## A New Explanation for the Photon, a New Atom

Gh. Saleh

Saleh Research Centre, Netherlands

The ancient believed that all matter was made up of four elements: Fire, Air, Water and Earth. Over time, with the progress of science, scientists have discovered that all matter is made up of tiny particles called molecules. So, if we think well, we will see that some knowledge gradually loses its meaning.

Saleh Theory describes the structure of Electron, Proton and Neutron as the following: The Electron is an array of photons rotating on the surface of an imaginary sphere without any central core. The Proton is a dense, compact globe filled up of photons getting together and, The Neutron is a sphere with the Proton core, and Electron shell.



Accordingly, the smallest unit of Electrons, Protons and Neutrons, and in other words the entire universe, is Photon. On the other hand, based on the present theory, the smallest quantity of an element that retains the unique properties of that element is an atom or it can be said that the atom is the smallest unit in which matter is divided into. According to the definition of the atom, and the true meaning of the word "Aτoµo" in the Greek language, which means uncuttable, and the description of the structure of Proton, Electron and Neutron, we can conclude that the atom which forming the structure of the whole universe is the photon.

Therefore, Saleh Theory believes that the "photon", in the true sense of the word, could be called the new atom, which is the primary building block of all material in the universe.



## **References:**

[1] Saleh, Gh. "A New Proof of the Constancy of Photon Mass Using Its Initial Energy." Saleh Theory, 06 Mar. 2025, <u>https://www.saleh-theory.com/article/a-new-proof-of-the-constancy-of-photon-mass-using-its-initial-energy</u>

[2] Saleh, Gh. "New, Marvelous and Revolutionary Discoveries About Photon." Saleh Theory, 07 Sep. 2023, <u>https://www.saleh-theory.com/article/new-marvelous-and-revolutionary-discoveries-about-photon</u>

[3] <u>Saleh, Gh. "Photon Could Have the Rest Mass." 2023 International Conference on Artificial Intelligence and Power Engineering (AIPE). IEEE, 2023.</u>

[4] Saleh, Gh. "Proving the Helical Motion of the Photon With Ten Reasons." *APS New England Section Fall Meeting Abstracts*. 2023.

[5] <u>Saleh, Gh. "A New Explanation for the Motion of Photon; The Nested Helical Motion." *APS New England Section Fall Meeting Abstracts*. 2023.</u>

[6] <u>Saleh, Gh. "The Helical Motion of Photons; The Proof of Wave-Particle Duality of Photons." APS</u> <u>Meeting Abstracts. 2023.</u>

[7] <u>Saleh, Gh. "Proving the rotational motion of the photon using the photon energy equation." APS</u> *Division of Atomic, Molecular and Optical Physics Meeting Abstracts.* Vol. 2023. 2023.

[8] <u>Saleh, Gh. "Mathematical and physical explanation of the theory of everything." *APS April Meeting Abstracts.* Vol. 2022. 2022.</u>

[9] <u>Saleh, Gh. "Up-Photon (From Photons to Electrons)." *The 83st Japan Society of Applied Physics* (JSAP) Autumn Meeting 2022. 2022.</u>

[10] Saleh, Gh, and M. J. Faraji. "The structure of a photon, a new atom which is the primary building block of all matter." *52nd Annual Meeting of the APS Division of Atomic*. 2021.

[11] <u>Saleh, Gh, et al. "3 Dimensional Motion of Photon and Its Energy." *EPJ Web of Conferences*. Vol. 238. EDP Sciences, 2020.</u>

[12] <u>Saleh, Gh, R. Alizadeh, and A. Dalili. "The relationship between the wavelength and evanescent intensity of a wave in optical fiber and the explanation of the structure of Photon as a new atom in Saleh Theory." *International conference on Nanophotonics and Electronics (Nanophotonics2020.* 2020.</u>

[13] <u>Saleh, Gh, and M. J. Faraji.</u> "Photon, a new atom (Primary building blocks of Electrons, Protons and Neutrons)." *Joint Fall 2020 Meeting of the Texas Sections of APS*. 2020.

[14] <u>Saleh, Gh, et al. "The Structure of Photon Based on Saleh Theory." *MATTER: International Journal* of Science and Technology 6.2 (2020): 4145</u>

[15] Saleh, Gh. "Discovery of a New Atom." Saleh Theory, 16 Jan. 2019, <u>https://www.saleh-theory.com/article/discovery-of-a-new-atom</u>

[16] Saleh, Gh. "Photon has a Constant Rest Mass!." Saleh Theory, 16 Mar. 2018, <u>https://www.saleh-theory.com/article/photon-has-a-constant-rest-mass</u>

[17] <u>Saleh, Gh, et al. "A new explanation for the color variety of photons." *MATEC Web of Conferences*. Vol. 186. EDP Sciences, 2018.</u>



[18] Saleh, Gh. "The Unseen World of Photon." Saleh Theory, 16 Jul. 2017, <u>https://www.saleh-theory.com/article/the-unseen-world-of-photon</u>

[19] Saleh, Gh. "A Revolution in Light Theory." Saleh Theory, 11 Apr. 2017, <u>https://www.saleh-theory.com/article/a-revolution-in-light-theory</u>

