healing feathers, needle or feather inclusions, rain inclusions, swirl marks, three-phase inclusions, tube inclusions, twinning planes, colour zone and two-phase inclusions.

6. A system for certifying and verifying gemstones, including:

a first microscope including a processor and a memory, the memory storing instructions for execution on the processor for:

capturing at least three magnified images of a first gemstone, wherein the at least three magnified images include a top view, a side view, and a 10x to 100x magnified internal view of one or more internal inclusions of a first gemstone, and

identifying the location of a volume within the first gemstone, wherein the volume includes the one or more internal inclusions within the first gemstone, the volume is defined by an x-y-z axis of the first

gemstone, the top view of the first gemstone includes a first grid defining two axes of the x-y-z axis, and the side view of the first gemstone includes a second grid defining one axis of the x-y-z axis;

storing the at least three magnified images and the location of the volume within the first gemstone that includes the one or more internal inclusions in a database;

allocating each of the at least three magnified images to a respective field of an electronic certificate template using the processor to access the database and process the at least three magnified images to generate an electronic certificate, the electronic certificate including the at least three magnified images that are each allocated to the respective field of the electronic certificate template;

displaying the top view with an indication of the corresponding two axes, the side view with an indication of the corresponding one axis, the 10x to 100x magnified internal view of the one or more internal inclusions, and the location of the volume within the first gemstone that includes the one or more internal inclusions within the first gemstone to a consumer;

identifying the location of the volume within the first gemstone that includes the one or more internal inclusions within a second gemstone based on the x-y-z axis; and

verifying that the first gemstone and the second gemstone are the same in response to the volume within the second gemstone including the one or more internal inclusions of the first gemstone based on the 10x to 100x magnified internal view of one or more internal inclusions of the first gemstone.

7. The system of claim 6, wherein the at least three stored magnified images and the location is displayed to a consumer on one or more of a smartphone or web application and a printed certificate.

8. The system of claim 7, further including the processor displaying the magnification level of the magnified image of the one or more internal inclusions.

9. The system of claim 8, further including the processor displaying physical identification data of the first gemstone to the consumer, the physical identification data comprising one or more of the first gemstone's appearance, shape, size, weight, measurements, colour, refractive index, specific gravity and absorption spectrum.

10. The system of claim 9, wherein the inclusion includes one or more of solid, liquid or gas inclusions, zones of crystal growth, striation, healed fractures, hollow growth tubes, needle-shaped crystals, twin-planes, internal fissures, cleavages, stress cracks, doubling effect, bubbles, cleavage fault, curved striae, dark ball like inclusions, feather, fingerprint, flash effect, halo inclusions, internal growth patterns, liquid filled or healing feathers, needle or feather inclusions, rain inclusions, swirl marks, three-phase inclusions, tube inclusions, twinning planes, colour zone and two-phase inclusions.