



**Asia-Pacific
Economic Cooperation**

**APEC Regional Workshop on
Measurement Challenges in Renewable Energy
and Climate Science**

亚太经合组织 (APEC) 可再生能源和气候科学计量研讨会

October 29, 2015 Beijing

2015年10月29日 北京

Changping Campus, National Institute of Metrology, China

中国计量科学研究院 昌平院区

The project, co-proposed by the People's Republic of China and the United States,
is implemented under the umbrella of the APEC Policy Partnership in Science,
Technology & Innovation (PPSTI)

本项目由中美两国联合发起，在亚太经合组织 (APEC) 科技创新政策伙伴关系机制 (PPSTI) 的框架下执行。



Agenda

Chair (morning session)

Ms. Magdalena Navarro

Senior International Program Manager

National Institute of Standards and Technology (NIST), US

Venue: Auditorium, F2, #4 Forum Building

09:00 - 09:10 **Welcome Address**

Mr. FANG Xiang

Director, National Institute of Metrology (NIM), China

Opening Remarks

Mr. XIE Jun

Director General, Department of Metrology, General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ)

Opening Remarks

Ms. Li Liyan

Division Chief, Department of Climate Change
National Development and Reform Commission (NDRC)

Plenary Session I: Renewable Energy

09:10 - 09:20 [CCPR Plans and Initiatives on Energy Metrology](#)

Dr. Takashi Usuda

Assistant Director General, National Metrology Institute of Japan (NMIJ) / CCPR President

09:20 - 09:30 [APMP Plans and Initiatives on Energy Efficiency](#)

Mr. Prayoon Shiowattana

Director, National Institute of Metrology, Thailand (NIMT)
/ Chair, APMP Focus Group on Metrology on Energy Efficiency

09:30 - 09:45 [New Developments in the Field of Primary Calibrations of Reference Solar Cells with the Laser-DSR Method](#)

Dr. Stefan Winter

Head of WG4.14 "Solar Cells", Physikalisch-Technische Bundesanstalt (PTB), Germany

09:45 - 10:00 [Impact of LED lighting on Worldwide Energy Saving and Role of Optical Metrology](#)

Dr. Yoshi Ohno

Fellow, National Institute of Standards and Technology (NIST), US /
Chairman of the Commission Internationale de L'Eclairage (CIE)

10:00 - 10:15 [Wind Energy – New Dimensions in Metrology](#)
Dipl.-Ing. Thomas Wiedenhoefer
Physikalisch-Technische Bundesanstalt (PTB), Germany

10:15 - 10:35 **Discussion of Session I**

10:35 - 11:00 **Group Photo & Coffee Break**
Coffee Break Venue: Cafeteria

Plenary Session II: Climate Science

11:00 - 11:10 [CCT Strategies and Initiatives on Climate Change Metrology](#)
Dr. Yuning DUAN
Vice Director, National Institute of Metrology (NIM), China
/ CCT President

11:10 - 11:20 [APMP Plans and Initiatives on Climate Change Metrology](#)
Dr. JinSeog KIM
Fellow, Korea Research Institute of Standards and Science (KRISS) /
Chair, APMP Focus Group on Climate Change

11:20 - 11:35 [The Greenhouse Gas and Climate Science Measurements Program at NIST](#)
Dr. James R. Whetstone
Special Assistant to the Director for Greenhouse Gas Measurements,
National Institute of Standards and Technology (NIST), US

11:35 - 11:50 [New Developments in Greenhouse Gas Measurements and Earth Observation for Climate](#)
Dr. Jane Burston
Head of Climate and Environment, National Physical Laboratory
(NPL), UK

11:50 - 12:05 [Progress and Prospects of China's Low Carbon Metrology](#)
Ms. WANG Chi
Director of Thermometry Division, National Institute of Metrology
(NIM), China

12:05 - 12:25 **Discussion of Session II**

12:30 **Lunch**
Venue: 2nd Floor, Canteen

Chair (afternoon session)

Ms. Wei Gao

Director, Dept. of R&D Management & International Cooperation

National Institute of Metrology (NIM), China

Venue: Auditorium, F2, #4 Forum Building

13:30 - 15:30 **Panel Discussion Session**

[Group 1: Renewable Energy](#)

Panelists: [Dr. Ilya Budovsky](#), Dr. Takashi Usuda, Dr. Wang Li,
Mr. Prayoon Shiowattana, Dr. Stefan Winter, Dr. Yoshi Ohno

Moderator: Ms. Angela Samuel

Director, International Relations, National Measurement Institute,
Australia (NMIA)

Venue: Auditorium, F2, #4 Forum Building

[Group 2: Climate Science](#) | [Questions](#)

Panelists: Dr. Jintao Zhang, Dr. Yoshiro Yamada, Dr. JinSeog KIM,
Dr. Chun-Min Su, Dr. Jane Burston, Dr. James Whetstone

Moderator: Ms. Magdalena Navarro

Senior International Program Manager, NIST

Venue: 1026, F1, #1 Admin. Building

15:30 - 16:15 **Coffee Break**

Venue: Cafeteria

16:15 - 17:15 **Wrap-up Session**

Venue: Auditorium, F2, #4 Forum Building

17:15 **Adjourn**

17:30 - 19:30 **Dinner**

Venue: 2nd Floor, Canteen

19:30 - 20:30 **Back to Hotels**

日程

上午主持人：美国国家标准与技术研究院 国际合作部高级项目经理 马莲娜

地点：4 号楼二层学术交流厅

- 08:00 - 08:50 计量院和平里院区西门 (北三环和平西桥南 300 米路东 , 地铁 5 号线和平西桥站 C 口往南 200 米) 乘车至昌平院区
- 09:00 - 09:10 **欢迎辞** 中国计量科学研究院院长 方向
- 致辞** 国家质量监督检验检疫总局 计量司司长 谢军
- 致辞** 国家发展与改革委员会 应对气候变化司 处长 李丽艳

全体会议 (能源计量部分) :

- 09:10 - 09:20 **CCPR 能源计量发展战略及主要活动**
日本计量院副院长、国际光度与辐射度咨询委员会 (CCPR)
主席 白田·孝 博士
- 09:20 - 09:30 **APMP 能效计量工作计划及主要活动**
泰国计量院院长、APMP 能效工作组主席 裴勇·史瓦塔纳 先生
- 09:30 - 09:45 **标准太阳能电池与 DSR 激光法校准技术的新进展**
德国物理技术研究院 史蒂芬·温特 博士
- 09:45 - 10:00 **LED 照明对全球节能和光学计量的影响**
美国国家标准与技术研究院研究员、国际照明委员会主席
Yoshi Ohno 博士
- 10:00 - 10:15 **风能——计量新领域**

德国物理技术研究院 托马斯·文登霍芬 先生

10:15 - 10:35

能源议题讨论

10:35 - 11:00

合影 (合影地点：会议楼门口)、茶歇 (茶歇地点：餐厅)

全体会议 (气候科学计量部分) :

11:00 - 11:10

CCT 气候科学计量发展战略及主要活动

中国计量科学研究院副院长、国际温度咨询委员会主席

段宇宁 博士

11:10 - 11:20

APMP 气候变化计量工作计划及主要活动

韩国标准与科学研究院研究员、APMP 气候变化工作组组长

金辰锡 博士

11:20 - 11:35

NIST 温室气体和气候科学计量项目概况

NIST 院长特别助理、NIST 温室气体和气候科学计量项目负责

人詹姆斯·卫斯通 博士

11:35 - 11:50

温室气体计量和气候有关地球观测工作的新进展

英国国家物理研究院 碳测量中心主任 简·波士顿 博士

11:50 - 12:05

中国低碳计量的发展与展望

中国计量科学研究院 热工所所长 王池

12:05 - 12:25

气候科学议题讨论

12:30 - 13:30

午餐 (地点：食堂二层)

下午主持人：中国计量科学研究院 科技管理部（国际合作部）主任 高蔚

地点：4 号楼二层学术交流厅

13:30 - 15:30 **分组讨论**

组一：可再生能源计量组

主持人：澳大利亚国家计量院国际合作部主任 安吉拉·塞缪

专家: Dr. Ilya Budovsky, Dr.Takashi Usuda, Dr. Wang Li,

Mr. Prayoon Shiowattana, Dr. Stefan Winter, Dr. Yoshi Ohno

地点：4 号楼二层学术交流厅

组二：气候变化计量组

主持人：马莲娜

专家: Dr. Jintao Zhang, Dr. Yoshiro Yamada, Dr. JinSeog KIM, Dr.

Chun-Min Su, Dr. Jane Burston, Dr. James Whetstone

地点：1 号办公楼一层 1026

15:30 - 16:15 **茶歇** (茶歇地点：餐厅)

16:15 - 17:15 **全体会议**

地点：4 号楼二层学术交流厅

17:15 **会议结束**

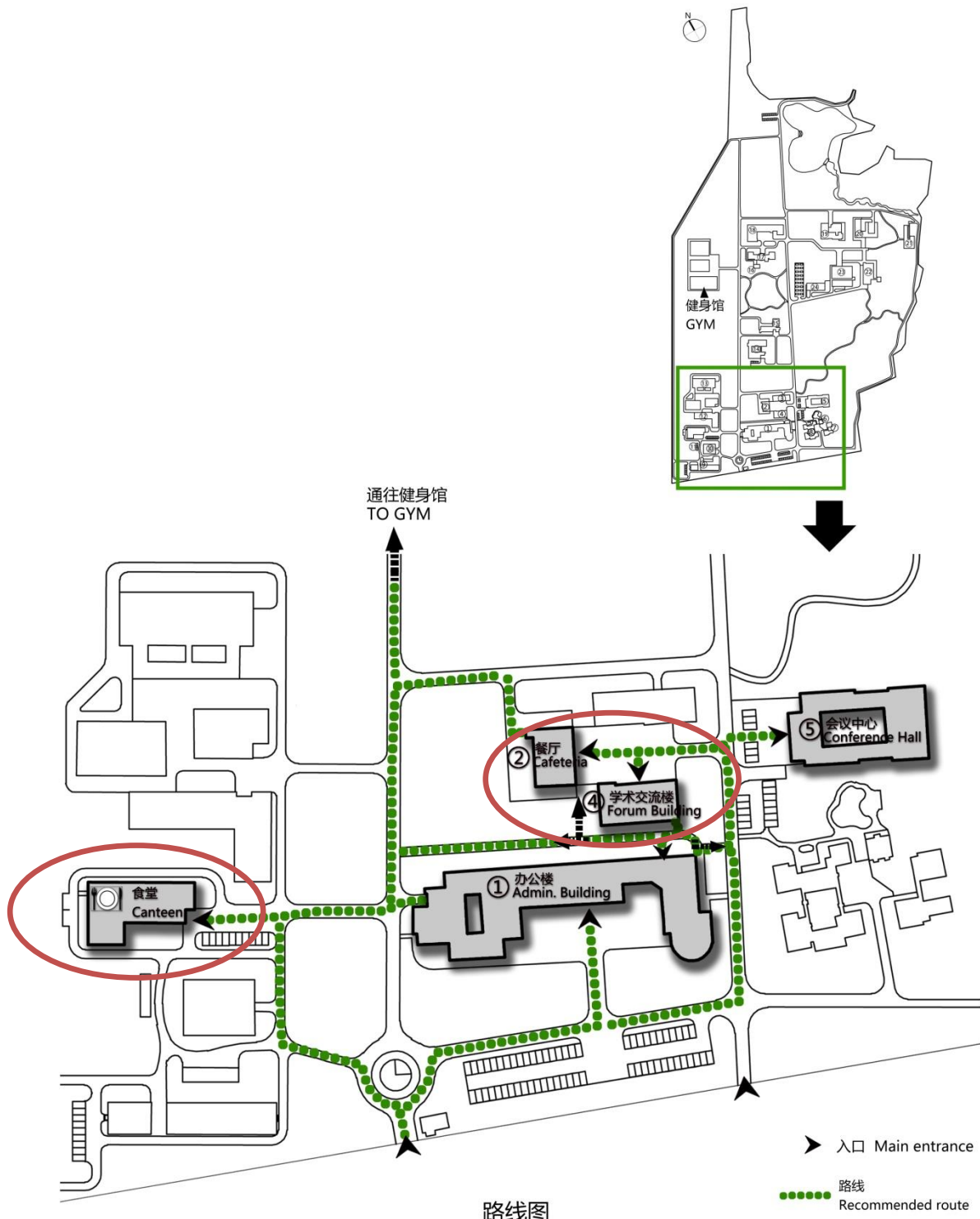
17:30 - 19:30 **晚餐** (地点：食堂二层)

19:30 - 20:30 **返回酒店/和平西桥**

Panellists

| | Name | Title/Position | Organization Economy | Email | Topic of Interest |
|---|----------------------------|--|-----------------------------|----------------------------------|--|
| Group 1: Renewable Energy 可再生能源计量组 | | | | | |
| 1 | Dr. Ilya Budovsky | Section Manager, Electricity | NMIA Australia | Ilya.budovsky@measurement.gov.au | Transmission of Energy from renewable sources / Renewable energy |
| 2 | Dr. Takashi Usuda | Assistant Director General of NMIJ / CCPR President | NMIJ Japan | Takashi.usuda@aist.go.jp | CCPR, Renewable Energy |
| 3 | Dr. Wang Li | Principal Metrology | NMC.A- STAR Singapore | Wang_li@nmc.a-star.edu.sg | Measurement and Verification for Building Energy Efficiency |
| 4 | Mr. Prayoon Shiowattana | Director/ Chair, APMP Focus Group on Metrology on Energy Efficiency | NIMT Thailand | prayoon@nimt.or.th | Energy Efficiency |
| 5 | Dr. Stefan Winter | Head of WG "Solar Cells" | PTB Germany | stefan.winter@ptb.de | Solar Energy |
| 6 | Dr. Yoshi Ohno | Fellow | NIST US | ohno@nist.gov | Photometry & LED |

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|---|-----------------------|---|-----------------------|----------------------------------|-----------------------------------|
| ** | Dr. Angela Samuel | Director, International Relations | NMIA Australia | angela.samuel@measurement.gov.au | Moderator |
| Group 2: Climate Science 气候科学计量组 | | | | | |
| 1 | Dr. Jintao Zhang | Laboratory Chief | NIM China | zhangjint@nim.ac.cn | GHG Measurements |
| 2 | Dr. Yoshiro Yamada | Expert for Radiation Thermometry | NMIJ Japan | y.yamada@aist.go.jp | GHG Measurements /Carbon Emission |
| 3 | Dr. Jin Seog Kim | Research Fellow | KRISS Korea | jkim@kriss.re.kr | GHG Measurements |
| 4 | Dr. Chun-Min Su | Project Manager | CMS Chinese Taipei | CMSu@itri.org.tw | Airborne Particulate Measurements |
| 5 | Dr. Jane Burston | <i>Head of Climate and Environment</i> | NPL UK | jane.burston@npl.co.uk | Carbon Measurement |
| 6 | Dr. James Whetstone | <i>Special Assistant to the Director for GHG Measurements</i> | NIST US | james.whetstone@nist.gov | GHG Measurements |
| ** | Ms. Magdalena Navarro | Senior International Program Manager | NIST US | mnavarro@nist.gov | Moderator |



路线图
Route Map

Map of Changping Campus
昌平院区示意图