



元素有机化学国家重点实验室

State Key Laboratory of Elemento-Organic Chemistry
Nankai University



学 术 报 告

**报告题目：Phenanthro[1,2-b:8,7-b']dithiophene (PDT):
Application to organic field-effect transistors and
photovoltaics**

**报告人：Prof. Yasushi Nishihara
Okayama University, Japan**

报告时间：2018年5月15日 上午10:00

报告地点：元素所石先楼学术报告厅

Prof. Yasushi Nishihara:

Employment

2010.4- present	Professor, Okayama University
2004.3- 2010.3	Associate Professor, Okayama University
1994.9- 2004.3	Assistant Professor, Tokyo Institute of Technology

Education

1997	Ph.D. Organic Chemistry, The Graduate University for Advanced Studies
1992	BS, Inorganic Chemistry, Hiroshima University

Research interests

Organometallic Chemistry (Development of new synthetic reactions by transition metal catalysts and its application to functional material synthesis)

Lecture Abstract & Student recruitment

Abstract: Transition metal-catalyzed cross-coupling and cyclization reactions have been utilized to synthesize picene, a compound consisting of five fused benzene ring with an armchair structure and its derivatives. We further designed to replace two terminal benzene rings with thiophene rings to yield phenanthro[1,2-*b*:8,7-*b'*]dithiophene (PDT). Moreover, we synthesized the low-band gap semiconducting polymers containing a PDT core in the polymer backbone.

Student recruitment of RIIS: PhD students (annual quota: 10), financial support: 120,000 JPY/month x 3 years

The Research Institute for Interdisciplinary Science (RIIS) was established April, 2017, involves 12 research groups from 1 mathematics, 4 physics, 5 chemistry, and 2 biology departments.

