

What? Where? and Who?

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Editor Comment

The *editor-in-chief* of this special issue of the Electronic Journal of Biology (EJBio.) under the special issue of building bridges between inorganic chemistry and biology in celebration of prof. Hoffmann's 80th birthday extended his invitation to many biologically and chemically related scientists over the last couple of months. The aim is to attract biologically sound scientists with a tint of chemistry to submit their work. Areas of interest for this special issue are: Biology, Bioanalytical Chemistry, Bioinorganic Chemistry, Bioorganic Chemistry, Biostatistics, Toxicology and Bio-physical Chemistry [1-5].

To date the editor-in-chief received some commitment from 1- Dr. Rosanna Del GAUDIO a Molecular Biologist at University of Naples Federico II, Napoli, Italy and 2- Dr. William Eckenhoff of the chemistry department of Rhodes College in Memphis, TN, USA. Dr. Eckenhoff may or may not submit to the special issue to bridge the gaps between Biology and Chemistry. The editor-in-chief has a hypothesis that some of the invitees from different institutions may say: What is EJBio? Where is LeMoyne-Owen College? and Who is Hamada YZ? We will attempt to answer these three hypothetical-legitimate questions. Before we answer, let's learn a bit about the father of Chemistry/Biochemistry and the inventor of the sub-field Molecular Biology during the 20th century (Professor Linus Pauling).

Professor Pauling (1901-1994) was born in the state of Oregon and finished his undergraduate studies at Oregon Agricultural College; later to be Oregon State University. When Linus was applying to graduate school at UC-Berkeley to pursue his graduate work early in the 20th century, the chair of the chemistry division at the time said where is Oregon Agricultural College? And tossed the application into the trash. Professor Pauling moved on in his career and ended up at California Institute of Technology (Cal Tech) and ended up to be the only person in history to receive two unshared Nobel Prizes in two different fields; the Nobel Prize in Chemistry in 1954, and the Nobel Peace Prize in 1962 [6]. Let's go back to answer the three hypothetical proposed questions that we mentioned above.

What is Electronic Journal of Biology (EJBio)?

It is an open access journal in its 12th year of publication. It is indexed in index Copernicus with index Copernicus value of 74.03. It is also indexed in the following indices: Open Access Journals Search Engine (OAJSE), Cite Factor, Publons, Proquest Summons and Google Scholar to name a few. The journal impact factor is ranging from 1.04 to 1.73 over the last decade. Visit the journal website at the following reference [7].

The journal has on its editorial board a group of scientists from various institutions of the highest eminence such as Stanford University, Drexel University College of Medicine, Baylor College of Medicine to name a few. The entire list is on the journal website [7]. These scientists have a very diverse scientific background. Major subjectareas of interests that the journal is publishing are: Biochemistry, Molecular Biology, Pharmacology, Chemical Biology, Biomedical Research, Structural Biology, Nano-Biology and Neurobiology to name a few. Many things can be mentioned about EJBio however, we will let the reader to decide for himself/ herself. So that, with confidence we can say that EJBio is a legitimate and authentic publication platform of the above-mentioned sub titles.

Where is LeMoyne-Owen College?

LeMoyne-Owen College (LOC) is a fully accredited, four years historically-black college in the heart of Memphis, Tennessee. LOC is more than 150 years old. It is founded in 1862 with very long and successful history, and will be here for more than 150 years to come. It is accredited by the Southern Association of Colleges and Schools (SACS). SACS accredits, monitor and evaluate colleges and universities in the following states: Alabama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee, Texas, and Virginia. LOC has an acceptance rate of 52.2% as of 2014 statistics [8]. We invite you to visit its website and also to come and visit its beautiful campus (named one of the most beautiful college campuses in the south) in the heart of the city of Memphis, TN, USA.

Who is Hamada YZ?

Professor Hamada is a full professor of chemistry

and biochemistry. He received his B.Sc. in Chemistry from Alexandria University (AU) in Egypt. His MS and PhD degrees in bioinorganic chemistry were earned from the University of Missouri in St. Louis (UMSL) in the state of Missouri, USA under the guidance of Professor Harris. Dr. Hamada held several assistant professorships at various institutions in the Midwest and Northern Midwest of the United States in the following states: Arkansas (Hendrix College), Nebraska (Wayne State College), and Minnesota (St. Cloud State University) before he moved to Memphis as an associate professor of chemistry and biochemistry in 2005 (which coincide with the publication of the first volume of EJBio. Please see above).

Dr. Hamada has published many articles in the area of aqueous solution chemistry of biologically relevant metal ions with low molecular weight ligand. He received various research grants from funding agencies in support of his research efforts. His research interests are reacting essential and toxic metal ions with low molecular weight ligands in aqueous solutions. During his stint at Hendrix College in Conway, Arkansas he learned how to conduct chemical and biochemical research in mainly undergraduate institutions with the highest academic excellence that he carried with him to LOC [9]. The following are some of his major publications with high impact on the bio-related fields [10-19].

Anecdote

Alexandria University (AU) has some of the most prestigious scientists in their own fields. For example, my own teacher, Professor Salem TM, (Professor of Inorganic chemistry) recommended her student Zewail AH in 1969 to go and finish his graduate research in chemistry in one of the American institutions. Thirty years later, Zewail received the 1999 Nobel Prize in Chemistry while he was a professor at Cal Tech. Prof. Salem also recommended Hamada to finish his graduate research in University of Missouri-St. Louis and, hopefully, for the same endeavor.

Another notable AU professor was Professor Sadig HM (Professor of Physical Chemistry) who taught physical chemistry and thermodynamics at AU for decades (Hamada was one of his students during the second half of the eighties of the last century). It happened that Prof. Sadiq was a doctoral student at Princeton University (PU) during the late 1940's when Albert Einstein was a physical chemistry professor at PU. Prof. Sadig used to tell his students, Hamada among them, that during the chemistry weekly seminar, Einstein used to sit in the front row to listen to the invited speakers. Usually, these seminars are done in dimmed light and the monotone of the speakers force the audience to fall asleep. Einstein used to doze off for many seconds and if he notices the speaker make a single mistake while he/she was lecturing, Einstein would yell STOP, he moves the speaker aside and take over the chalk and blackboard and start correcting the speaker for another hour to hour and half of his own lecture, so we were told by Professor Sadiq.

Another notable professor at AU was Mohamed A. El-Sayed who received his graduate training in Northeastern University, Boston MA under the guidance of Prof. Geoffrey Davies. Dr. El-Sayed taught Hamada Inorganic chemistry and Coordination Chemistry. Another professor was Adel Amer who received his graduate training at the University of Cincinnati, OH, USA. Dr. Amer taught Hamada Organic chemistry, bioorganic, and physical organic chemistry. Dr. Amer used to tell Hamada about the Woodward-Hoffmann rule. Here is Dr. Hamada writing and honoring Dr. Hoffmann for his 80th Birthday.

During the PhD training Dr. Hamada was the student of the best inorganic professors in the world. He was taught to conduct high ethical chemical research from his direct supervisor, Dr. Harris. Hamada also learned how to teach during his research and teaching assistantships that he received from the Department of Chemistry and Biochemistry at the University of Missouri in St. Louis. Both Prof. Barton (World renowned Boron and cage inorganic chemist) and Prof. Corey (world class scientist who specialized in organometallic, silicon, and metallo-silicon derivatives) had the most influence on the development of Prof. Hamada's education. Other notable professors in the environment were Keith Stine and Chris Spelling of the Department of Chemistry and Biochemistry at the University of Missouri in St. Louis. Dr. Keith Stine received his PhD from MIT and Post doc training from UCLA. Dr. Chris Spelling received his PhD from Loughborough University-UK and was a Post Doc associate at Northwestern, Evanston, Illinois-USA. Research and its communication is an ever going activity that will stop only with the death of the scientists.

References

- [1]Bertini HB, Gray EI, Stiefel JS. (2007). Valentine. Biological inorganic chemistry-structure and reactivity, University Science Books, Sausalito, CA.
- [2] Cowan JA. (1997). In Inorganic Biochemistry/An introduction, Wiley-VCH Inc. Hoboken, NJ.
- [3] Lippard SJ, Berg JM. (1994). In Principles of Bioinorganic Chemistry, University Science Books, Mill Valley, CA
- [4] Tietz NW. (1994). Textbook of clinical chemistry, 2nd edn, Carl A. Burtis and Edward R. Ashwood Ed. Saunders, Philadelphia.
- [5] Rehder D. (2014). Bioinorganic Chemistry, Oxford University Press
- [6] Pauling L. (1995). Linus Pauling in his own Words, Edited by Barbara Marinacci published by Simon & Schuster.
- [7] http://www.ejbio.imedpub.com
- [8] http://www.loc.edu
- [9] Doyle MP. (2000). Academic Excellence. The role of



research in the physical sciences at undergraduate institutions. Research Corporation, a foundation for the advancement of science. 2-202.

- [10] Hamada YZ, Brandon C, Andrew P, et al. (2006). Accurate potentiometric studies of chromium-citrate and ferric-citrate complexes in aqueous solutions at physiological and alkaline pH-values. Synthesis and Reactivity of Inorganic and Metal-Organic and Nano-Metal Chemistry. 36: 469-476.
- [11] Hamada YZ, Darboe A. (2016). Zn²⁺ with clofibric acid: A peroxisome proliferator-activated receptor-Alpha (PPAR-) ligand A. *Elec J Bio.* **S2**: 25-30.
- [12] Hamada YZ, Makoni N, Hamada H. (2016). Three very different UV-Vis absorption spectra of three different transition metals found in biological solutions. *Elec J Bio.* **12**: 6-9.
- [13] Hamada YZ, Rehan S, Scott J. (2016). Clofibric acid, a peroxisome proliferator-activated receptor *alpha* agonist, forms a ternary complex with ferric iron. *Elec J Bio.* **S2**: 18-24.
- [14] Harris WR, Hamada YZ. (2006). Stability constants

of aluminum with phosphonic acid derivatives and multinuclear NMR-measurements in aqueous solutions. *Inorg Chim Acta.* **359:** 1135-1146.

- [15] Hamada YZ, Carlson B, Joseph D. (2005). Interaction of malate and lactate with Cr(III) and Fe(III) in aqueous solutions. Synthesis and Reactivity of Inorganic and Metal-Organic and Nano-Metal Chemistry. 35: 515-522.
- [16] Harris WR, Wang Z, Hamada YZ. (2003). Competition between transferrin and the serum ligands citrate and phosphate for the binding of aluminum. *Inorg Chem.* 42: 3262-3273.
- [17] Hamada YZ, Brandon LC, Jeremy TS, et al. (2003). Potentiometric and UV-Vis spectroscopy measurements of citrate with the hexaquo Fe³⁺ and Cr³⁺ metal ions. Synthesis and Reactivity of Inorganic and Metal-Organic Chemistry. **33**: 1425-1440.
- [18] Harris WR, Hamada YZ, Bingsheng Y, et al. (1999). Steric restrictions on the binding of large metal ions to serum transferrin. *J Inorg Biochem.* **76:** 231-242
- [19] Hamada YZ. (2017). Bridges between biology and chemistry. *Elec J Bio.* **S4:** 1-2.

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