

## Insights on the Currents Trends in Biochemistry and Analytical Biochemistry

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### Editor's Note

Researches devoted to analytical biomarkers applied to different biocompounds with relevance in clinical analysis, as well as studies dealing with methods of assay of food components, are of vital importance. This constitutes the focus on volume 5 and issue 3.

The papers published in the present issue comprise investigations in fields like analytical biochemistry, molecular biology and genetics.

Spectroscopy, chromatography and electro-analysis allow for sensitive and accurate detection modes, in the assessment of various metabolites. The application of ever increasingly accurate and sensitive methods of assay has significance in both clinical domain and food characterization [1-3].

The researches presented in this issue aimed at the assessment of various biomolecules' profile (lipid assay, protein determination), of DNA damage and oxidative stress markers, [4] but also at: genotype characterization, investigation of bioefficacy [5] against pathogen vectors and anti-cancer [6] activity of some extracts, the role and activity study of peroxidases, the sensing ability of carbon and graphene-based quantum dots versus various metabolites, the effect of leptin on blood biochemical parameters associated with oxidative stress [7], the assessment of water quality, the variation of total phenol content. Other studies investigated: the use of osteoprogenitor glycoprotein as marker of conditions such as metabolic syndrome, the risk factors in blood transfusion [8] during cardiopulmonary surgery, the reference values of renal, cardiac and pancreatic function tests, the influence of glucosamine derivatives on extracellular matrix remodeling in dermal fibroblasts. Modern techniques that combine molecular recognition and sensitivity of analytical detection, as well as the use of novel materials increase the assays' performances. Finally, the novel trends in modern medicine, as driven by recent advances in bioanalysis and bioinformatics are also approached in the present issue [9].

The studies published in the present issue can provide the reader with novel and minutiously presented informations and interpretations, and can lead to a more thorough view in biochemical analysis and biomedical investigation.

### References

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