西北大学化材学院本科生
赴澳大利亚墨尔本亚洲化学峰会参会回顾

报告听讲/海报展示/课题展示/交流学习


23-28 July 2017 | Melbourne
AHeDD 2017
Computers in Drug Discovery
26-27 July 2017
Melbourne Australia
GSC8
DELEGATE

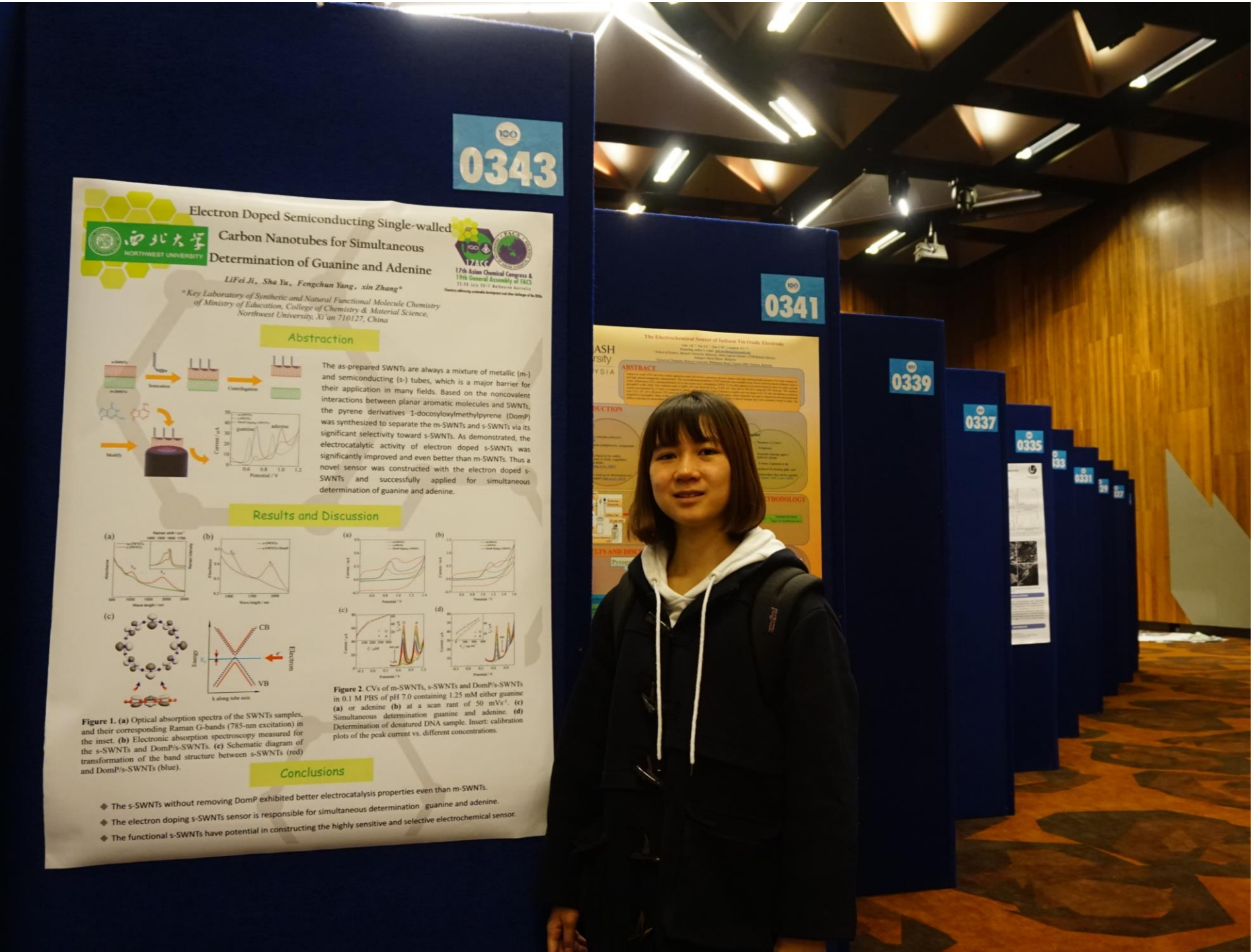
亚洲化学峰会
会议报道

参加开幕式

听取诺贝尔奖获得者大会学术报告


6th Asian Conference on Coordination Chemistry
ACCC6
24-28 July 2017 | Melbourne, Australia
AIMECS2017
Carbon 2017
23-28 July 2017
Melbourne Australia
GSC8
8th International Conference on Green and Sustainable Chemistry
23-26 July 2017 | Melbourne Australia
1917 - 2017
raci
National Centenary Conference
DELEGATE

参观学术海报厅


0343
Electron Doped Semiconducting Single-walled Carbon Nanotubes for Simultaneous Determination of Guanine and Adenine
LiFei Ji, Sha Yu, Fengchun Yang, xin Zhang*
*Key Laboratory of Synthetic and Natural Functional Molecule Chemistry of Ministry of Education, College of Chemistry & Material Science, Northwest University, Xi'an 710127, China
17th Asian Chemical Congress & 19th General Assembly of FACS
Abstraction
The as-prepared SWNTs are always a mixture of metallic (m-) and semiconducting (s-) tubes, which is a major barrier for their application in many fields. Based on the noncovalent interactions between planar aromatic molecules and SWNTs, the pyrene derivatives 1-docosyloxylmethylpyrene (DomP) was synthesized to separate the m-SWNTs and s-SWNTs via its significant selectivity toward s-SWNTs. As demonstrated, the electrocatalytic activity of electron doped s-SWNTs was significantly improved and even better than m-SWNTs. Thus a novel sensor was constructed with the electron doped s-SWNTs and successfully applied for simultaneous determination of guanine and adenine.
Results and Discussion
Figure 1. (a) Optical absorption spectra of the SWNTs samples, and their corresponding Raman G-bands (785-nm excitation) in the inset. (b) Electronic absorption spectroscopy measured for the s-SWNTs and DomP/s-SWNTs. (c) Schematic diagram of transformation of the band structure between s-SWNTs (red) and DomP/s-SWNTs (blue).
Figure 2. CVs of m-SWNTs, s-SWNTs and DomP/s-SWNTs in 0.1 M PBS of pH 7.0 containing 1.25 mM either guanine (a) or adenine (b) at a scan rant of 50 mVs-1. (c) Simultaneous determination guanine and adenine. (d) Determination of denatured DNA sample. Insert: calibration plots of the peak current vs. different concentrations.
Conclusions
The s-SWNTs without removing DomP exhibited better electrocatalysis properties even than m-SWNTs.
The electron doping s-SWNTs sensor is responsible for simultaneous determination guanine and adenine.
The functional s-SWNTs have potential in constructing the highly sensitive and selective electrochemical sensor.
0341
0339
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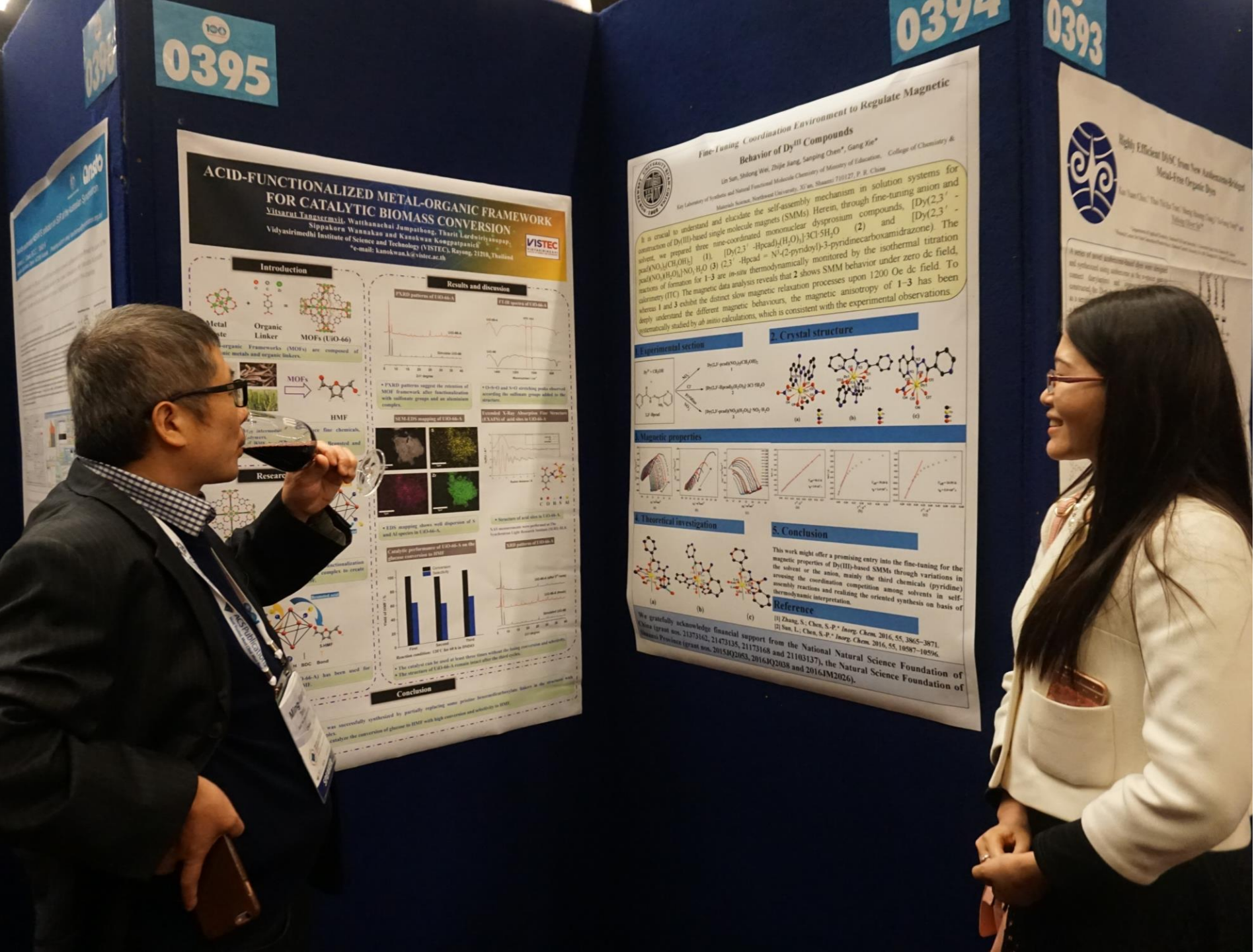
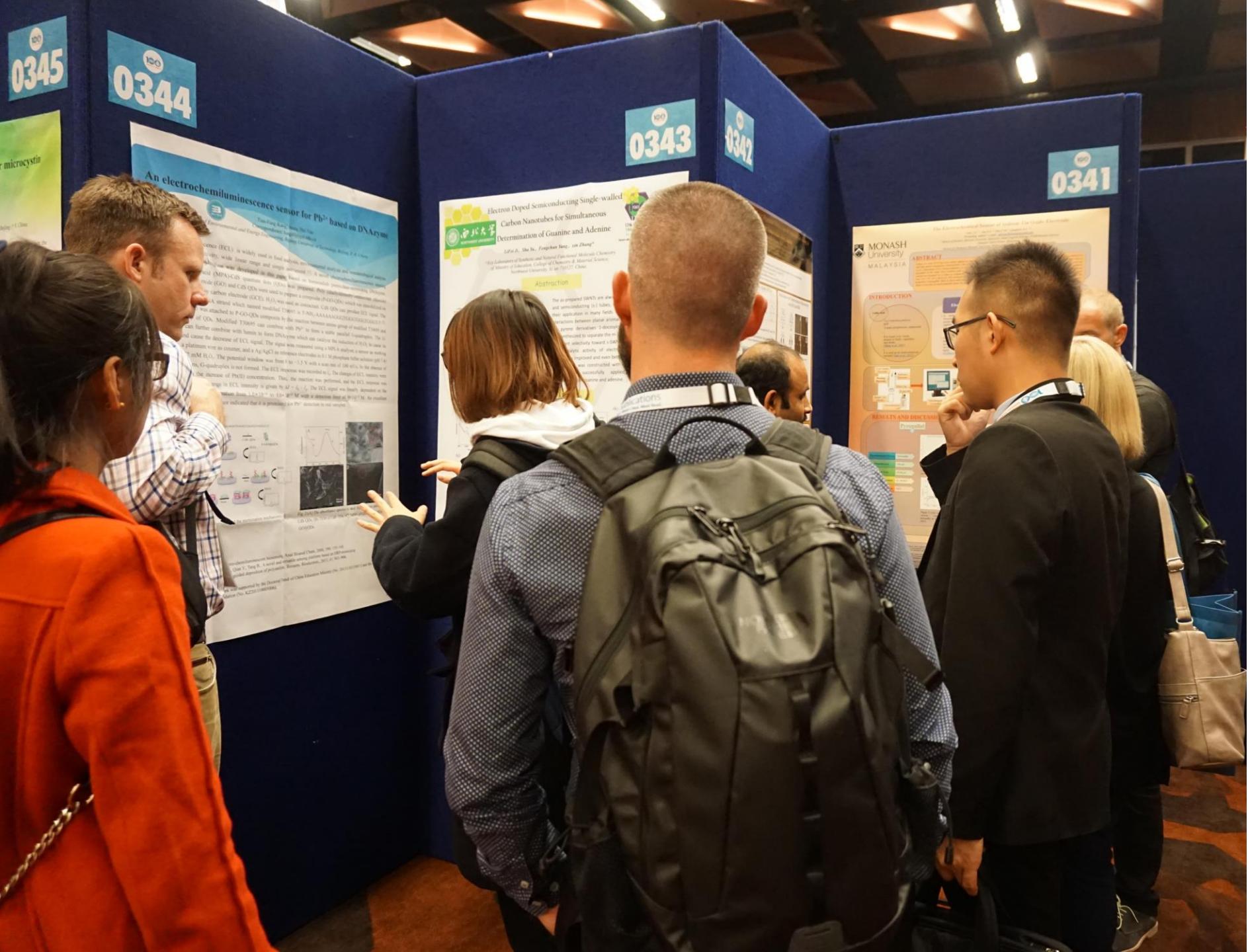
准备学术海报展示

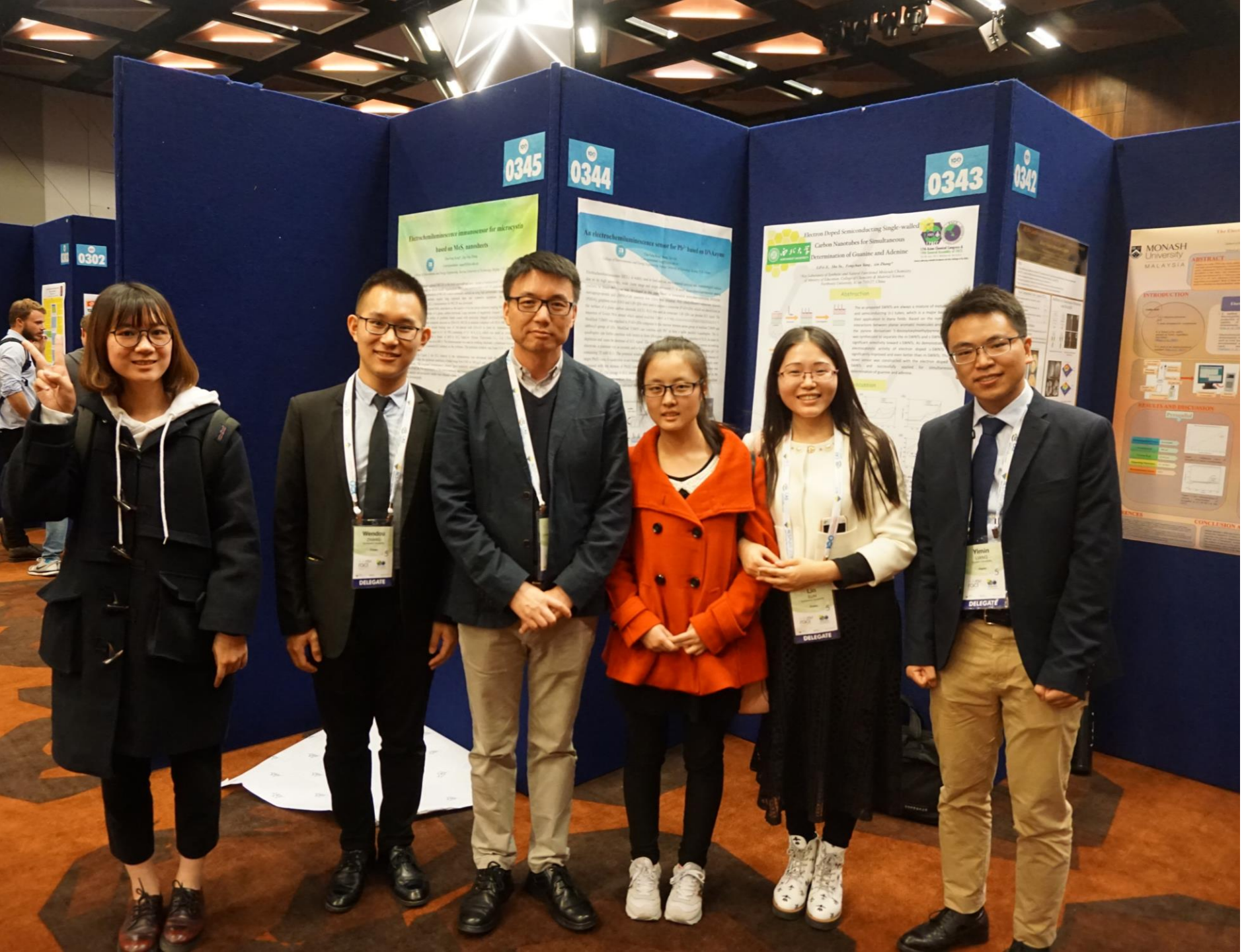

0395
ACID-FUNCTIONALIZED METAL-ORGANIC FRAMEWORK FOR CATALYTIC BIOMASS CONVERSION
Introduction
Results and discussion
Conclusion
0394
Fine-Tuning Coordination Environment to Regulate Magnetic Behavior of Dy^III Compounds
2. Crystal structure
3. Magnetic properties
4. Theoretical investigation
5. Conclusion
Reference
0393

与教授分享学术成果

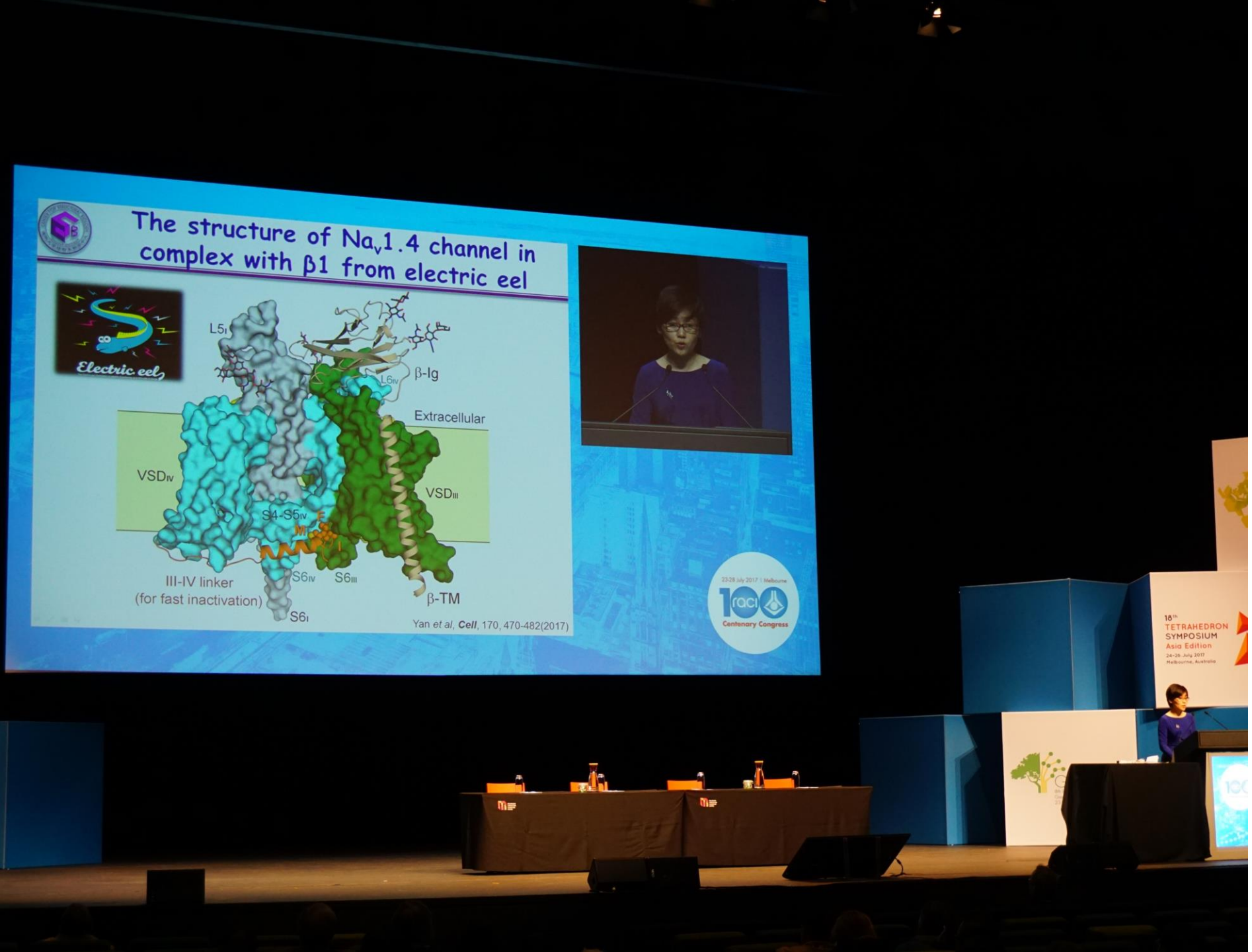

0345
0344
0343
0342
0341
An electrochemiluminescence sensor for Pb2+ based on DNAzyme
Electron Doped Semiconducting Single-walled Carbon Nanotubes for Simultaneous Determination of Guanine and Adenine
MONASH University
MALAYSIA

与国内外学者
交流学习

阐述个人研究成果的创新与进步



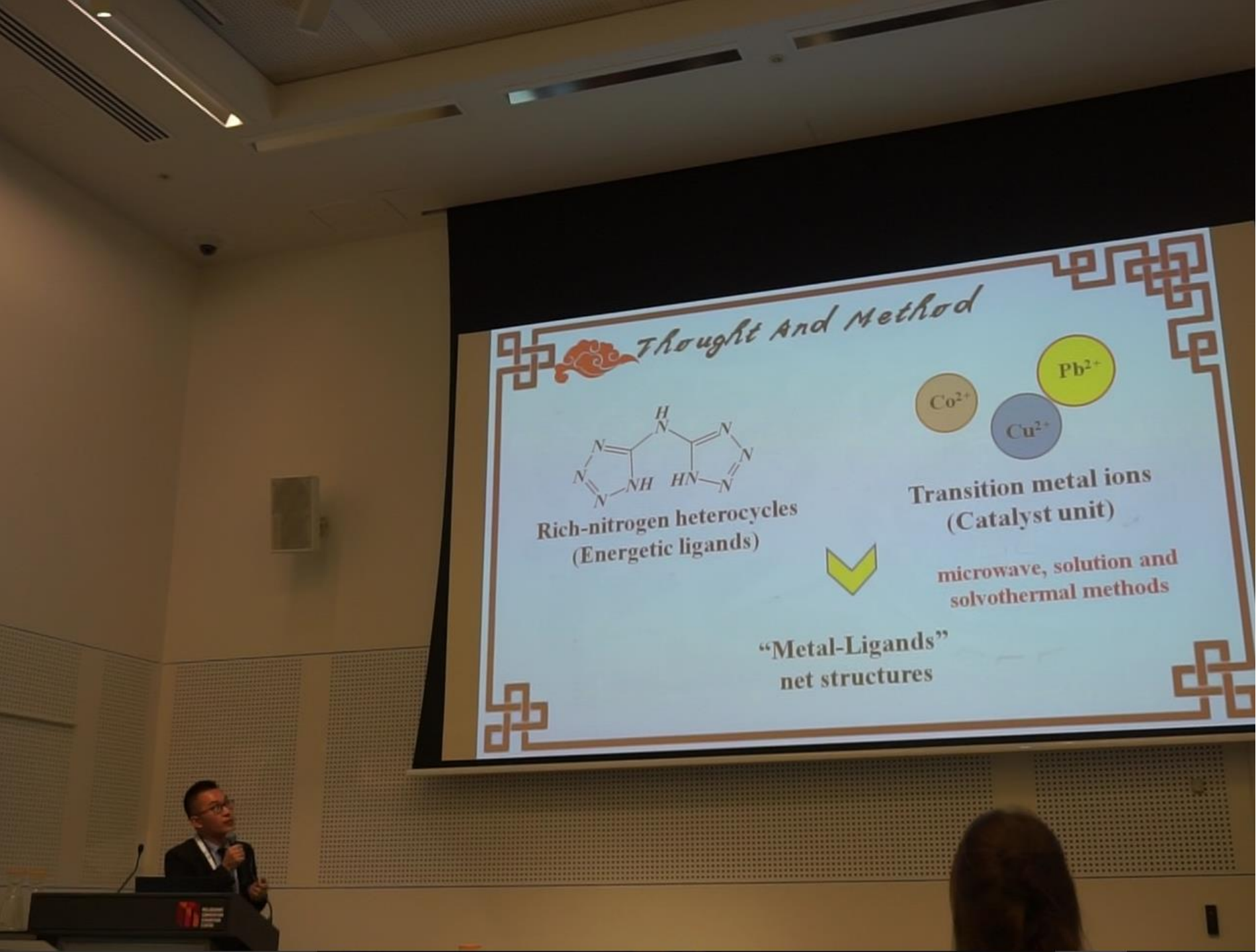
与新南威尔士大学赵川副教授（西北大学校友）合影留念



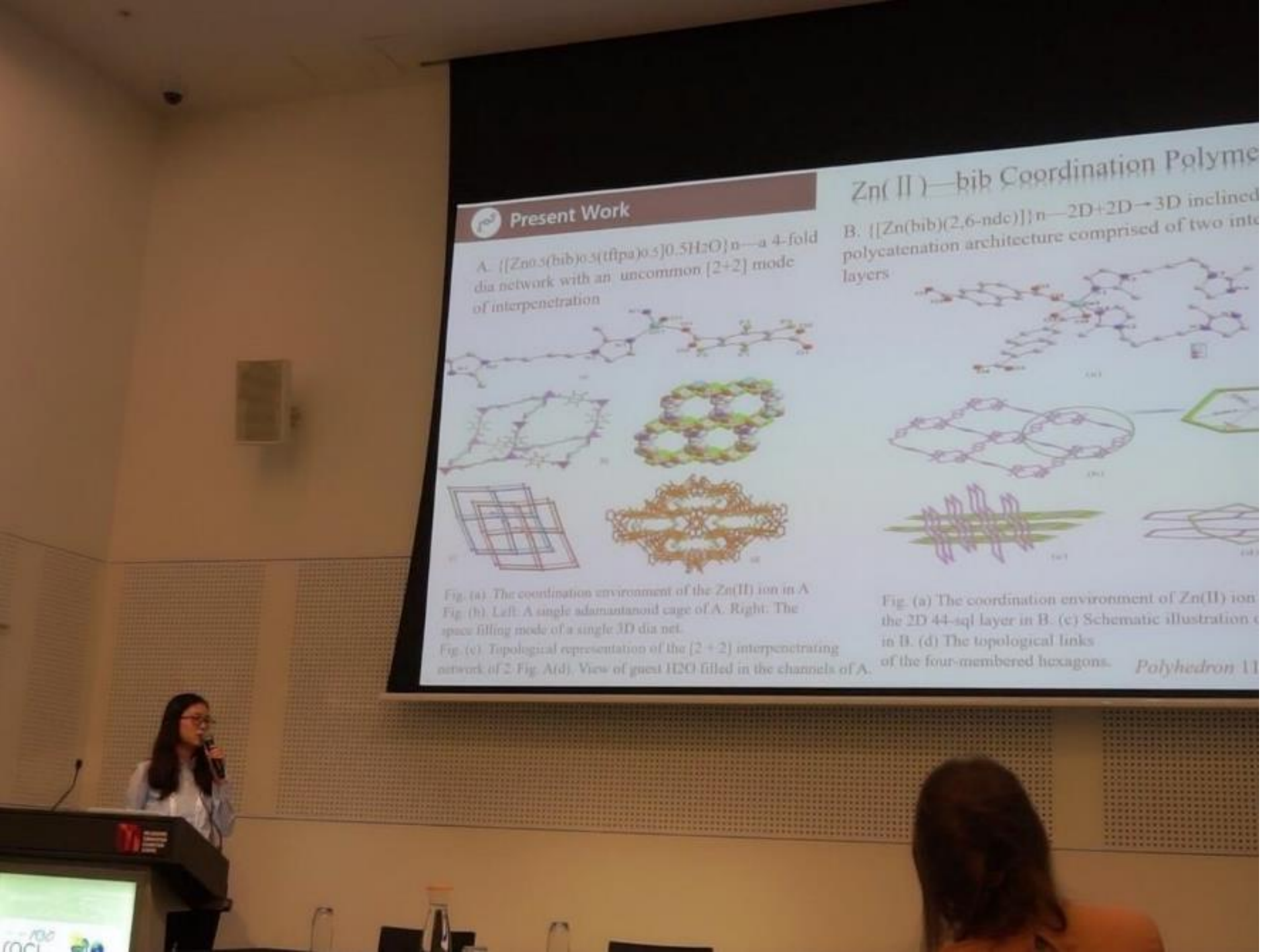
听取清华大学颜宁教授的学术会议报告


Carbon Materials for
Energy Applications
16th
TETRAHEDRON
SYMPOSIUM
raci
National Centenary
Conference
DELEGATE
DELEGATE
R.M.WILLIAMS

与颜宁教授合影留念


Thought And Method
Rich-nitrogen heterocycles
(Energetic ligands)
Co2+
Pb2+
Cu2+
Transition metal ions
(Catalyst unit)
microwave, solution and
solvothermal methods
"Metal-Ligands"
net structures

进行学术报告


Present Work
A. {[Zn0.5(bib)0.5(tftpa)0.5]0.5H2O}n—a 4-fold dia network with an uncommon {2+2} mode of interpenetration
Fig. (a). The coordination environment of the Zn(II) ion in A
Fig. (b). Left: A single adamantanoid cage of A. Right: The space filling mode of a single 3D dia net.
Fig. (c). Topological representation of the {2 + 2} interpenetrating network of 2. Fig. A(d). View of guest H2O filled in the channels of A.
Zn(II)—bib Coordination Polyme
B. {[Zn(bib)(2,6-ndc)]}n—2D+2D→3D inclined
polycatenation architecture comprised of two inte
layers
Fig. (a) The coordination environment of Zn(II) ion
the 2D 44-sql layer in B. (c) Schematic illustration
in B. (d) The topological links
of the four-membered hexagons.
Polyhedron

认真解答提问者的疑问


Welcome
THE UNIVERSITY OF MELBOURNE
Wominjeka
We acknowledge and pay respect to the Wurundjeri people, the Traditional Owners of this land.
Bienvenidos
UNIVERSITY OF
LBOURNE

参观墨尔本大学

参观墨尔本动物园

参观大洋路十二门徒

参观圣保罗大教堂

谢谢指导。