



DETERMINATION OF INDOOR VOLATILE ORGANIC COMPOUND LEVELS IN SOME RESIDENTIAL AREAS IN WUKARI, TARABA STATE, NIGERIA

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ABSTRACT

One of the hazardous pollutants of indoor air is volatile organic compounds (VOCs). These compounds are organic emissions from products used on daily basis. They include a variety of hazardous chemicals, and high levels of these organic compounds could mean serious health threat to humans that come in contact with them. In this study, the levels of indoor volatile organic compounds in some residential areas in Wukari, Taraba State, Nigeria were determined. Different locations/sites were mapped within Wukari Metropolis. These sites include; the Government Reserve Area (GRA), Mission Quarters, Students' Residence and the School Hostels. Automated TVOC metre was used in collecting the data. This equipment was allowed to boot properly and the readings were taken one after the other after 30 seconds each. The readings were taken in triplicates in all the residential buildings used within the Metropolis. The process was repeated after one month. The result shows that the total volatile organic compounds (TVOCs) in students' residential hostels ranges from 0.06 ± 0.04 to $0.23 \pm 0.06 \text{ mg/m}^3$ with hostel C1 having the least TVOCs while Hostel A3 has the highest TVOCs level. The result also shows that the TVOCs ranges from 0.02 ± 0.01 to $0.21 \pm 0.07 \text{ mg/m}^3$ in Federal University Wukari Staff Quarters with Junior staff quarters 1 having the least TVOCs whereas the junior staff quarters 2 has the highest level. The level of TVOCs in students' residence opposite Federal University Wukari ranges from 0.09 ± 0.0 to 0.14 mg/m^3 with Naya2 having the least TVOCs level while Oklahoma2 has the highest level. The range of TVOCs level in mission quarters Wukari was found to be 0.06 ± 0.03 to $0.14 \pm 0.05 \text{ mg/m}^3$ with Mission 4 has the least TVOCs while GRA1 has the highest level. The result for this study showed that there were low levels of total volatile organic compounds (TVOCs) in the residential buildings considered in this research. At such concentration, it can be said that health challenge(s) to this effect is a rare scenario. However, prolonged exposure to TVOCs at a particular dose can lead to chronic health challenges such as respiratory disease, neurological damage among others.

KEYWORDS: Volatile organic compounds, Residential buildings, Concentration, Hazardous pollutants, Indoor air.

Inter Group Relations In Wukari And Donga Areas 1900 1992

Idris Ejima Aruwa



Inter Group Relations In Wukari And Donga Areas 1900 1992:

Readings on Igala People, Land and Language Idris Ejima Aruwa, 2022-02-23 This book is a comprehensive history of the Igala kingdom Kogi state Nigeria people land and language based on the study of the oral traditions cultural practices articles published and unpublished works on Igala history It is a compendium of the history of the Igala people from the Pre 16th century to the present day using the Igala cultural and rituals practices as evidence of historical events It is a scholarly work on the chronology of the events that led to the establishment of the present dynastic monarchy in Igala land and the creation of the Igala kingdom which became the greatest pre colonial kingdom in the River Niger Benue confluence area in Nigeria with its influence on the cultural political and commercial developments on the northern Igbo country and along the River Niger down to the Niger Delta area The chronology was discussed under three main eras the Pre Dynastic Monarchy Era the Proto Dynastic Monarchy Era and The Dynastic Monarchy Era The events that took place in each of these eras were extensively reported The book illustrates the cultural leadership development of the autochthonous Igala clans the Benin vassal Aji Ata dynasty the Achadu clan and the Empire building escapades of Ayegba oma Idoko starting from his progenitor Abutu Ejeh breakaway from the ancient Jukun led Kwararafa Kingdom Other subjects discussed include the real history behind the sacrifice of Princess Inikpi and Oma Odoko the funeral rites and coronation rituals for the Ata Igala and the origin of the name Igala This book is recommended for students of history and those who want to enrich their knowledge on Igala people land language and other related cultural matters

Adopting the Beat of Term: An Psychological Symphony within **Inter Group Relations In Wukari And Donga Areas 1900 1992**

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Table of Contents Inter Group Relations In Wukari And Donga Areas 1900 1992

1. Understanding the eBook Inter Group Relations In Wukari And Donga Areas 1900 1992
 - The Rise of Digital Reading Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Advantages of eBooks Over Traditional Books
2. Identifying Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Inter Group Relations In Wukari And Donga Areas 1900 1992
 - User-Friendly Interface
4. Exploring eBook Recommendations from Inter Group Relations In Wukari And Donga Areas 1900 1992

- Personalized Recommendations
 - Inter Group Relations In Wukari And Donga Areas 1900 1992 User Reviews and Ratings
 - Inter Group Relations In Wukari And Donga Areas 1900 1992 and Bestseller Lists
5. Accessing Inter Group Relations In Wukari And Donga Areas 1900 1992 Free and Paid eBooks
 - Inter Group Relations In Wukari And Donga Areas 1900 1992 Public Domain eBooks
 - Inter Group Relations In Wukari And Donga Areas 1900 1992 eBook Subscription Services
 - Inter Group Relations In Wukari And Donga Areas 1900 1992 Budget-Friendly Options
 6. Navigating Inter Group Relations In Wukari And Donga Areas 1900 1992 eBook Formats
 - ePub, PDF, MOBI, and More
 - Inter Group Relations In Wukari And Donga Areas 1900 1992 Compatibility with Devices
 - Inter Group Relations In Wukari And Donga Areas 1900 1992 Enhanced eBook Features
 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Highlighting and Note-Taking Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Interactive Elements Inter Group Relations In Wukari And Donga Areas 1900 1992
 8. Staying Engaged with Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Inter Group Relations In Wukari And Donga Areas 1900 1992
 9. Balancing eBooks and Physical Books Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Inter Group Relations In Wukari And Donga Areas 1900 1992
 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
 11. Cultivating a Reading Routine Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Setting Reading Goals Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Carving Out Dedicated Reading Time
 12. Sourcing Reliable Information of Inter Group Relations In Wukari And Donga Areas 1900 1992

- Fact-Checking eBook Content of Inter Group Relations In Wukari And Donga Areas 1900 1992
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning
- Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
- Integration of Multimedia Elements
 - Interactive and Gamified eBooks

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