



Message of the Summit:

Greetings and a warm welcome to all participants,

Thermodynamics is the backbone of science and identifies phenomena in depth. Matter shows the motion and heat is the first vector, then all physical parameters are related to thermal energy. When this universal position is extended to the biological sciences, it forms the biothermodynamics in which biomolecular and especially protein thermodynamics has the most importance. The protein structure and function are governed by heat content. Biothermodynamics with this power of identification is not used much in the world of science today and deserves to be better introduced to scientists in various fields, especially in the fields of medicine, pharmacy. A new paradigm in medicine is arising which is termed P4 medicine the modern views which is featured as predictive, preventive, personalized and participative medicine. Biothermodynamics is supposed to involve in early diagnosis which makes it possible to timely recognize and prevent advanced complications. Since the thermal profile of disease is an important component of biothermodynamics which is measured via precision calorimeters supported by an advanced software for analyzing of the thermal profiles. The results show that the thermal profile of disease, help to monitor the stages and intensities of disease at the early stages. Therefore, "Frontier in Biothermodynamics" summit has been arranged to issue the worldwide scientific statement in this field and its modern applications. The most important proposed headlines are listed as follows:

- A10-year global strategy for the development of Biothermodynamics
- Co-writing books, articles, reviews in Biothermodynamics
- Defining important and big questions in this field and engaging students' dissertations with these important questions
- How protein thermodynamics serves in human health and diseases
- Provide virtual teaching for students in this field
- Forming a scientific cooperation network
- Introducing the science of biothermodynamics and its applications for the applicants, especially in medicine, agriculture and industry.

The meeting hosts the distinguished scientists, and hope it helps to promote development of biothermodynamics in Universities and scientific centers, to encourage the applicants in the community and industry at the international level.

Wishing health and well-being to all

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