

**cfaed Seminar Series**

**DATE:** July 8, 2019  
**TIME:** 2:00 PM – 3:00 PM  
**LOC:** Seminar room HEM 219 (second floor)  
 Walther-Hempel-Bau  
 Mommsenstr. 4, 01069 Dresden



**GUEST SPEAKER:**

**Prof. Shie-Ming Peng**

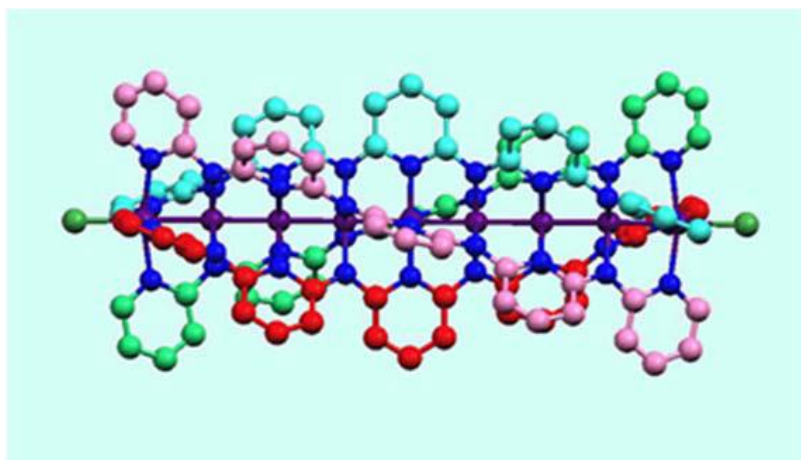
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**TITLE:**

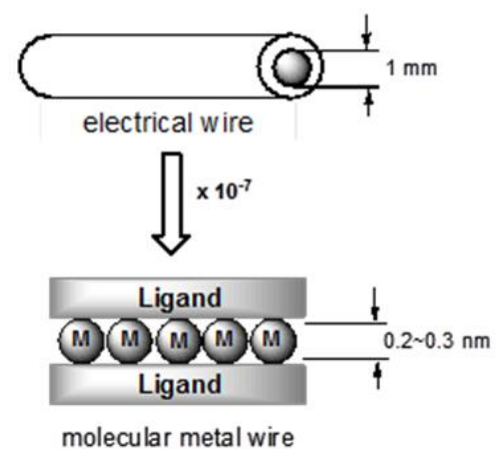
**“Molecular Metal Wires from Homonuclear Metal String Complexes to Heteronuclear Metal String Complexes”**

**ABSTRACT:**

The study of metal string complexes with 1-D transition metal frameworks(Fig.1) began in the early 1990s. Since these complexes provide great insight into multiple metalmetal bonds, and may have potential applications as molecular wires ( Fig.2), this field of research has grown in the past 20 years. As such, the electronic structure of the simplest trinuclear complexes, the supporting ligand systems, and single molecular conductance of metal string complexes are discussed. This review will introduce the development of this field and summarize some important results in the newly designed heteronuclear metal string complexes (HMSCs). These molecules may be of great interest in studying the nature of heterometallic electronic effects and molecular electronic applications.



**Figure 1:** Molecular Model of Metal String Complex with Quadruple Ligands



**Figure 2:** An Electric Wire and a Miniature Molecular Wire

## References

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