**Editor’s Comment:**

I accept the manuscript for publication in the BP International.

Considering the reviewers comments and authors corrections, we can publish this manuscript. The

reasons are as follows:

1- One reviewer gives comments such as “This manuscript provides valuable insights into the

behaviour of nitrogen-active species in microwave plasmas and early afterglows, which is

highly relevant for applications such as surface treatment and material processing. The

integration of experimental and theoretical approaches enhances our understanding of plasma

kinetics and the production of radiative states, contributing to advancements in low-pressure

plasma research. I appreciate the comprehensive nature of the study, as it bridges the gap

between experimental observations and theoretical modelling, offering a robust framework for

future investigations”

2- One reviewer gives comment such as” The study investigates N 2 microwave discharges and

their afterglows. The focus is on the production of N 2 + ions and excited N 2 species. A self-

consistent theoretical model is developed to explain the observed phenomena. It provides

insights into the complex mechanisms involved in N 2 discharges and the influence of

experimental conditions on plasma properties.”

3- Two reviewers give comment such as “Accept after minor revision”.

According to the comments, the authors have corrected the manuscript carefully. Therefore,

the manuscript has enough value for publication in the BP International.

**Editor’s Details:**

Prof. Magdy Rabie Soliman Sanad

Professor, National Research Institute of Astronomy and Geophysics, Egypt.