Certainly, here's a suggested flow for writing the results section of your experiment paper on an LSTM (Long Short-Term Memory) model:

Title of Results Section:

"Results and Analysis of LSTM Model for Soh Experiment"

1. Overview of the Experiment:

Provide a brief introduction to the experiment and the problem you aimed to address using the LSTM model. Summarize the main objectives and research questions.

2. Data Preprocessing and Model Training:

Describe the preprocessing steps you applied to the Soh experiment data before feeding it into the LSTM model. This may include data normalization, sequence padding, and splitting the dataset into training, validation, and testing sets. Highlight any specific considerations relevant to your experiment.

3. Model Architecture and Hyperparameters:

Detail the architecture of the LSTM model used in the experiment. Include the number of layers, units per layer, activation functions, and any additional components like dropout or recurrent dropout. Present the hyperparameters chosen for training, such as learning rate, batch size, and number of epochs.

4. Performance Metrics:

Outline the performance metrics you employed to evaluate the LSTM model's performance. This could include accuracy, precision, recall, F1-score, or any other relevant metrics based on the nature of the Soh experiment.

5. Quantitative Results:

Present the quantitative results of your experiment. This section will likely include tables or figures to showcase the model's performance metrics on the testing dataset. Report key metrics for different evaluation criteria (e.g., confusion matrix, ROC curves) to demonstrate how well the LSTM model performed in predicting the Soh phenomenon.

6. Qualitative Results:

Discuss any qualitative observations you made during the experiment. This might involve analyzing specific examples or sequences where the LSTM model performed exceptionally well or encountered challenges.

7. Comparison with Baseline/Other Methods:

If applicable, compare the performance of your LSTM model with baseline methods or other relevant algorithms. Highlight any improvements or differences in predictive accuracy or efficiency.

8. Robustness and Sensitivity Analysis:

Address the robustness of your LSTM model by discussing its performance under different conditions or variations in input data. This could involve sensitivity analysis or testing the model on different subsets of the Soh experiment data.

9. Limitations:

Be transparent about any limitations encountered during the experiment. This could involve data quality issues, computational constraints, or other factors that may have influenced the results.

10. Generalization and Future Work:

Discuss the potential for generalizing your LSTM model to other scenarios or datasets beyond the Soh experiment. Highlight areas for improvement and potential avenues for future research.

11. Summary of Results:

Provide a concise summary of the key results obtained from your LSTM model in the context of the Soh experiment. Reinforce the main findings and their implications.

Remember to support your findings with clear and well-labeled tables, graphs, and figures. The text should complement these visuals by elaborating on the patterns and trends observed in the results. Additionally, adhere to the principles of scientific writing, such as clarity, objectivity, and proper citation of sources.

Lastly, as you proceed with writing the results section, keep in mind that the interpretation and discussion of these results will come in the subsequent "Discussion" section of your paper.