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| Book Name: | [Science and Technology: Developments and Applications](https://www.bookpi.org/bookstore/product/science-and-technology-developments-and-applications-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4141** |
| Title of the Manuscript:  | **Moisture Sorption Studies of Kamsa: A Smoke-Dried Meat Product Stored Over a Period of Six Months, using GAB and BET Models** |
| Type of the Article | **Book chapter** |

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| PART 1: Comments |
|  | Reviewer’s comment | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | **This manuscript provides valuable insights into the moisture sorption behavior of kamsa, a product with significant nutritional and commercial importance. By employing the GAB and BET models, the study advances our understanding of how temperature and water activity influence food stability, which is crucial for designing optimal storage and packaging strategies. The findings contribute to the broader scientific discourse on food preservation, offering practical solutions to mitigate spoilage and maintain quality. Additionally, the methodology and results may serve as a reference for future research on similar food products, enhancing the scope of moisture sorption studies in the field.** |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **The current title, *"Moisture Sorption Studies of Kamsa: A Smoke-Dried Meat Product Stored Over a Period of Six Months, using GAB and BET Models,"* effectively conveys the study's focus on moisture sorption, the specific product (kamsa), and the analytical methods (GAB and BET models). However, it could be streamlined for clarity and impact.****Suggested alternative:"Moisture Sorption Analysis of Smoke-Dried Kamsa Using GAB and BET Models Over Six Months."** |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | **The abstract should succinctly present the study's objectives, methodology, key findings, and significance to the scientific community. Based on the content provided, here are some suggestions for improvement:**1. **Add the study's objective: Clearly state the aim of the research, such as understanding the moisture sorption behavior of kamsa over time using GAB and BET models.**
2. **Highlight key findings: Summarize the main results, including temperature effects on monolayer moisture content and the models' fit to the data.**
3. **Include significance: Emphasize how this research contributes to food stability, storage optimization, or broader applications in food science.**
4. **Refine the conclusion: Conclude with a concise statement on the implications for storage and quality preservation of smoke-dried meat products.**
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| **Is the manuscript scientifically, correct? Please write here.**  | **Based on the provided content, the manuscript appears to be scientifically sound, with well-documented methods, thorough analysis, and clear presentation of results. However, to confirm its accuracy, the following points should be considered:**1. **Clarity of Methodology: Ensure all experimental steps are detailed enough for replication. The gravimetric method and model fitting procedures are well-explained, but specific details on the preparation of sulfuric acid solutions and their concentrations could be added for transparency.**
2. **Model Justification: The manuscript should justify why the GAB and BET models were chosen over other sorption models. A brief explanation of their relevance to food products like kamsa would enhance scientific rigor.**
3. **Data Presentation: Ensure the isotherm plots and statistical analysis results (e.g., R² values) are included and appropriately labeled in the results section.**
4. **Consistency in Temperature Reporting: Clarify if 33.8°C is considered ambient temperature or a controlled condition, as this might affect interpretations.**
5. **Significance of Findings: Expand on how the findings contribute to the broader field of food science, particularly in optimizing storage and quality control for traditional meat products.**
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| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | **The references you provided cover a broad spectrum of topics related to food science, particularly meat and moisture sorption. They appear comprehensive and include foundational works, reviews, and more specific studies on various aspects of meat processing, biochemical composition, microbial hazards, and moisture sorption characteristics. However, some references could benefit from more recent publications to ensure that the latest research is represented.** |  |
| Is the language/English quality of the article suitable for scholarly communications? | Yes.  |  |
| Optional/General comments |  |  |

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| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s comment *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*** |
| **Are there ethical issues in this manuscript?**  | ***(If yes, Kindly please write down the ethical issues here in details)*** |  |

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| **Reviewer Details:** |
| **Name:** | **Mohammed Noori Salman** |
| **Department, University & Country** | **University Of Jabir Ibn Hayyan For Medical And Pharmaceutical Sciences, Iraq** |