**What is claimed is:**

1. A contact lens cleaning system comprising: a contact lens holder; a vial adapted to contain the contact lens holder and a cleaning solution; an agent capable of reacting with the cleaning solution; a reaction sensor adapted to monitor a ~~chemical~~ rate of reaction ~~rate of~~ between the agent and the cleaning solution; a processing device in communication with the reaction sensor to receive a reaction signal from the reaction sensor; and a display in communication with the processing device, the processing device being adapted to operate the display to provide cleaning efficacy information based on the reaction signal.

2. The system of claim 1 ~~further comprising~~ ,wherein the agent is a catalyst element disposed within the vial ~~and adapted to react with the cleaning solution.~~

3. The system of claim 1 wherein the reaction sensor is a temperature sensor.

4. The system of claim 3 wherein the temperature sensor is disposed in a cap covering the vial.

5. The system of claim 3 wherein the temperature sensor is disposed outside of the vial.

6. The system of claim 3 wherein the processing device is adapted to determine a temperature change rate from the reaction signal.

7. The system of claim 6 wherein the processing device is further adapted to determine cleaning efficacy by comparing the temperature change rate to a theoretical temperature change rate.

8. The system of claim ~~3~~ 7 further comprising an ambient temperature sensor disposed outside of the vial and adapted to measure a temperature of air surrounding the vial, the processing device being further adapted to determine cleaning efficacy ~~information based on~~ using a temperature signal from the ambient temperature sensor to correct for ambient temperature affect to the approximate rate of temperature change as compared to the theoretical temperature change rate.

20. The method of claim 19 wherein the determining step comprises monitoring temperature of the cleaning solution.

21. The method of claim 19 wherein the determining step comprises monitoring temperature exterior to the vial.

22. The method of claim 19 wherein the determining step comprises calculating a temperature change rate.

23. The method of claim 22 wherein the determining step further comprises comparing the temperature change rate to a theoretical temperature change rate.

24. The method of claim 19 wherein the determining step comprises monitoring temperature within the vial.

25. The method of claim 24 further comprising monitoring ambient temperature outside of the vial, the determining step comprising determining the chemical reaction rate from the temperature within the vial and the ambient temperature.

26. The method of claim 17 further comprising counting a number of contact lens cleaning uses.

27. The method of claim 26 further comprising displaying information related to the number of contact lens cleaning uses.

28. The method of claim 17 wherein the determining step comprises monitoring pressure within the vial.

29. The method of claim 17 further comprising determining whether there is cleaning solution in the vial prior to the step of determining a chemical reaction rate.

30. The system of claim 2 wherein the catalyst element comprises platinum.

31. The system of claim 2 wherein the cleaning solution comprises hydrogen peroxide.

32. A contact lens cleaning system comprising: a contact lens holder; a vial adapted to contain the contact lens holder and a cleaning solution; an agent capable of reacting with the cleaning solution; a reaction sensor adapted to measure a characteristic of a chemical reaction between the agent and the cleaning solution; a processing device in communication with the reaction sensor to receive a reaction signal from the reaction sensor, wherein the processing device is adapted to use the reaction signal to determine an approximate rate of the chemical reaction; and a display in communication with the processing device, the processing device being adapted to operate the display to provide cleaning efficacy information based on the reaction signal.

33. The system according to claim 32, wherein the characteristic of the chemical reaction is temperature resulting from heat produced by the chemical reaction, and wherein the reaction sensor is a temperature sensor.

34. The system according to claim 33, wherein the processing device is further adapted to determine cleaning efficacy by comparing the approximate rate of temperature change to a theoretically determined rate of temperature change for the chemical reaction.

35. The system of claim 34 further comprising an ambient temperature sensor disposed outside of the vial and adapted to measure a temperature of air surrounding the vial, the processing device being further adapted to determine cleaning efficacy using a temperature signal from the ambient temperature sensor to correct for ambient temperature affect to the approximate rate of temperature change as compared to the theoretically determined rate of temperature change.

36. The system according to claim 32, wherein the characteristic of the chemical reaction is pressure resulting from a gas product from the chemical reaction, and wherein the sensor is a pressure sensor.

37. The system according to claim 36, wherein the processing device is further adapted to determine cleaning efficacy by comparing the approximate rate of pressure change to a theoretically determined rate of pressure change for the chemical reaction.

38. The system according to claim 32, wherein the agent is a catalyst element disposed within the vial.

39. The system of claim 38 wherein the catalyst element comprises platinum.

40. The system of claim 38 wherein the cleaning solution comprises hydrogen peroxide.