## ICAWMSCS 2024: International Conference and Advanced Workshop on Modelling and Simulation of Complex Systems



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## RECYCLING OF MUNICIPAL SOLID WASTE: A DETERMINISTIC APPROACH.

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Effective waste management aims at minimizing garbage's detrimental effects on the environment, public health, and aesthetics, which also attempts to recover valuable resources and support sustainable development. The Next Generation matrix was employed to calculate the reproduction number, the model equations were solved using the Differential Transformation Method (D.T.M.) and the obtained result was simulated using the Maple software. The result shows that waste management will be effective if recycling of waste is given the proper attention that it deserves. It also indicates that waste for disposal will be limited and managing waste will become easier.

Author: ABDURRAHMAN, Nurat Olamide (Federal University of Technology Minna, Niger State.)

Co-authors: Mr IBRAHIM, Jamiu Omotola (Fountain University Osogbo.); Prof. IBRAHIM, Muhammad Olan-

rewaju (University of Ilorin, Ilorin. Kwara State.)

Presenter: ABDURRAHMAN, Nurat Olamide (Federal University of Technology Minna, Niger State.)

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