

## Components of Modern Chemistry and its Applications

Ponizovskiy MR\*

Kiev Regional, Head of Laboratory Biochemistry and Toxicology, PN Hospital, Germany

Journal of Modern Chemistry and Applications deals with the study of stoichiometry, modern analytical chemistry, modern nuclear chemistry, modern heterocyclic chemistry, modern chemistry formulas, modern experimental chemistry and modern organometallic chemistry. Volume No 4, Issue 2 of the journal published 4 research articles of current research interest.

Fawzy et al. studied the kinetics of oxidation of vanillin by using chromium in sulfuric acid medium assisted by spectrophotometric technique. The present study tried to evaluate the rate and equilibrium constants involved in the different steps that describes the mechanism, while assessing their activation and thermodynamic parameters [1].

Hossain et al. evaluated the physicochemical properties of an antimalarial drug lead, 4, 10-bis (7- chloroquinoline)-1,4,7,10-tetraazacyclododecane (Cyclenbisquinoline; CNBQ) and its hydrochloride salt for the stability. The study outcome would be useful for novel and quality drug design and development [2].

Fawzy et al. in their study evaluated the oxidations of two aliphatic  $\alpha$ -amino acids namely, leucine and isoleucine by hex chloroplatinate as an anticancer platinum complex. The study used a spectrophotometric technique in perchlorate solutions in the presence of palladium as catalyst at a constant ionic strength. This study also discussed and evaluated the activation parameters of the second order rate constants [3]. The research article of Zaki discussed the effect of compost and nitrogen fertilization on yield and nutrients uptake of rice crop under saline soil [4].

Ponizovskiy studied the mechanisms stability of both an open non equilibrium nonlinear thermodynamic system of a human organism and the open non equilibrium nonlinear thermodynamic system of an organism's cells considering the role of Krebs tricarboxylic acid cycle in processes interaction between aerobic exergonic oxidative processes, anaerobic exergonic processes of oxidative phosphorylation and anaerobic endergonic processes in norm and in cancer pathology, i.e., normal Stationary State and cancer pathologic Quasi-stationary State leading to Warburg effect mechanism. Also, there was described the mechanisms of the offered method prevention supplementary metastasis in processes of up-to-date chemotherapy and was described practical application of this method treatment on the cancer disease patient.

### References

1. Fawzy A, Zaafarany I, Khairou K, Althagafi I, Alfahemi J (2016) Kinetics and Mechanism of Oxidation of Vanillin by Chromium (VI) in Sulfuric Acid Medium. Mod Chem appl 4: 179.
2. Amoyaw PNA, Saluja HS, Khan FMO (2016) Evaluation of the Physicochemical Properties of a Novel Antimalarial Drug Lead, Cyclenbisquinoline. Mod Chem appl 4: 181.
3. Fawzy A, Zaafarany IA, Altass HM, Althagafi II, Bawazeer TM (2016) Kinetics and Mechanistic Approach to Palladium (II)-Catalyzed Oxidative Deamination and Decarboxylation of Leucine and Isoleucine by Anticancer Platinum (IV) Complex in Perchlorate Solutions. Mod Chem appl 4: 182.
4. Zaki SS (2016) Effect of Compost and Nitrogen Fertilization on Yield and Nutrients Uptake of Rice Crop under Saline Soil. Mod Chem appl 4: 183.