

FACULTY OF SCIENCE UNIVERSITY OF IBADAN, IBADAN, NIGÉRIA

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# INTERNATIONAL CONFERENCE

SCIENCE AND SUSTAINABLE DEVELOPMENT IN NIGERIA

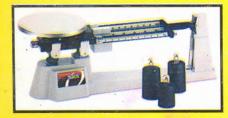
**ONFERENCE PROGRAMME** 

BOOK OF ABSTRAC

# THEME: SCIENTIFIC RESEARCH AND SUSTAINABLE DEVELOPMENT IN NIGERIA

DATE: 13 - 17 May, 2013

Venue: Conference Centre, University of Ibadan, Ibadan, Nigeria. Faculty of Science Lakeside Lecture Theatre.



IBADAN 2013



#### Keywords: Thinning, Growth Models, System dynamic, Experiment, Forecast

#### **SSD 106**

# SYNTHESIS, CHARACTERIZATION AND ANTIBACTERIAL EVALUATIONS OF NOVEL HYBRID POLYESTERAMIDE-URETHANES PREPARED FROM YELLOW OLEANDA SEED OIL

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#### ABSTRACT

Air drying polyesteramide-urethanes resins were synthesized from *Thevetia peruviana* seed oil commonly known as Yellow oleanda (a tropical ornamental shrub) having about 68.8% unsaturated and 30.9% saturated fatty acids. The physico- chemical characterization of the optimized unsaturated FAME such as hydroxyl value, iodine value, saponification value, refractive index, inherent viscosity were carried out using standard methods. Through condensation reaction the N,N'- bis(2-hydroxyethyl) *Thevetia peruviana* (HETA) prepared from the FAME reacted with isophthalic acid to form polyesteramide. The latter undergo urethanation with H<sup>1,2</sup>MDI. The structural elucidation of the moisture cured polyesteramide-urethane coating was based on FTIR, <sup>1</sup>H-NMR and <sup>13</sup>C-NMR spectroscopic methods. The coatings films were evaluated for its antibacterial activity and thermal stability properties on TGA and DSC. The SEM of the coating films was also examined.

#### SSD 107

# A CRITICAL ASSESSMENT OF THE NIGERIAN RURAL ELECTRIFICATION POLICY

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#### ABSTRACT

The problem of access to modern energy services is a major developmental issue confronting rural communities globally, particularly in Asia and sub – Saharan Africa. Modern energy services are benefits derived from modern energy sources such as electricity, natural gas, clean cooking fuels and mechanical power, that contribute to human well –being. This study takes a critical look at the problems and constraints of rural electrification in Nigeria. It also appraised the various policies and practices that have driven rural electrification in Nigeria, the level of implementation and the prospects of providing universal access to electricity services in rural areas of the country.

Keywords: Rural areas, Electricity, Policy, Nigeria

## SSD 108

## SEASONAL PREDICTION OF RAINFALL IN THE SOUTHWESTERN NIGERIA

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#### ABSTRACT

The availability of quantitative means of probing anticipated rainfall is essential for the purposes of planning and policy formulation everywhere in the world. This paper attempts to present some results of an ongoing experiment on seasonal prediction of