

PROFORMA OF EVENT

1. Name of the Department-**PHYSICS**
2. Event-**SEMINAR**
3. Date-**27.11.2019**
4. Title of the topic-**ATOMIC MODEL**
5. Name & Designation of Resource Person:-

Prof. Pratap Chandra Nayak
Associate Prof. of Physics
LokanathMohavidyalaya,
Patkura, korua,odisha

6. **Report** - According to Dalton's atomic theory, the ultimate structural unit of matter was atom. It was considered to be an elementary particle. John Dalton proposed that all matter is composed of very small things which he called atoms. This was not a completely new concept as the ancient Greeks had proposed that all matter is composed of small, indivisible (cannot be divided) objects. When Dalton proposed his model electrons and the nucleus were unknown. After the electron was discovered by J.J.Thomson in 1897, people realized that atoms were made up of even smaller particles than they had previously thought. However, the atomic nucleus had not been discovered yet and so the "plum pudding model" was put forward in 1904. In this model, the atom is made up of negative electrons that float in a "soup" of positive charge, much like plums in a pudding or raisins in a fruit cake. In 1906, Thomson was awarded the Nobel Prize for his work in this field. However, even with the plum pudding model, there was still no understanding of how these electrons in the atom were arranged. The discovery of radiation was the next step along the path to building an accurate picture of atomic structure. In the early twentieth century, Marie and Pierre Curie discovered that some elements (the *radioactive* elements) emit particles, which are able to pass through matter in a similar way to x-rays. It was Ernest Rutherford who, in 1911, used this discovery to revise the model of the atom. Rutherford carried out some experiments which led to a change in ideas around the atom. His new model described the atom as a tiny, dense, positively charged core called a nucleus surrounded by lighter, negatively charged electrons. Another way of thinking about this model was that the atom was seen to be like a mini solar system where the electrons orbit the nucleus like planets orbiting around the sun. A simplified picture of this is shown in fig.1. This model is sometimes known as the planetary model of the atom. Niels Bohr proposed that the electrons could only orbit the nucleus in certain special orbits at different energy levels around the nucleus.

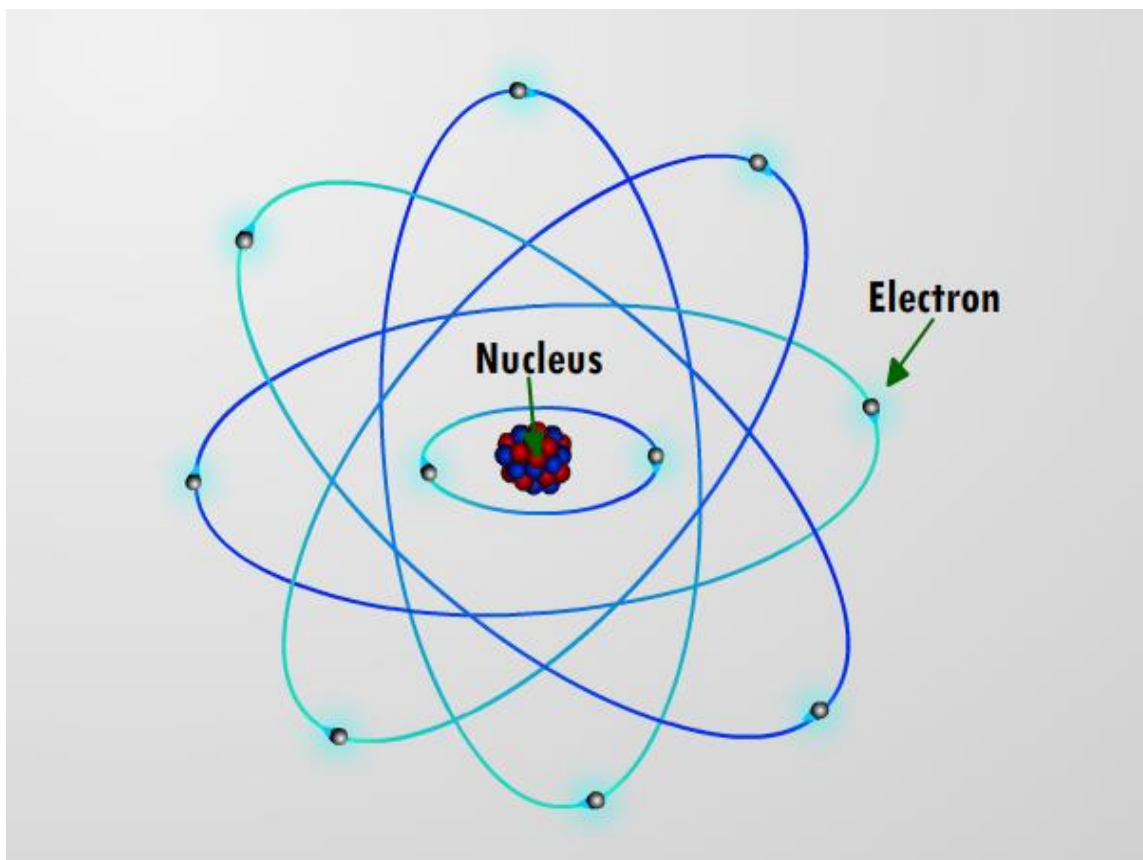


Fig.1 The planetary model of the atom

- Other remark:** The seminar on the topic “Atomic Model “ was presided by the honorable principal Dr.Smriti Ranjan Behera along with IQAC Co-ordinator Dr.Mathuri Charan Nayak. The welcome address of the resource person was given by the convener (HOD of Physics) Mr.Brahmananda Sethi. The invited resource person discussed the topic from various angles so that it will be fruitful to UG & PG students as well as for research scholars those who are working in this field of research. The interactive session for the participant with the resource person was very nice. At the end of seminar the vote of thanks was given by second year students Miss. Shruti Chhanda Sahoo. Other staff members of physics department gave their efforts to make the seminar a grand success.



SEMINAR ON "ATOMIC MODEL"

Resource Person-Prof. Pratap Chandra Nayak
Associate Professor of Physics (Retd.)
L.N. Mohavidyalaya, Patkura, Korua
Organized by : Department of Physics
Tulasi Women's collge, Kendrapara
Date: 27/11/2019 (Wednesday) at 11:00 a.m



ସୁମାରୀ - ୩୦/୧୧/୨୦୧୯

ତୁଳସୀ ମହିଳା କଲେଜ

ପଦାର୍ଥବିଜ୍ଞାନ ବିଭାଗୀୟ ସେମିନାର

କେନ୍ଦ୍ରାପଡ଼ା, ୩୦/୧୧ (ନି.ପ୍ର) - ସ୍ଥାନୀୟ ତୁଳସୀ ମହିଳା ମହାବିଦ୍ୟାଳୟର ପଦାର୍ଥବିଜ୍ଞାନ ବିଭାଗ ପକ୍ଷରୁ ସେମିନାର ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ଏଥିରେ ପାଟକୁରା ଲୋକନାଥ ମହାବିଦ୍ୟାଳୟର ପଦାର୍ଥବିଜ୍ଞାନ ବିଭାଗର ପ୍ରଫେସର ପ୍ରତାପ ଚନ୍ଦ୍ର ନାୟକ ରିସୋର୍ସପର୍ସନ ଭାବେ ଯୋଗଦେଇ ଛାତ୍ରୀମାନଙ୍କୁ 'ଆଟୋମିକ ମଡେଲ' ବିଷୟରେ ଉଦ୍‌ବୋଧନ ଦେଇଥିଲେ । କଲେଜ ଅଧ୍ୟକ୍ଷ ଡଃ ସ୍ମୃତିରଞ୍ଜନ ବେହେରା କାର୍ଯ୍ୟକ୍ରମ ପରିଚାଳନା କରିଥିବା ବେଳେ ବିଭାଗୀୟ ମୁଖ୍ୟ ଅଧ୍ୟାପକ ବ୍ରହ୍ମାନନ୍ଦ ସେଠୀ ବକ୍ତବ୍ୟ ରଖିଥିଲେ । ପ୍ରାଧ୍ୟାପକ ଅଜୟ କୁମାର ରାଉତ, ଡଃ ମଥୁରା ଚରଣ ନାୟକ, ଜ୍ୟୋତ୍ସ୍ନାମୟୀ ପତି, ପ୍ରମିଳାରାଣୀ ବେହେରା, ସନ୍ଦୀପ କୁମାର ଜେନା ପ୍ରମୁଖ କାର୍ଯ୍ୟକ୍ରମ ପରିଚାଳନାରେ ସହଯୋଗ କରିଥିଲେ । ଅଧ୍ୟାପିକା ଦିପ୍ତୀମୟୀ ରାଉତରାୟ, ତେମନଞ୍ଜେଟର ମୋନାଲିସା ସାହୁ, ଅର୍ପିତା କାନ୍ତୁନଗୋ, ବିଶ୍ଵପ୍ରକାଶ ସାହୁ ପ୍ରମୁଖ ଉପସ୍ଥିତ ଥିଲେ । ଛାତ୍ରୀ ଶ୍ରୁତିଚନ୍ଦ୍ରା ସାହୁ ଧନ୍ୟବାଦ ଦେଇଥିଲେ ।

Mr. Brahmananda Sethi
HOD. of Physics.