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# A MARVELOUS WAY OF MAKING RADIATION FREE ENVIRONMENT

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## ABSTRACT:

One of the greatest causes of the formation of safer environment is plantation of trees. With the growing development of modern world, the diversity of the surroundings going down as different type's radiation causes harm to the world. Since polyene system have huge  $\pi$ -electron cloud can absorb positively charge  $\alpha$  particle, the vegetation of colourful flower and fruits will be the easiest policy for human being.

## INTRODUCTION:

To make the living world maintaining its balance in terms of its living and non-living things relation, our novel aim to achieve radiation less environment. The high radiation areas includes air space , automobile factories , mobile stations constantly releases high energy radiation like  $\alpha$  radiation,  $\gamma$  radiation etc. This radiation causes different harmful casualties to different species regarding their structure and state in stable situation. Similarly different deformation of microbes living in water and earth leading to the decreasing their mutual activities and also form different restriction to balance of the ecosystem. The species having  $\pi$  clouds like polyene can act as a shield to  $\alpha$  radiation. So the material made of polyene compounds can act as a source to formation of greener environment.

## **PROCESS TO ELEMIMATE $\alpha$ RADIATION RELEASING FROM DIFFERENT SOURCE**

- $\alpha$ - radiation being positively charged releasing mostly from automobiles, factories etc. Can be absorbed to the negatively charged source.
- The species contains largely conjugated  $\pi$ - electron cloud can act as a absorber to  $\alpha$  particle.
- So in the high radiation zone should be used to with this type of material likewise different polymer material can absorb this type of radiation.
- The easiest way to do this is the vegetation colourful flowers where the highly conjugated  $\pi$  electron cloud eliminates this type of positive radiation.
- Making this aspect towards our life also act as radiation eliminating source, we will be able to free the environment from high energy particle causalities.

### **CONCLUSION:**

The way world progress involving uses of huge variation of technology in different aspect of life, it is very demanding to the greenness of the world to maintain the diversity the world. Planting of the tree to make the world surface green is the cheapest form of maintain balance of living and non-living things; can cause a marvellous effect towards the safer environment for our livings.

# A NOVEL TREATMENT OF CANCER CELLS USING FULLERENE

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## **ABSTRACT:**

FULLERENE has its capability to interact with the protein and amino acid to deform their structure to restrict the cell formation by replication. The former interact with amino acid very well to deform its structure and inhibit the enzyme and other actives for replication. The electron transfer process causes the structure deformation with lost of its binding capacity with enzymes resulting the decreasing of the growth of the cancer cells.

## **INTRODUCTION:**

The fullerene is being the allotrope of the carbon has the structure of Bucky ball can show a good impact on destruction of cancer cell and stop the following replication. Its size and shape have a compare with the cavity of the DNA to cut it thoroughly. Herald krato has discovered the allotrope contains 60 carbon atoms have shown its interaction with amino acid to deform it following the process of the cutting of DNA. This giant effect has shown including 60-1-ALA, 60-1-S, 60-1-AcNa etc. has been discovered by Raman ova. The volume the allotrope is such it can effect an interaction with inter cell region. Thus the deformation hydrophobic part of the DNA includes the imbalance the working of the HE LA cells.

## **PROCESS OF CUTTING OF THE DNA AND STOP REPLICATION**

- The fullerene has its structural facility that it can interact with the DNA by fitting into the cavity of the hydrophobic part.
- It interacts with the amino acid part resulting its deformation, so that it can inhibit the other enzyme activity for cell growth.
- Then it forms the stress on chain of the DNA and resulting into the cutting of it. Thus the possibility of the formation the daughter DNA stops. Hence the replication of the infected DNA stops.

So the growth of the other HE LA cells also stops. Hence the cancer cells stop its replication.

### **CONCLUSION:**

This cell growth of the cancer cells stops on the activity of the fullerene to stop the replication can cause the hamper to the infected cells. So this modern investigation on this aspect of fullerene has shown its facile effect. Although some restriction the total effect has been come out.

# A NOVEL USES OF LANTHANIDE COMPOUNDS IN ENERGY SAVING PROCESS

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By prof. Ribhu Maity, Aranyadev Bhunia.

## **ABSTRACT:**

Throughout the years the energy saving course has spread out all over the world regarding the fight with decrease of major thermal energy source. In fact the species like coal, mineral oil are uses predominantly as the giant bowl of energy in terms of energy production for serving the society. A high amount of energy needed for lighting a city per day. Lanthanides can be a huge alternative in this aspect having its fluorescence capability to increase the intensity after emission. Having this we can go for making the prosperity in energy saving in daily life.

## **INTRODUCTION:**

In daily life process huge amount of energy has been spent on making power for lighting our household. Although different type of green light source has been used in this respect but still energy source has consumed larger amount of thermal source. Lanthanides have strong f-f transition results emission with high intensity. The lanthanides have this special effect on this intensity increasing of a light source regarding a way of using simple energy source. The effect also utilizes for the multiple emission using only single light source.

## **PROCESS OF INCREASING INTENSITY USING A SINGLE LIGHT SOURCE:**

In daily life process in a city nearly 2500 M Ton watt energy has been consumed. Considering the fact, we are suppose to using nearly 5-6 CFL Lights per room as households. Hence per room 500 watt energy consumed per day. The intensity of the light is such that the energy saving capacity only depends on the lights using in our house. To increase the intensity of the light source, the voltage of the light source should increase. In this aspect the thermal energy needed has been increased by almost 15%.

- Lanthanides has fluorescence capability on the emission respect can cause a huge increment of intensity by doing multiple fluorescence. Using this fact a model can be prepared.
- In this model a box with the internal wall covered with the lanthanide compounds has allowed to enter a single beam of light from a single light source. Then the wall will show the fluorescence one by another by all the walls. Each time the intensity of the light increases than incident light. Thus a huge intensity will gained the light beam.
- Thus if this concept has been applied in our household formation likewise if the internal wall of the house has been colored with the material containing lanthanides element will show huge intensity of the light. As a result a room consuming light energy from 5-6 light source ,now needed only one light source where the walls of the former containing lanthanide compounds. Hence reduces the energy loss by nearly 8-10%

## **CONCLUSION:**

Now a days the energy consumption become a threat to the human world regarding the constantly decrease of energy source. From this point of view this modification in house considering the household also can a great cause of energy saving in all energy source aspects



# THE INTERICTION OF FIRST GENERATION ANTI-CANCER DRUG CIS -PLATIN FOR DNA DEFORMATION

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## ABSTRACT:

In 20<sup>th</sup> century I.Chernyaev introduced the idea of Trans effect leading to synthesis of novel cis platin, have a various effect on deformation of different bio- molecules, most likely the aspect of deformation of DNA. The intercalation process made the binding the cis drug leading to formation of the kinks in strands of DNA. The interaction of cis platin is being through the hydrogen bonding with the bases of the DNA. Thus the interaction of the cis planer platinum complex leads to opening the strands of the DNA causing the denaturation of the structure.

## INTRODUCTION:

In 1926 planer complex of platinum shows cis effect introduced by I.Chernyaev has different application on discovering other squire platinum derivative and also some special organometalic compound. The intercalation process have also shown by different organometalic complex ,but predominantly by cis platin leads the much more investigation on binding of cis platin with DNA. The cancer cells are also found to replicate to produce the more and more daughter DNA has also been researched throughout the years. Also in 19<sup>th</sup> century have numerous types of treatment have been made to destruct these replicated DNA and stop further replication. The cancer cell aka HE LA

cells have shown different types of binding with different square planar and organometallic complex with the result of its denaturation of its structure. The square planar complex cis platin have its structural facility to make the process of the intercalation easier in different respect. The binding is easier to have cis conformation with the ligand like chloride having the ease of leaving to make the binding with the nitrogen base of the DNA, proceeding towards the unfolding of the DNA strands.

### **1. THE PROCESS OF THE BINDING OF CIS -PLATIN WITH DNA STRANDS**

- Cis-platin has its two good leaving chloride in same side hence with the help of trans effect in the inner cellular region having high concentration of water molecule making the process of replacing those chloride group with hydroxyl group to form cis di-hydroxyl compound.
- After the introduction of the complex in close vicinity of DNA it will enjoy the interaction with phosphate group of DNA .Next it will bind with the nitrogen base of DNA following the intercalation process. The evidence of the binding gets from the CD Spectrum and also IR data.
- The strong binding with bases causes' different strain angle formation in orientation of the strands making some kinks in those strands such that it will leads the fact of inhibition other enzyme action regarding the formation of the daughter DNA. Thus the replication of the mother DNA to produce daughter DNA has stop and also forbidden the fact of farther replication.

- Thus the changing of the orientation of the strands due to binding of the nitrogen base causing the formation of strain angle gets try to relax in terms of unfolding of the DNA strands. Thus two strands try to unbounded so far as they were so far due to hydrogen bonding. Hence the **HE LA** gets deformed in terms of structural aspect. The binding of the drug with the DNA have also been investigated through SEM analysis. Thus the short view of the interaction with the **HE LA** cells causing the unfolding the strands with respect of the structural analysis.

#### **CONCLUSION:**

The first generation anti cancer drag shows several interactions to decrease the rate of increment of **HE LA** cells by this type of the DNA denaturation. Although some restriction also found in the way of treatment regarding the fact of other side effect and also other interaction with different enzymes, may hamper the other cell reaction. However the effect of the drag found in DNA inactivity is quite strong leading to searching of the second generation anti cancer drug.