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1. There are many reasons to optimize an existing wastewater. For instance the volume and concentration of inflow might have changed over time or might have become necessary to minimize energy consumption or operating resources. There is no “one size fits all”. My views are:

- a. Wastewater can be used to produce electricity.
- b. Wastewater can be treated and used for farmlands.
- c. Can be used for the production of biogas.
- d. Can be used to predict several important parameters in wastewater process, such as the influent flow rate, the total suspended solids, CBOD.
- e. The process is optimized by evolutionary algorithms either to save energy consumption or to maximize the energy generation. The two categories are not separated but coupled together.

2. It is evident that transmission occurs via direct droplets from an infected person and via contaminated surfaces, aerosols or contact with fecal materials. Therefore health and water engineers play crucial roles by

- a. Promoting general hygiene.
- b. Addressing unique information needs as the pandemic affects all aspects of public and private life.
- c. Provision of safe handling practices, appropriate PPE and disinfection practices.
- d. Provision of food and water safety practices.