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MATHEMATICAL MODELING OF ENVIRONMENTAL PROBLEMS

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Preface

The Mathematical Modelling of Environmental Problems Research Group at the National Mathematical Centre Abuja has the mission statement: To improve the environment through mathematical models. The group also has a saying that “God has ordained man to conquer the environment and preserve nature in a way suitable to his existence”.

The environment is that part of macrocosm we live in and supports our daily existence. It is continuously being disturbed intermitted by natural and man-made disasters. As a result, there is the need to study the environmental problems and think of how to prepare for the unforeseeable future and to formulate strategy to arresting environmental disasters when they happen.

The precise goal of the workshop is to focus attention on some aspect of environment and train young scientists who we expected to use knowledge acquired and the power of mathematical modelling/simulation to proffer solutions to environmental problems.

We have decided to assemble scientists, engineers and the other participants together to exploit some selected areas of environmental problems, make indebt study, and expose the participants to open and challenging problems hitherto.

The study of environmental problems is as verse as the oceans, some selected topics are considered, and these are:

The general overview of mathematical modelling and environmental problems, which include, ecological and man-made mishaps; other topics include, exploitation of fishery and forestry. Also covered are, mathematical and application of corrosion in a petroleum industry, and finally, the environmental implication of combustion with emphasis on coal combustion.

This Proceedings being the first volume on researchable areas on environmental problem earmarked by the National Mathematical Centre, Abuja. In our future volume(s), we shall extend our tentacles to cover other aspects of environmental problems.

S.O. Ale
R.O. Ayeni
B.O. Oyelami
Abuja 2005

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