What is claimed is:

1. A biomonitoring device that measures a parameter of a material expelled into a bowl of a toilet by a user, the device comprising

(i) an electromagnetic radiation source above the material, wherein the electromagnetic radiation source emits electromagnetic radiation into the bowl of the toilet, and

(ii) a sensor above the material that detects electromagnetic radiation or an analyte chemical in the bowl of the toilet, and

(iii) a polarization filter positioned to limit characteristics of light that reaches the sensor,

wherein ~~(i) and (ii) are~~ the device is positioned at a back portion of a seat of the toilet.

2. The biomonitoring device of claim 1, wherein ~~(i) and (ii) are~~ the device is integrated into the back portion of the seat of the toilet.

3. The device of claim 1, wherein the sensor is an image sensor comprising a lens.

4. The device of claim 3, wherein the sensor further comprises a complementary metal–oxide–semiconductor.

5. The device of claim 3, wherein the lens is situated such that it does not change position when the seat of the toilet is lifted.

6. The device of claim 1, further comprising components for spectroscopic detection comprising a laser diode and a photodetector.

7. The device of claim 1, wherein the sensor detects an analyte chemical in the bowl.

~~8. The device of claim 2, further comprising a polarization filter integrated into a back portion of the toilet.~~

~~9~~8. The device of claim 1, further comprising a capacitive sensor that detects the presence of the user while seated on the seat of the toilet.

~~10~~9. The device of claim 1, further comprising a data storage and/or transmittal unit that stores and/or transmits data from the sensor.

~~11~~10. The device of claim ~~10~~9, comprising a transmittal unit that transmits data via wireless, optical or wired communications to a computing unit.

~~12~~11. The device of claim ~~11~~10, wherein the device undergoes a training period where data is analyzed when no excreta is in the bowl.

~~13~~12. The device of claim ~~11~~10, wherein the computing unit analyzes the data to determine stool consistency, presence of blood, urine color, urine voiding volume, weight, body composition, stool frequency, urine frequency, or any combination thereof.

~~14~~13. The device of claim 1, further comprising a scale or footstool comprising a thin film pressure sensor that captures a weight of the user.

~~15~~14. The device of claim 1, wherein the material is urine or feces.