What is claimed is:

1. A method of integrity testing a porous material, comprising:

providing a porous material suitable for filtration to be tested, said porous material having a first surface and a second surface;

wetting said porous material with a wetting liquid;

providing a gas stream comprising at least first and second gases humidified with said wetting liquid below the saturation vapor pressure of said wetting liquid and wherein said humidified gas stream has a humidity of 50-99%;

applying a vacuum to the permeate stream exiting said second surface of said porous material;

introducing said gas stream to said first surface of said porous material;

causing said first and second gases to flow through said porous material;

measuring the concentration of at least one of said first and second gases in the permeate stream exiting said second surface of said porous material; and

comparing the measured concentration to a predetermined concentration;

wherein a difference between said measured concentration and said predetermined concentration is indicative of said porous material being non-integral.

2. The method of claim 1, wherein said humidified gas stream has a humidity of 90-99%.

3. The method of claim 1, wherein said first gas is oxygen and said second gas is nitrogen.

4. The method of claim 1, wherein said first gas is oxygen, and wherein said concentration of one of said gases is measured with an oxygen analyzer.

5. The method of claim 1, wherein said wetting liquid comprises water.

6. The method of claim 1, wherein said porous material is a sterilizing grade filter.

7. The method of claim 1, wherein said porous material comprises a membrane.

8. A method of integrity testing a filter, comprising:

providing a plurality of porous materials suitable for filtration to be tested, each said porous material having a first surface and a second surface;

wetting each said porous material with a wetting liquid;

providing a gas stream comprising at least first and second gases humidified with said wetting liquid below the

saturation vapor pressure of said wetting liquid and wherein said humidified gas stream has a humidity of 50-99%;

applying a vacuum to the permeate stream exiting said second surface of said porous material;

introducing said gas stream to each said first surface of each porous material;

causing said first and second gases to flow through each said porous material;

sequentially or selectively measuring via a single analyzer the concentration of at least one of said first and second gases in the permeate stream of each said porous material; and

comparing each measured concentration to a predetermined concentration;

wherein a difference between each said measured concentration and said predetermined concentration is indicative of each said porous material being non-integral.

9. The method of claim 8, wherein said humidified gas stream has a humidity of 90-99%.

10. The method of claim 8, wherein said first gas is oxygen and said second gas is nitrogen.

11. A system for integrity testing a porous material suitable for filtration, comprising:

a gas stream source comprising at least first and second gases humidified with a wetting liquid below the saturation vapor pressure of said wetting liquid and wherein said humidified gas stream has a humidity of 90-99%;

a housing comprising a porous material wetted with a wetting liquid, said porous material having a first and second surface,

said housing being in fluid communication with said gas stream source;

a vacuum pump in communication with said housing; and

an analyzer configured to measure the concentration of at least one of said first and second gases in a permeate stream exiting said second surface of said porous material.

12. The system of claim 11, wherein said first gas is oxygen and said second gas is nitrogen.

13. The system of claim 11, wherein said analyzer is an oxygen analyzer.

14. The system of claim 11, wherein said wetting liquid comprises water.