Editorial

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British Biomedical Bulletin
ISSN 2347-5447

2017
Vol.5 No.2:305

DOI: 10.21767/2471-9897.1000305

The Design Graphene-Based Nanosheets as a New Nanomaterial in Anti-Cancer Therapy and Delivery of Chemotherapeutics and Biological Nano Drugs for Liposomal Anti-Cancer Nano Drugs and Gene Delivery

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Received date: June 20, 2017; **Accepted date:** June 26, 2017; **Published date**: June 30, 2017

Citation: Heidari A (2017) The Design Graphene-Based Nanosheets as a New Nanomaterial in Anti-Cancer Therapy and Delivery of Chemotherapeutics and Biological Nano Drugs for Liposomal Anti-Cancer Nano Drugs and Gene Delivery. Br Biomed Bull 5: 305.

Editorial

The design Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation has been studied more seriously in recent years and many researchers have investigated the theoretical aspects of pharmaceutical enzymatic reactions in much detail. Many kinetic models have been applied to these reactions [1-10].

Michaelis-Menten kinetics and Briggs-Haldane kinetics models are among the most successful models applied to enzymatic reactions and are widely taught in biochemical and chemical engineering in the design Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation [10-15].

These models are used in a variety of biochemical situations other than enzyme-substrate interaction, including antigen-antibody binding, nucleic acids-nucleic acids hybridization, amino acids-amino acids or Branched-Chain Amino Acids (BCAA) Branched Chain Amino Acids (BCAA) interactions and for designing Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation [15-20].

It can be used to characterize a generic biochemical reaction, in the same way that the Langmuir equation and Langmuir adsorption model can be used to model generic adsorption of bimolecular species. When an empirical equation of this form is applied to microbial growth, it is sometimes called a Monod equation or an activated sludge model.

Furthermore, these models are usually defined as a set of differential equations such as Verhulst equation, Von-Bertalanffy model, replicator dynamics, Hodgkin-Huxley model and Lotka-Volterra equations also known as the predator-prey equations, are a pair of first-order and non-linear differential equations frequently used to describe the population dynamics of two species that interact, one as a predator and the other as prey. It should be noted that the rate law or rate equation for a chemical reaction is a differential equation that links the reaction rate with concentrations or pressures of reactants and constant parameters (normally rate coefficients and partial reaction orders) [21-25].

To design Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation. In addition, a set of differential equations are present in the investigation of thermodynamics, kinetics and quantum mechanics. The complete solution of this set is usually very difficult, complex and may be obtained using numerical methods and computer programming [26-30].

A computational program have been made progress to pass the computational barrier for designing Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation. The program is very user friendly and even an elementary user can learn the program, easily. There is a main menu and one can choose the proper enzyme kinetics from the right box of the main menu entitled by “Type of Enzyme Kinetics”.

Different kinetic models have different parameters and so whenever a certain kinetic model is selected, certain kinetic parameters are also highlighted in the main menu. The user may also select the time interval and the name of the file to which the computational results must be saved. After entering the

kinetic parameters, initial values, time intervals and file name, then the user must double click on the "calculate" to design Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation and also must double click on the "plot" to draw Eadie-Hofstee diagram and Lineweaver-Burk plot as with the Michaelis-Menten and Briggs-Haldane equations graphical methods may be used to fit the coefficients of the Monod equation or an activated sludge model [31-33].

The design Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation has been considered for many years. In this editorial, first, immobilization process has been evaluated in different periods from various point views and it is tried to be totally considered its relation with pharmaceutical products in the world high-tech factories. For evaluation of biocatalyst performance in a specific process, it is necessary to be aware of the nature of kinetics and transport phenomenon in that biocatalyst.

A logical assumption system is evaluated in both steady state and unsteady state and conditions include three geometric shapes: Slap cylinder and sphere with the use of Michaelis-Menten kinetics and Briggs-Haldane kinetics mechanisms and then obtained computational results from both models to compare with experimental data. This comparison illustrates that although time duration for transforming system from unsteady state to steady state is too short (model is capable to calculate this time), the computational results of the unsteady state are closer to the experimental data.

Therefore, prediction the condition of biocatalyst performance will be more accurate to design Graphene-based nano sheets as a new nanomaterial in anti-cancer therapy and delivery of chemotherapeutics and biological nano drugs for liposomal anti-cancer nano drugs and gene delivery using nano-functionalization of metal complexes for molecular imaging and anti-cancer therapy under synchrotron radiation.

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