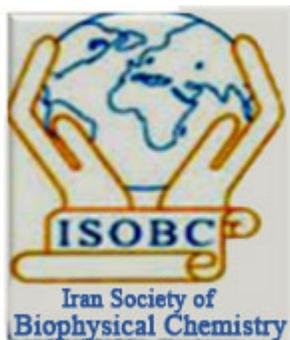




# ISOBC NEWSLETTER

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## ISOBC Newsletter

September/ 2010

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Iran Society of Biophysical Chemistry

## News

### **Accession of Biophysical Chemistry laboratory (BCL) to Iran Nanotechnology Laboratory Network**

The major way to develop nanotechnology is to provide an advanced laboratory equipped with accurate devices, skilled technicians capable of serving in easy and fulltime way. A laboratory facility in the field of nanotechnology (such as equipment, technicians and operators, maintenance facilities, etc.) in many cases is beyond the power of individual researchers and investors. Therefore laboratory networking technology is particularly important in various branches of nanotechnology. Nanotechnology Laboratory Network was formed in Iran in early 1383 AH with the aim of creating appropriate laboratory to researchers and foundation of industrial laboratories to use better the country capacities. So far, during the network activity, more than 39 laboratory collections are accepted the members of the created firm network. Biophysical Chemistry laboratory (BCL) at Institute of Biochemistry and Biophysics (IBB), University of Tehran, also recently is joined to this network. This laboratory has become accessible to the Nano site and is ready to bring forward suitable services in various aforementioned areas. For more information, visit: [www.ibb.ut.ac.ir/bcl](http://www.ibb.ut.ac.ir/bcl)



A zinc oxide "nanoflower"



## Winner of 2011 Ahmed Zewail Prize in Molecular Sciences

The Chief Editors and Elsevier publishing company, the Publisher of Chemical Physics Letters, are delighted to announce that the third Ahmed Zewail Prize in Molecular Sciences has been awarded to Professor William H. Miller from the University of California, Berkeley, USA, for his outstanding contributions to the theory of chemical reactions.

Professor Miller's research has dealt with essentially all aspects of molecular collision theory and chemical reaction dynamics. Most recently his efforts have focused on developing a practical way of adding quantum effects to classical molecular dynamics simulations of chemical processes. Everyone involved in the detailed interpretation of experiments on chemical reaction dynamics will have been influenced by his innovative theories.

Nobel Laureate Professor Ahmed Zewail, after whom the prize is called, remarked: "Bill has made fundamental contributions to the field of chemical dynamics. In his work, one can see the elegance of approach and the creative sparks, which were certainly evident in his seminal semi-classical description of reactivity." Awarded on a biennial basis, the Ahmed Zewail Prize comprises a monetary award of US\$ 20,000, a Gold Medal, and a certificate. The Ahmed Zewail Prize will be presented to Professor William H. Miller at the Ahmed Zewail Prize Award Symposium during the ACS Spring National Meeting in Anaheim, California (March 2011). For more information, **visit: [www.elsevier.com/ahmedzewailprize](http://www.elsevier.com/ahmedzewailprize)**



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## 10<sup>th</sup> Conference of Iran Biophysical Chemistry



Islamic Azad University of Jahrom , February 22-24 , 2011

### Main Topics:

- ✓ Biophysical Chemistry
- ✓ Biophysics
- ✓ Biothermodynamics
- ✓ Structural biochemistry
- ✓ Ligand-biomacromolecule interaction
- ✓ Structural analysis and enzyme kinetics
- ✓ Structural bioinformatics of biomacromolecule

Abstract submission and registration Deadline: December 6, 2010

Young scientist award registration deadline: December 6, 2010

Email address: [isobc@ibb.ut.ac.ir](mailto:isobc@ibb.ut.ac.ir)

Web address: [www.iranbcc.com](http://www.iranbcc.com)



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## ProteinSociety.org

The Protein Society Awards rank among the most honorable distinctions bestowed upon a protein scientist. The awards recognize the exemplary achievements of researchers who advance the study of proteins at key points in their careers. We would be pleased to receive your nominations for the following 2011 awards:

- Carl Brändén Award (sponsored by Rigaku Corporation)
- Dorothy Crowfoot Hodgkin Award (sponsored by Genentech)
- Stein and Moore Award (sponsored by The Protein Society)
- Hans Neurath Award (sponsored by The Hans Neurath Foundation)
- Christian B. Anfinsen Award (sponsored by The Aviv Family Foundation)
- Emil Thomas Kaiser Award (sponsored by The Protein Society)
- Irving Sigal Young Investigator Award (sponsored by Merck Research Laboratories)

Recipients will present plenary lectures at Society symposia on the structure and function of protein science as it relates to their field of study. The Brändén and Hodgkin awards will be presented at the IX European Symposium of the Protein Society in Stockholm, Sweden, May 22-26, 2011. The Neurath, Anfinsen, Stein and Moore, Kaiser, and Sigal awards will be presented at the 25th Annual Symposium of The Protein Society in Boston, Massachusetts, July 23-27, 2011.

Executive Officer Visit the 2011 Nominations web site at:

[www.proteinsociety.org/pages/page03c.htm](http://www.proteinsociety.org/pages/page03c.htm)



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## *New Conferences*

**The 4th International Conference on  
Advanced Technologies & Treatments for Diabetes  
London, UK, February 16-19, 2011**



For more information please see: [www.kenes.com/attd](http://www.kenes.com/attd)

### **2nd International Society BioTechnology Conference ISBT 2010**

(7th to 9th December 2010 at Trivandrum, Kerala, INDIA )

E-mail: [bioconf@biotekjournal.org](mailto:bioconf@biotekjournal.org) Website: [www.biotekjournal.org](http://www.biotekjournal.org)

### **International Conference & Exhibition on Analytical & Bioanalytical Techniques : Pharmaceutical R&D Summit**

**Time: November 1-3, 2010 Venue: Marriott Hotel & Convention Centre,  
Hyderabad, India**

Website: <http://www.omicsonline.org/analbioanal2010/>

### **11<sup>th</sup> Iranian Congress of Biochemistry and Molecular Biology**

**8-10 February 2011, Qazvin, Iran**

Website: <http://sm.qums.behdasht.gov.ir>

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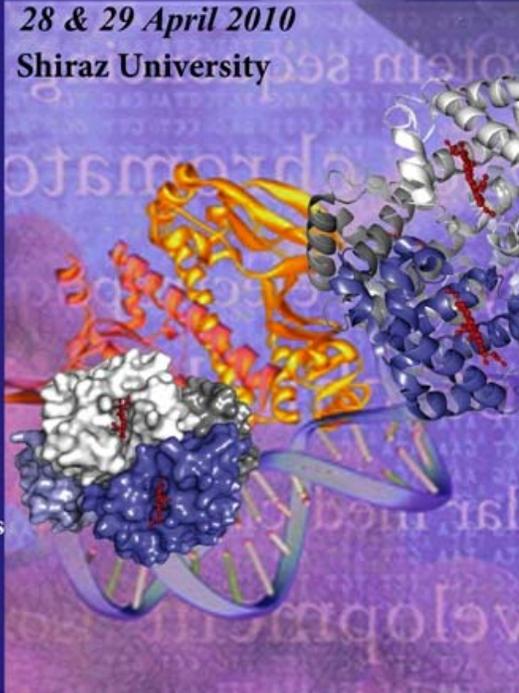
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***The National Proteomics Congress***

**Topics:**

- Bioinformatics
- Nanoproteomics
- Glycoproteomics
- Mass Spectrometry
- Phosphoproteomics
- Analytical proteomics
- Protein modification
- Proteomics Chemistry
- Quantitative Proteomics
- Proteomics & Biomarkers

**28 & 29 April 2010**  
**Shiraz University**



The Iran Society of Biophysical Chemistry (ISOBC) will give out an award to the best presented paper.

For more information, please visit: <http://proteomics.shirazu.ac.ir/>

## The 3rd Asia Pacific Protein Association Conference

May 6-9 2011, China



May 6-9, 2011  
Shanghai University, Shanghai, China

**The 3rd APPA Conference in conjunction with the 3rd Symposium of the CPS**

*Protein and Beyond*



For more information please see: [www.appaconference2011.org](http://www.appaconference2011.org)

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## Asian Congress on Biotechnology 2011 (ACB-2011)



For more information, please visit: <http://www.acb-2011.org/>

## The 1st Annual World Congress of Nanomedicine (Nanomedicine 2010)

**Theme:** Integrative Nanotechnology for Biomedicine

**Time:** October 23-25, 2010

**Venue:** China National Convention Center, Beijing, China

**Website:** <http://www.bitlifesciences.com/nanomedicine2010/>

## The Biophysical Society 2011 Annual Meeting



For the complete Annual Meeting program information, visit  
<http://www.biophysics.org/2011meeting/Program/tabid/2113/Default.aspx>

To register and submit an abstract, visit  
<http://www.biophysics.org/2011meeting>

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## ➤ *New Books & New Journals*

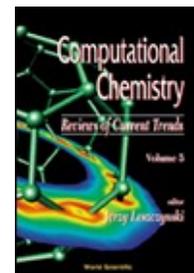
### Computational Chemistry: Reviews Of Current Trends

**Series Editor:**

J Leszczynski (*Jackson State University, USA*)

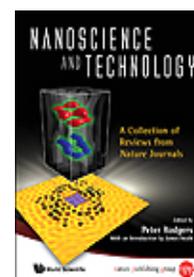
[View](#) the latest volume:

[Vol. 10 - Computational Chemistry: Reviews Of Current Trends](#)



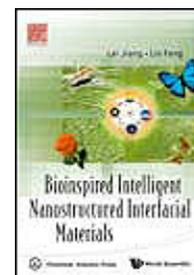
### Nanoscience And Technology

A Collection of Reviews from *Nature Journals*  
edited by Peter Rodgers (*Nature Publishing Group*)



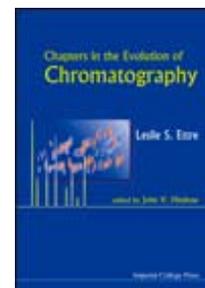
### Bioinspired Intelligent Nanostructured Interfacial Materials

by Lei Jiang (*The Chinese Academy of Sciences, China*) & Lin Feng (*Tsinghua University, China*)



### Chapters In The Evolution Of Chromatography

by Leslie S Ettre (*Retired Adjunct Professor, Yale University, USA*) &  
edited by John V Hinshaw (*Serveron Corporation, USA*)





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## Pertanika Journal of Science & Technology (JST)

### Aims and Scope

*Pertanika Journal of Science & Technology aims to provide a forum for high quality research related to science and engineering research. Areas relevant to the scope of the journal include: bioinformatics, bioscience, biotechnology and bio-molecular sciences, chemistry, computer science, ecology, engineering, engineering design, environmental control and management, mathematics and statistics, medicine and health sciences, nanotechnology, physics, safety and emergency management, and related fields of study.*

*JST accepts submission of mainly four types: original articles, short communications, reviews, and proposals for special issues.*

### Editorial Statement

*Pertanika is the official journal of Universiti Putra Malaysia. The abbreviation for Pertanika Journal of Science & Technology is Pertanika J. Sci. Technol.*

### Publication policies

*Pertanika policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications. It prohibits as well publication of any manuscript that has already been published either in whole or substantial part elsewhere.*

### Editorial process

*Authors are notified on receipt of a manuscript and upon the editorial decision regarding publication.*



Website: <http://www.pertanika2.upm.edu.my/jpertanika>



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## Two new textbooks of Biophysical Chemistry by Thomas E. Creighton

### The Physical and Chemical Basis of Molecular Biology

The twenty-one chapters of this volume present a comprehensive description of the fundamental physical and chemical phenomena that form the basis of molecular biology. Topics include the fundamental thermodynamic and kinetic properties of biochemical reactions in solution; the physical properties of aqueous solutions, including the hydrophobic effect and the Hofmeister series; both individual and cooperative noncovalent interactions between atoms and molecules; mass spectrometry; and radioactivity. Methods for observing the structures of nucleic acids and proteins,

including microscopy, scanning probes, crystallography and NMR, are explained in detail. The interactions of macromolecules with radiation of various types are described in terms of the information that they yield. The hydrodynamic properties of proteins and nucleic acids in aqueous solution and in molecular sieves are described to explain centrifugation and electrophoresis. The interactions of macromolecules with other molecules in solution and when attached to solid supports are described, explaining chromatography, blotting, affinity labeling, and cross-linking.

### The Biophysical Chemistry of Nucleic Acids & Proteins

DNA, RNA and proteins are undoubtedly the most important biological molecules. Being large macromolecules, their physical, chemical and biological properties can differ dramatically from those of the monomers from which they are made. Described here are their primary, secondary, tertiary and quaternary structures; their evolutionary origins; their unfolding

and refolding; their chemical synthesis and manipulation; their physical interactions with other molecules, which often result in catalysis of chemical reactions in one or both of them; and the various ways in which the catalytic activities of enzymes are controlled and regulated. Color is used liberally throughout the volume to enhance the many illustrations.

Versions of the two books and of individual chapters are available at  
[www.Myebook.com/HelvetianPress](http://www.Myebook.com/HelvetianPress).



## Journals Highlight

### Nano LIFE

*Nano LIFE* is an international peer-reviewed journal that will be divided into three different categories: Life Sciences, Nanosciences, and Nanomedicine. In each category, for instance, in Nanosciences, there are sub-fields of chemical synthesis, structures, and properties of nanomaterials. The Life Sciences section will accept high quality papers in pure biomedical areas. *Nano LIFE* will collect the top and frontier research results from the nanobiomedicine communities covering the following topics:

- Biosurfaces and biointerfaces
- Nanostructures, and novel devices for biological and chemical detection
- Integrated nanosensors
- Nanoscale magnetic nanoparticles
- Mechanics of biological and bioinspired materials
- Fluorescent nanomaterials
- Magnetic nanomaterials for hyperthermia applications
- Using biological building blocks to create novel materials and devices
- Smart nanomaterials for sensors and transducers
- Using materials to probe, alter, and control biological responses
- Understanding biological responses to implanted or injected materials
- Quantum dots/nanocrystals in biolabeling, marking, etc.
- Scintillation crystal materials for medical PET imaging devices
- Early cancer diagnosis and treatment
- Nanomedicine - General
- Novel therapies
- Cellular and molecular dynamics
- Nanotechnology approaches to drug design, storage, and delivery
- Modeling and simulation of biological systems
- Cellular transport
- Protein-protein interactions
- Subcellular targeting

For more informations, click [here](#).

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## ➤ *Interview with TWAS-UNESCO Associate Researcher*

### - Please tell us about yourself:

My name is Oluwatosin Adekunle Adaramoye. I was born on the 24th August 1969 in Akure, Ondo State of Nigeria. My parents are Late Mr Williams Adaramoye and Mrs. B.F. Adaramoye. My both parents are from Akure.



### -Please tell us about your relationship with University of Tehran:

I am presently in University of Tehran as a TWAS-UNESCO Associate to research on the anti-diabetic property of some Iranian and Nigerian medicinal plants

### -Could you please explain your biography sketch and your CV:

#### *UNIVERSITY EDUCATION (WITH DATES):*

- University of Ibadan, Ibadan, Nigeria 1998- 2005
- University of Ibadan, Ibadan, Nigeria 1995- 1997
- University of Ilorin, Ilorin, Nigeria. 1989- 1994

#### ACADEMIC QUALIFICATION (WITH DATES AND GRANTING BODIES):

- Doctor of Philosophy (Ph.D.) University of Ibadan, Nigeria 2005
- Master of Science (M.Sc.) University of Ibadan, Nigeria 1997
- Bachelor of Science (B.Sc.) University of Ilorin, Nigeria 1994

#### SELECTED FELLOWSHIPS, GRANTS AND PRIZES WON (WITH DATES);

- Visiting Scientist, Faculty of Medicine and Health Sciences, UAE University, Al Ain. UAE. October 2001 – April 2002
- Travel grant to the 38<sup>th</sup> Annual Scientific Meeting of the European Society for Clinical Investigation, 14- 17 April 2004, Utrecht, The Netherlands.



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- Travel grant to the 39<sup>th</sup> Annual Scientific Meeting of the European Society for Clinical Investigation, 6-9 April 2005, Athens, Greece.
- Travel grant to attend the European Cancer Conference (ECCO 13) organized by the Federation of European Cancer Societies (FECS) from 30 October to 3 November 2005 in Paris, France.
- Travel grant to attend the 19<sup>th</sup> World Diabetes Congress organized by the International Diabetes Federation (IDF) from 3-7 December 2006 in Cape Town, South Africa.
- Year post-doctoral fellowship by TWAS and CNPq at the Laboratorio de Tecnologia Farmaceutica, Universidade Federal da Paraiba, Joao Pessoa-PB, Brazil.
- 3-months Research visit to Central Drug Research Institute, Lucknow, Uttar Pradesh, India sponsored by INSA JRD-TATA Fellowship (March 16, 2009-June 15, 2009)

Publications: Over 30 published articles in peer-review journals

**- How did you acquaint yourself with IBB? What was your desire (motivation) to join as an associate researcher in IBB?**

IBB is a reputable centre of excellence. The state-of-art facilities and research output of this centre actually attracted me. My expectations were met since I have started my research here.

**-Are you satisfied with your research during your stay in Iran, what did you find, the new facts and results?**

My research is still ongoing. The results of my findings should be promising and interesting with respect to diabetic treatment.

**-Are you adapted with Iranian environment and society?**

I have adapted to some extent, but I am still learning the language. One thing is the acceptability I enjoyed everywhere I found myself here.



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## **-What is your view about Iran, University of Tehran and IBB?**

Iran as a Country is peaceful, quiet and friendly. Iranians love visitors and are very hospitable. University of Tehran is quiet, clean and full of research activities. The University has first class equipments with competent expertise in necessary research areas.

## **-Are you a member of Iran Society of Biophysical Chemistry? If yes tell us your view about this Society?**

Yes, the society is marching forward and the future is very bright

## **-What are your suggestions for promotion of foreign researchers at University for future?**

I think researchers should be encouraged to attend language schools to facilitate easy understanding of Persian language.



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