

23. INTERNATIONAL PASSIVE
HOUSE CONFERENCE 2019
国际被动房大会2019



Photo © Windoor City

被动房-
遍及全球

Passive House
– worldwide!

PROGRAMME 大会议程

9 – 11 October 2019

Gaobeidian, China

2019年10月9日至11日

高碑店, 中国

Workshops & Excursions | 专题研讨课程 & 项目导览

8 – 13 October 2019 | 2019年10月8-13日

9:30 - 10:00am **Welcome ceremony | 开幕式**

10:00 - 12:00am **Plenary | 主题演讲**



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Ernst Ulrich von Weizsäcker
Environmental Scientist,
Honorary President
of the Club of Rome,
Co-Chair International
Resource Panel

„Come on!“

Professor Ernst Ulrich von Weizsäcker is one of the pioneers of sustainable business practices. Von Weizsäcker has been a member of the Club of Rome, an interdisciplinary alliance of scientists for the greater good of humanity, since 1992. To ensure that humanity's future can be sustained, this organisation studies the megatrends in humanity's history. Between 2012 and 2018 von Weizsäcker served as vice president and, since then, he is the organization's honorary president



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Hou Li'an
Environmental Engineering
Specialist Academician, Chinese
Academy of Engineering

„Indoor air quality control
for a healthy China“

Hou Li'an, born in Xuzhou, Jiangsu Province, is an Environmental Engineering Specialist. In 2009, he was rated as Academician of Chinese Academy of Engineering. Hou Li'an has long dedicated himself to scientific research, engineering design and technical management work in the field of environmental construction.



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Diana Üрге-Vorsatz
Environmental Scientist and
Engineer. Professor,
Department of Environmental
Sciences and Policy, Central
European University

„IPCC report 2018/2019 –
A summary“

Diana Üрге-Vorsatz graduated from Eötvös Lóránd University of Sciences in Physics in 1992. She received her doctorate in Environmental Science and Engineering from the University of California, Los Angeles and Berkeley in 1996. She has been a professor at the Central European University and director of the Center for Climate Change and Sustainable Energy Policy since 2007. She was a main contributor to the IPCC Special Report - Global Warming of 1.5° C(2018) and serves on the Governing and Advisory boards of several organisations.



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Wolfgang Feist
Founder of the Passive House
Institute and
Professor at the University of
Innsbruck

„Passive House – building
healthy, comfortable and
sustainable constructions
globally“

Wolfgang Feist, a physicist by training has dedicated his career to the development of solutions for energy efficient buildings and increasing industry capacity worldwide through the Passive House Standard. Having researched at Tübingen, Kassel and Lund University since 1973, Feist was responsible for the planning and construction of the first Passive House building in 1991.

9:30 - 10:00am **Welcome ceremony | 开幕式**

10:00 - 12:00am **Plenary | 主题演讲**



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Ernst Ulrich von Weizsäcker
魏伯乐

环境科学家和罗马俱乐部荣誉主席
联合国环境规划署可持续资源利用
委员会联合主席

“一起行动!”

魏伯乐教授是可持续商业实践的先驱者之一。1992年，魏伯乐成为罗马俱乐部成员，该俱乐部是为人类谋取更大利益的科学家联盟。为了确保人类未来的可持续发展，该组织研究了人类历史的大趋势。在2012年至2018年期间，魏伯乐担任该组织的副主席，目前为荣誉主席。



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Hou Li'an
侯立安

环境工程专家
中国工程院院士

“健康中国的室内空气质量控制”

侯立安出生江苏省徐州市，环境工程专家，2009年被评为中国工程院院士。侯立安长期致力于环境工程领域的科学研究、工程设计和技术管理工作!



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Diana Üрге-Vorsatz
戴安娜·悦格弗萨茨

环境科学家和工程师，
中欧大学 - 环境科学和政策部门教授

“2018-2019政府间气候变化专门
委员会评估报导-总结”

戴安娜·悦格弗萨茨，1992年毕业于罗兰大学。物理学系。在加州大学洛杉矶和伯克利分校，获得环境科学和工程博士学位。自2007年起担任中欧大学教授，和气候变化与可持续能源政策中心主任。于联合国政府间气候变化专门委员会(IPCC)专题文章-全球暖化 1.5°C(2018)的主要执笔人之一，并担任数个国家、研究机构的评审委员。



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Wolfgang Feist
沃尔夫冈·费斯特

被动房创始者
因斯布鲁克大学教授

“被动房——在全球建造健康、
舒适、可持续的建筑”

沃尔夫冈·费斯特是一位物理学家，他致力在全球推广满足被动房标准的节能建筑。自1973年以来，费斯特教授先后在图宾根，卡塞尔和隆德大学进行研究工作。1991年，费斯特教授负责规划及建造了第一座被动房!

All the sessions will be held in Hall D2

1:30 pm	Zhang Zhaorui Share of case of first Premium Passive House in China
1:55 pm	Dawid Michulec Passive House experience from South China, Hangzhou/Jiaxing
2:20 pm	Tian Shuhui R&D Centre Hebei Academy of Building Research
2:45 pm	Yingying Li Research on key technologies for passive ultra-low energy consumption in China's Central Plains region
3:10 pm	Deng Binta From 0 to 1

中国国际门窗城D2馆

张昭瑞 中国首个Premium等级被动房案例分享
大卫·米舒列克 杭州/嘉兴，华南地区被动房经验
田树辉 河北省建筑科技研发中心科研楼
李莹莹 中原地区被动式超低能耗关键技术研究
邓滨涛 从0到1

Session 2: Airtightness and Quality Assurance, Room 4

专题论坛 02_气密性和质量保证，会议室 4

1:30 pm	Jürgen Schnieders Guidelines for airtightness measurements in high-rise buildings
1:55 pm	Qian Cai The selection of materials and measures for the airtightness of Passive Houses with different construction types
2:20 pm	Michael Meyer-Olbersleben Measuring the airtightness in high-rise buildings
2:45 pm	Bai Yu Construction control and energy consumption functioning in renovation project of Passive ultra-low energy green buildings
3:10 pm	Mengyue Peng Practice and thoughts on whole-process quality control of ultra-low energy passive buildings in China

尤尔根·施尼德斯 高层建筑的气密性导则
蔡倩 气密性材料的选用及不同结构被动房的气密性措施
迈克·迈耶-奥伯斯莱本 高层建筑的气密性测试
白羽 被动式超低能耗绿色建筑改造项目的施工控制与能耗运行
彭梦月 中国被动式超低能耗建筑全过程质量控制的实践与思考

Session 3: Ventilation concepts, Room 5

专题论坛 03_通风系统规划，会议室 5

1:30 pm	Andrea Bombasaro Innovative strategy for tall buildings retrofit: the case of Torri M. Bianca, Trento Italy
1:55 pm	Wolfgang Feist, Fabian Ochs Ventilation, heating and domestic hot water preparation with decentral compact heat pumps
2:20 pm	Xing Wei Research on air distribution of all-in-one HVAC systems based on Airpak simulation
2:45 pm	Fanxuan Xia Influence of heat recovery mode on humidity and cleanliness management in exhaust ventilation of passive house
3:10 pm	Berthold Kaufmann, Huijun Jiang Ventilation+AC design layout for apartments in (Chinese) cooling climates

安德里亚·博马萨罗 高层既改建筑的创新策略 - 意大利·特兰托 Torri M. Bianca案例
沃尔夫冈·费斯特, 费比安·奥克斯 在(中国)寒冷气候条件下公寓的通风+空调设计布局
魏兴 基于Airpak环境一体机暖通系统气流组织模拟研究
夏凡轩 热回收模式对被动式住宅排风系统湿度和洁净度控制的影响
贝特霍尔德·考夫曼, 江慧君 在(中国)寒冷气候条件下公寓的通风+空调设计布局

3:30 - 4:00pm Coffee Break | 茶歇

Programme, subject to change! 议程将依现场情况变动!

All the sessions will be held in Hall D2

1:30 pm	Martin Aichholzer Use of sustainable building materials on the example of the "House of Learning"
1:55 pm	Ann-Marie Fallon 'High-rise' Passive House development in the UK: Carbon impact study
2:20 pm	Jason Quinn PHPP and LCAQuick – an integrated energy / Life Cycle Assessment toolset
2:45 pm	Jessica Grove-Smith Climate-specific renewable primary energy factors across China
3:10 pm	Burkhard Schulze Darup Sustainable supply systems in multi-storey residential buildings

中国国际门窗城D2馆

马丁·艾克霍泽 以“学习之家”为例，使用生态建筑材料
安-玛丽·法伦 英国“高层”被动房发展：碳影响研究
詹森·奎因 PHPP和LCAQuick—综合能耗及全生命周期的分析工具
杰西卡·格罗夫-史密斯 气候因素决定的可再生一次能源系数在中国的应用
伯克哈特·舒兹·德瑞普 多层住宅中的可持续性能源系统

Session 5: WORKSHOP: designPH 2, Room 8

1:30 pm	Camille Sifferlen designPH 2.0 explained – What the new shading algorithms can do for you!
2:20 pm	Dragos Arnautu designPH 2.0 explained – how to apply the new shading
3:10 pm	Edwin May Using SketchUp as an information modeler for enhancing accuracy and simplifying certification

专题论坛 5 : designPH 2 专题研讨, 会议室 8

卡米·西非玲 全新 designPH2.0 —— 新的遮阳算法可以为你做什么!
德拉戈斯·阿诺图 全新 designPH2.0 —— 如何应用新遮阳算法!
爱德文·玛雅 使用SketchUp创建的信息模型改进准确性并简化认证

Austria-Workshop –   
Austrian pioneers of Passive House and Passive House Plus, Room 7

奥地利专题论坛：
奥地利被动房及优级被动房的探索者, 会议室 7 

1:30 pm	Welcome: Günter Lang, LANG consulting Friedrich Stift, Ambassador, Embassy of Austria in Beijing, China Baoding Government Representative
1:45 pm	Georg Reinberg Austria, Passive House and Reinberg's Architecture: an evolution 1982-2020
2:00 pm	Wolfgang Streicher New and refurbished low Cost Passive Houses in Tyrol/Austria – Technology and Results of Measurements
2:15 pm	Helmut Krapmeier Austrian State Award for Architecture and Sustainability
2:30 pm	Laszlo Lepp Awarded Chinese office buildings – Certified supermarkets and other non-residentials from Austria
2:45 pm	Martin Huber Lower Austrian State Buildings as Pioneers of the Passive House Standard
3:00 pm	Ernst Schriefl World's first plus-energy office high-rise building (Vienna, Austria)
3:15 pm	Dawid Michulec Lessons learned after 5 years of pioneering work in ASIA
3:30 pm	Martin Aichholzer It's always a question of resources
3:45 pm	Thomas Lebinger, Marcello Turrini Green Building Solutions for students – Summer School Design workshop

欢迎致辞: 君特·朗, Lang 管理咨询顾问公司 史迪福, 奥地利驻华大使馆大使 保定政府领导
乔治·莱茵贝格 奥地利, 被动房和莱茵伯格建筑: 1982-2020的演变
沃尔夫冈·施特莱尔 因斯布鲁克/奥地利社会福利房及改造项目中的被动房
海姆特·科哈麦尔 奥地利建筑与可持续发展奖
拉兹洛·莱普 奥地利获奖的中国办公楼, 被动房超市及其他奥地利公共建筑项目
马丁·胡贝尔 下奥地利州建筑成为被动房标准的先驱
恩斯特·斯瑞佛 世界首个最低能耗高层建筑 (奥地利, 维也纳)
大卫·米舒列克 在亚洲进行5年开拓性工作所获得的经验分享
马丁·爱克霍泽 资源仍然是问题
托马斯·莱宾格, 马尔切洛·图希尼 学生绿色建筑指南-暑期设计研讨班

4:00 pm	Oscar Flechas The Valleyview Town Hall: Energy efficiency in the Canadian subarctic
4:25 pm	Thomas Lebinger Passive Houses for active students – providing knowledge about eco-efficient buildings
4:50 pm	Maria Chiara Failla The impact of thermal bridges in reinforced-concrete multi-family house and high-rise projects
5:15 pm	Georg Reinberg Realizing the ecological civilisation
5:40 pm	Søren Dietz: Passive House School in the northern part of Denmark: 7 years' consumption below PHPP calculated values Graeme Verhulst: Passive House goes to work: A commercial office case study Dan Whitmore: Verified successful airtightness approaches in the US and the PNW Johannes Kreißig: Similarities of the Passive House and the DGNB-sustainability certification concepts

POSTER

奥斯卡·弗勒查斯 古景市市政厅：加拿大亚寒带气候区的节能建筑
托马斯·莱宾格 主动地学习被动房——高效建筑教学
玛利亚·基娅拉·法伊拉 热桥对钢筋混凝土集合住宅及高层项目的影响
乔治·莱茵贝格 生态文明发展之路 Søren Dietz 索伦·迪茨: 丹麦被动房学校: 运行七年的能耗低于 phpp 计算结果 Graeme Verhulst 格雷姆·维尔豪斯特: 达到被动房标准: 一个商业办公案例研究 Dan Whitmore 丹·惠特莫尔: 美国及西太平洋区域气密性建筑 Johannes Kreißig 翰内斯, 克里茨基: 被动房认证与 DGNB 可持续认证的概念相似性

海报

Session 7: China: Implementing Passive House, Room 4

专题论坛 07_中国 - 被动房项目实施, 会议室 4

4:00 pm	Kong Lingchen Key points of Passive House design and construction control from developer's perspective – Gaobeidian Railway-City
4:25 pm	Zhang Shaobiao Technology and application analysis of prefabricated ultra-low-energy buildings in cold areas
4:50 pm	Xianghui Pan German Passive House technology "Chinese re-innovation"
5:15 pm	Mou Yu Let Passive House construction become "non-passive"
5:40 pm	Shuo Li: Research on Passive House thermal bridge free design - taking the Passive House residential extension and demonstration community project in Sino-German Ecopark as an example Qi Li: Discussion on design of passive ultra-low energy building based on performance measurements Funan Zhang: Analysis of thermal bridges of door and window openings in the walls of Passive ultra-low energy buildings Wen Tao: Analysis for outdoor air system heat recovery of commercial Passive House Yu Chuair: PHI certified steel precast construction systems

POSTER

孔令晨 甲方视角下的被动房建筑设计管控要点
张少彪 装配式超低能耗建筑发展现状及应用浅析
潘向辉 德国被动房技术“中国式再创新”
牟裕 让被动房的建造变得“不被动”
Shuo Li 李硕: 被动房无热桥设计研究--以中德生态园被动房住宅推广示范小区项目为例 Qi Li 李琪: 基于性能实测的被动式超低能耗建筑设计若干问题的探讨 Funan Zhang 张福南: 门窗安装在不同墙体结构最佳保温位置的性能研究 Wen Tao 文韬: 被动房商业建筑新风热回收分析 Yu Chuai 揣雨: 被动房研究所认证的钢结构装配式建筑系统

海报

Session 8: Construction Systems, Room 5

专题论坛 08_建造系统, 会议室 5

4:00 pm	Franz Freundorfer Passive House Building envelope in all climatic regions – solutions for the practice
4:25 pm	Ludwig Rongen Prefabricated Passive Houses in modular construction
4:50 pm	Soraya Lopez Uptake of native Certified Passive House components by the Chinese passive construction sector – a gap analysis
5:15 pm	Xiaodong Xia Prefabricated, thermal bridge-free light steel and light slurry walls
5:40 pm	Marcus Strang Material benefits and risks of cross laminated timber for Passive House construction in tropical climates

弗朗茨·弗罗因多费尔 适用于所有气候区域的被动房外围护结构——可实施性的解决方案
路德维希·隆恩 装配式被动房模块化建造
索拉雅·洛佩兹 中国本土被动房建筑行业认证组件制造商的飞跃——发展分析
夏晓东 预制轻钢轻浆料无热桥墙体
马库斯·斯特朗 正交胶合木在热带地区被动房应用的优势及风险

4:00 pm	Dragos Arnautu Lessons from an EnerPHit industrial building in Sri Lanka
4:25 pm	Milica Tumbas Old quad – Significant heritage building retrofitting to Passive House EnerPHit standard
4:50 pm	Michael Ingui Combining a systematic approach with final design benefits for Passive House retrofits
5:15 pm	Xing Zhao, Hsuanyin Peng Building airtightness and Chinese craft – the Ao’ni Courtyard project in Songyang, China, as an example of how traditional timber construction can achieve EnerPHit
5:40 pm	Zhiyong Tian: Retrofitting according to the EnerPHit Standard in cold climate – components Søren Dietz: Final renovated social housing to PH standard with district heating, CO ₂ emissions of future energy systems

POSTER



德拉戈斯·阿诺图
斯里兰卡既改被动房项目的经验教训

米立卡·托姆巴斯
“老宅”——以被动房既改建筑标准修复的重要历史保护建筑

迈克尔·因古伊
将建筑改造的系统方法与改造设计的优势相结合

赵星, 彭宣颖
建筑气密与中国工艺——以松阳畚呢院子传统木结构被动房改造项目为例

海报

Zhiyong Tian 田志勇:
寒冷气候下改建被动房项目——组件 |
Søren Dietz 索伦·迪茨: 社会保障性住房改造达到PH标准, 住区未来供热总二氧化碳排放量

Session 10: WORKSHOP: Kitchens, Room 8

专题论坛 10_被动房厨房, 会议室 8

4:00 pm	Peng Xiao Fume exhaust and air-makeup and exhaust system in kitchens of Passive buildings
4:25 pm	Haifeng Guo Study of kitchen HVAC design complications and overall ventilation systems in Chinese Passive House residential buildings.
4:50 pm	Zhao Yang Discussion of selfbalance oil fume purifier in passive room kitchen
5:15 pm	Stefan Schirmer Ventilation system in Chinese Passive House: Challenges with integration of WC and kitchen in heat recovery
5:40 pm	Sichen Sheng, Berthold Kaufmann Extractor hoods in kitchens in energy efficient buildings

肖鹏
被动式居住建筑内厨房排油烟与补风排风系统

果海凤
被动房住宅内中式厨房的暖通设计难点及通风系统研究

杨肇
论零和式油烟净化器在被动房厨房中的应用

石特凡
被动房通风系统：厨房与卫生间一体化热回收的挑战

盛巳宸, 贝特霍尔德·考夫曼
节能建筑厨房中的油烟机

6:30 – 9:00pm **Passive House Networking Party 被动房交流晚宴**

Passive House Networking Party
Wednesday, 9 October 2019, 6:30 – 9:00pm
International Door and Window Technology Building, North Square

The annual international networking event takes place at the Xiabei Square, International Window City. Enjoy the cuisine and meet Passive House friends from all over the world!

The evening event is included in the conference ticket. Registration is obligatory.

被动房交流晚宴

2019年10月9日, 星期三, 6:30pm – 9:00pm
国际门窗科技大厦北广场

一年一度的国际被动房交流活动将在国际门窗城 - 大厦北广场举行。

享受美食, 结识来自世界各地的被动房朋友!

被动房交流晚宴包含于大会门票。请务必于线上登记系统注册。



9:00am – 11:00am Plenary

- 09:00am Wolfgang Feist
 Founder of the Passive House Institute and
 Professor at the University of Innsbruck
**Latest developments of Passive House
 technology and components worldwide**
- 09:15am Cheng Caishi
 Chief Economist, Mohurd (Hebei government)
**Successes and Experiences with ultra low
 energy buildings in Hebei Province**
- 09:35am Xu Wei
 Board Chairman of CPBA
 (China Passive Building Alliance)
**Perspectives on the development of nearly
 zero energy buildings in China**
- 09:55am Zhang Xiaoling
 Kangju Institut – Building Certification and
 Consulting, Beijing
**Challenges and development trends for
 Passive Houses in China**
- 10:15am Gu Xiuming
 Acting representative CEO, Longfor Group
**Passive House in Practice: The construction
 experience of Longfor Group – The Bahnstadt
 Project**
- 10:35am Martin Meeseburg
 President of EBH and Meeseburg Group
**The development of energy efficient buildings
 in Europe**
- 10:50am Ni Haiqiong
 CEO, Orient Sundar Group
**Promoting a new era of high quality Passive
 House Developments**

9:00am – 11:00am 主论坛

- 09:00am 沃尔夫冈·费斯特
 被动房创始人 and 因斯布鲁克大学教授
 演讲主题: 被动房于全世界技术和组件的最新发展
- 09:15am 程才实
 河北省住房和城乡建设厅总经济师
 演讲主题: 河北省超低能耗建筑的成就与经验
- 09:35am 徐伟
 中国被动式超低能耗建筑联盟理事长
 演讲主题: 中国近零能耗建筑发展与展望
- 09:55am 张小玲
 北京康居认证中心主任
 演讲主题: 中国被动房发展趋势与存在问题
- 10:15am 顾修铭
 龙湖集团副总裁
 演讲主题: 龙湖集团的被动房实践-列车新城项目
- 10:35am 马丁·梅森博格
 梅森博格集团·欧洲建筑五金协会主席
 演讲主题: 节能建筑在欧洲的发展
- 10:50am 倪海琼
 奥润顺达集团总裁
 演讲主题: 推动新时代被动房产业高质量发展

The Thursday Plenary will be held
 in Hall D2, Conference Room 1

中国国际门窗城D2馆第1会议室

11:00am Plenary Session (continued)

Certificate handover Ceremony
(detailed information to be provided later)

Component Award Ceremony (AZEB)
(detailed information to be provided later)



11:00am 主论坛

证书颁发 (详细信息将后续提供)


组件奖 (AZEB) (详细信息将后续提供)



Please find the latest information on our website www.passivehouseconference.org
请于网站参考最新消息
www.passivehouseconference.org

Session 11: Districts, Room 4

专题论坛 11_被动房居住区(项目), 会议室 4

11:30 am	Christopher Higgins City process for ensuring projects target and achieve Passive House certification
11:55 am	Ralf Bermich Passive House city district Heidelberg-Bahnstadt – experience and evaluation
12:20 pm	Jürgen Schnieders Implementation of the Passive House standard in social housing in Mexico, lessons learned
12:45 pm	Han Fei Large-scale certified Passive House development in Qingdao, China – demonstrative residential project settles in Sino-German Ecopark
1:10 pm	Günter Lang The reduction by 50% of the energy demand until 2050 

克里斯托弗·希金斯 为确保项目目标并取得被动房认证的城市化进程
拉尔夫·贝尔米西 海德堡被动房城市街区——列车新城项目经验及评估
尤尔根·施尼德斯 墨西哥经济适用房的被动房标准施行及经验
韩飞 中国青岛大规模被动房开发认证
君特·朗 2050年减碳50%：比较三个城市和农村的被动房目标区域

Session 12: Training and design concepts, Room 5

专题论坛 12_被动房设计与教育培训, 会议室 5

11:30 am	Susanne Winkel Quality assurance through further training
11:55 am	Daxiong Si The significance of Passive House education in Chinese colleges and universities
12:20 pm	Enrico Bonilauri Re-Learning Training: The need and potential for regional and trades-specific training
12:45 pm	Wolfgang Frey Thermal comfort in summer versus large windows
1:10 pm	Huifang Zhang Design strategies for thermally broken Passive House details

苏珊娜·温克尔 通过进修保证良好的素质
司大雄 被动房课程在中国高校开展的意义
恩里科·伯尼拉瑞 再学习培训：区域及行业性培训的需求和潜力
沃尔夫冈·弗莱 大面积玻璃窗对夏季舒适度的影响
张慧芳 被动房断热桥节点的设计思路与方法

Session 13: Non-residential buildings, Room 6

专题论坛 13_被动房公建项目, 会议室 6

11:30 am	Ernst Schriefl, Berthold Kaufmann Office and residential Passive House building in Zhuozhou, China – focus on monitoring
11:55 am	Andrea Frisque The Wood Innovation Research Laborator at UNBC, Prince George, BC, Canada
12:20 pm	Marine Sanchez Strategies for improving energy efficiencies in large institutional kitchens
12:45 pm	Andrew Peel Shifting gears: A Passive House car dealership in the making
1:10 pm	Jessica Grove-Smith Passive House guidelines for indoor swimming pools

厄恩斯特·施里夫, 贝特霍尔德·考夫曼 中国涿州办公及住宅被动房项目——关注监测
安德里亚·弗瑞斯科 加拿大乔治王子城不列颠哥伦比亚大学·木材创新研究实验室
马林·桑切斯 提高用于机构的大型厨房的节能政策
安德鲁·皮尔 换挡：一家正在成长的被动房车经销商
杰西卡·格鲁夫史密斯 被动房游泳馆设计指南

Programme, subject to change! 议程将依现场情况变动!

Session 14: Project Monitoring and Results, Room 7

专题论坛 14: 项目监测及结果, 会议室 7

11:30 am	Jesus Menendez Keeping overheating cool
11:55 am	Miwa Mori Measured data of the Passive Town Phase 3 in Kurobe
12:20 pm	Marco Filippi Pilot Passive House in UAE – Results from monitoring
12:45 pm	Georgios Dermentzis Three years monitoring analysis of two multi-story net zero energy buildings
1:10 pm	Liu Bin, Berthold Kaufmann Qingdao PHTEC monitoring within two years of operation

杰西·梅南德斯
预防过热

森美和
黑部市被动房村三期监测数据

马尔科·菲莉比
阿联酋的被动房试点项目——监测结果

乔治·德门子
两个近零能耗住宅的三年监测分析

刘斌, 贝特霍尔德·考夫曼
青岛生态园技术中心两年运行监控

Session 15: AZEB WORKSHOP Building Envelope, Room 8

专题论坛 15 - 建筑围护结构, 会议室 8

11:30 am	Sichen Sheng, Soraya Lopez Component Award 2019 – window of the future
11:55 am	Franz Freundorfer 20 years of development work on the Passive House window, a cool story
12:20 pm	Hagen Weber Passive House certified curtain walls / The difficult relation between demand & reality
12:45 pm	Roman Kramer Reducing structural thermal bridge effects – a best practice study on Passive House projects in China
1:10 pm	Soraya Lopez Passive House Institute certification of transparent and opaque building envelope components

盛巳宸, 索拉亚·洛佩兹
2019年组件奖——未来之窗

弗朗茨·弗罗因多费尔
20年的被动窗开发工作——一个很酷的故事

哈根·韦伯
被动房认证幕墙系统 / 需求与现实的矛盾关系

罗成
减少结构性热桥效应——中国被动房优秀项目研究

索拉亚·洛佩兹
被动房透明及非透明外围护结构认证



1:30 - 2:30pm Lunch Break | 午餐

Please find the latest information on our website www.passivehouseconference.org
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www.passivehouseconference.org

2:30 pm	Laszlo Lepp SINFONIA – Selection of outcomes and best practice examples from Innsbruck
2:55 pm	Martin Huber Refurbishment of the Primary School and Gymnasium, Ziersdorf
3:20 pm	Wolfgang Streicher Results of deep renovation of two Austrian Schools
3:45 pm	Bernd Steinmüller From Experimental to Passive House Plus – some 4-decade insights
4:10 pm	Helmut Schöberl, Ernst Schriefl EnerPHit renovation of a residential building in Vienna with preservation of its historical façade



拉斯洛·莱普 SINFONIA 项目——因斯布鲁克的优秀案例节选
马丁·胡贝尔 齐斯多夫小学和健身馆的翻新
沃尔夫冈·施特莱彻 两所奥地利学校深度改造成果
贝恩德·斯坦米勒 从实验到实现——40年优级被动房之路
赫尔穆特·旭博, 厄恩斯特·施里夫 以EnerPHit标准改造 - 维也纳历史保护区居住建筑的外观

Session 17: Projects in cooling dominated climates, Room 5

专题论坛 17_被动房项目 - 制冷需求气候区, 会议室 5

2:30 pm	Pablo Carranza Navarro, Clara Lorente Martin Basa I, Passive House multi-family dwelling in Zaragoza (Spain)
2:55 pm	Sichen Sheng Efficient cooling and dehumidification strategies for Passive Houses in warm and hot climates
3:20 pm	Piero Russo Cost-effective multi-family building in warm climate
3:45 pm	Micheel Wassouf Chengdu mixed use building – a Passive House challenge in the heart of China
4:10 pm	Pablo Sepulveda Corradini Meeting the Passive House standard through parametric design

巴勃罗·卡兰扎·纳瓦罗, 克拉拉·洛伦特·马丁 萨拉戈萨 (西班牙) 的被动房集合住宅: Basa I
盛巳宸 在温暖和炎热气候里被动房有效的制冷和除湿策略
皮耶罗·拉索 温暖气候区经济性集合住宅建筑
米歇尔·沃索弗 成都混合功能建筑——中国中心区域的被动房挑战
巴勃罗·塞普维达·科拉蒂尼 通过参数化设计满足被动房标准

Session 18: Policy and financing, Room 6

专题论坛 18_政策与补助, 会议室 6

2:30 pm	Hartmut Murschall Passive Houses in 50 solar- and 100 climate protection estates in the former coal-and steel-region North Rhine-Westphalia
2:55 pm	Helmut Krapmeier Only numbers count – life cycle costs in social housing
3:20 pm	Carl-Peter Goossen New finance model for apartments to approaches neutral living expenses before and after EnerPHit renovation
3:45 pm	Thilo Cunz, Johann Souvestre Long-term monitoring of the successful energy efficient Brunck-Quarter modernization
4:10 pm	Lloyd Alter Framing the conversation: How do we talk about Passivhaus

哈特穆特·穆沙尔 北莱茵-威斯特法伦州前煤炭和钢铁区域的50个太阳能及100个气候保护被动房
赫尔穆特·科瑞迈耶 只有数字可靠——保障性住房实际生命周期成本
卡尔·彼得·古森斯 通过公寓被动房既改前后的新财务模型验证低生活成本
蒂洛·孔兹, 约翰·梭维斯特 布伦克街区有效节能改造的长期监控成果
罗爱德·奥尔特 构思对话: 我们如何谈论被动房

2:30 pm	Rolf Demmler Tianjin eco-city residential high-rise Passive House
2:55 pm	Chun Li Optimization of the U-value of exterior walls with external insulation and of the g-value of glass in Chinese hot-summer and cold-winter regions
3:20 pm	Fuzhao Jiang Design, optimization and construction of residential building 40# in Project Phase I in Beijing, Modern Industry Development Experimental Zone
3:45 pm	Aurelia Lippolis Multi-family homes in China – initial design, optimization potentials and the impact of it
4:10 pm	Huanlin Zhang: Huangshan reception center project of Shandong Hua Jian Aluminum Industry Group Stefan Schirmer: Social housing in Beijing in Passive House standard Shou-Kong Chen: Sunyoung Pavilion – A Passive House in Shanghai Park Byoungyoeol: A Passive House village in Korea

POSTER

罗尔夫·德姆勒 天津生态城高层被动房项目
李淳 夏热冬冷地区外墙外保温U值与玻璃g值的优化
姜福翌 北京(曹妃甸)现代产业发展实验区(生态城先行启动区)一期40#住宅楼项目的设计, 优化以及施工
奥雷利亚·利波利斯 中国集合住宅——初步设计、优化潜力及其影响

海报

Huanlin Zhang 张环林: 山东华建铝业黄山接待中心项目 | Stefan Schirmer ---石特凡: 北京经济适用房项目 | Shou-Kong Chen 陈守恭: 上海舜元被动房项目 | Park Byoungyoeol 朴伯烈: 韩国被动房村 |

Session 20: WORKSHOP: Design Tools, Room 8

专题论坛 20_进阶专场 - 设计工具介绍, 会议室 8

2:30 pm	Jan Steiger PHPP 10 – The design tool for robustness and future proof buildings
2:55 pm	Cheney Chen, Cillian Collins Explorations in optimizing PHPP using „Grasshopper“
3:20 pm	Jürgen Schnieders PHPP validation according to ASHRAE 140
3:45 pm	Jessica Grove-Smith Project-specific primary energy requirements for Passive House certification
4:10 pm	Berthold Kaufmann, Wolfgang Hasper Performance monitoring and evaluation with PHPP: new features for PHPP 10

POSTER

Jürgen Schnieders: A calculation procedure for the heat losses caused by vented drain pipes

杨·施泰格 PHPP 10—— 稳健的设计工具和未来建筑
切尼·陈, 西莲·柯林斯 使用“Grasshopper (蟋蟀)”优化被动房遮阳的计算
尤尔根·施尼德斯 根据ASHRAE 140进行PHPP验证
杰西卡·格鲁夫·史密斯 被动房认证具体项目主要能源的需求
贝特霍尔德·考夫曼, 沃尔夫冈·哈斯佩 使用新PHPP进行性能监视及评估:PHPP10的新特性

海报

Jürgen Schnieders 尤尔根·施尼德斯: 排(污)水管热损失计算方法

4:30 - 5:00pm **Coffe Break 茶歇**
5:00 - 6:00pm **Plenary 主论坛闭幕**

5:00-6:00pm **Plenary 主论坛闭幕**

- Building Certificates for Projects all over the world
- Component Certificates – new products recently finalised
- Innovation Award – new product concepts
- Wolfgang Feist – summary of the conference



5:00-6:00pm **Plenary 主论坛闭幕**

--全球认证新项目

--组件认证 - 近期认证组件

--创新奖 - 新组件

--沃尔夫冈·菲斯特 大会闭幕致辞



Please find the latest information on our website www.passivehouseconference.org
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www.passivehouseconference.org

Excursions in Gaobeidian and the surrounding area

On Friday, 11th October 2019, conference participants will have the opportunity to tour Passive House buildings.

The excursions are included in the conference ticket.

All excursions include the tour itself in either English or Chinese with translation into English as well as a small meal and drinks.

Space is limited. You can select at most one excursion.

Meeting point: North Square of Hall B1, Windoor City.

Excursion 1 | Bahnstadt Gaobeidian

Friday, 11 October 2019 | 8:30am
(subject to change)

Visit the Passive House district in Bahnstadt Gaobeidian including multi-storey apartment buildings and the Passive House museum!

www.passivehouse-database.org
Museum ID 5423
Bahnstadt ID 5991

高碑店及周边地区项目导览

2019年10月11日，星期五，大会参会者将有机会参观被动房项目。

项目参观已包含在大会门票内。

所有的参观包括英语或汉译英的导览，轻食餐点及饮料。

集合地点:

门窗城内B1馆北侧广场

项目导览 1 | 高碑店列车新城

2019年 10月11日 星期五 | 08:30am

计划参访高碑店列车新城被动房项目以及示范区。





Excursion 2 | Hebei

Friday, 11 October 2019 | 8:30am
Visit the Passive House buildings in Hebei region.
Further detailed information available online.

项目导览 2 | 河北

2019年10月11日 星期五 | 08:30am

计划参访河北地区的被动房项目。
详细信息参见网站。

Excursion 3 | Beijing

Friday, 11 October 2019 | 8:30am
Visit the Passive House buildings in Beijing region.
Further detailed information available online.

项目导览 3 | 北京

2019年10月11日 星期五 | 08:30am

计划参访北京地区的被动房项目。
详细信息参见网站。

Please find the latest information on our
website www.passivehouseconference.org
请于网站参考最新消息
www.passivehouseconference.org



Exhibition

Passive House components provide maximum comfort with low energy costs in new builds and refurbishments alike. Whether you are looking for insulation materials, windows or ventilation systems with heat recovery – all of the leading manufacturers of Passive House components will be represented at the accompanying exhibition. Here you will find first-class advice, information materials, illustrative models, and experts happy to answer your questions. Guided exhibition tours on request at the Passive House Institute booth (C2 Hall, B17/B21) on Wednesday, Thursday and Friday.

Date: 9 to 11 October 2019

Venue:

**China International Window City
Hall C2
No.1 Dongfang Road
Gaobeidian City
Hebei Province | China**

Opening hours:

Wednesday, 9 October 2019 (8:00 am - 5:00 pm)

Thursday, 10 October 2019 (8:00 am - 5:00 pm)

Friday, 11 October 2019 (8:00 am - 2:00 pm)

The conference and Passive House exhibition are aimed at: architects, designers, engineers, energy consultants, energy suppliers, tradespeople, scientists and researchers, retailers, manufacturers, local authorities, property developers, students.

Exhibition area themes

- Insulation
- Windows and doors
- Ventilation systems with heat recovery, compact heat pump units, air conditioning split units, subsoil heat exchangers, stoves and heating systems, solar collectors
- Measuring devices for airtight construction and ventilation techniques, infrared cameras
- Products for ensuring airtightness
- Prefabricated buildings and building components
- Contracting businesses, trade associations, architectural and engineering firms, energy consultants, quality assurers
- Software, specialist literature, advanced training
- Renewables for Passive House buildings

被动房展览会

被动房组件无论是在新建建筑或是改造项目中都对建筑的舒适性和低能耗发挥了极大的作用。无论您是在寻找保温材料、窗户还是带热回收的新风系统，都能在国际被动房大会同期举办的展会上找到。你不仅可以获得一流的咨询，信息以及材料说明而且还能与专家会面对面进行交流。

可于星期三，星期四，星期五于被动房展位 (C2 Hall, B17/B21) 申请展区导览

日期: 2019年10月9号-11号

地点

**中国国际门窗城
C2大厅
河北省高碑店市东方路1号
中国**

展览时间:

2019年10月9日，星期三((8:00 am - 5:00 pm)

2019年10月10日，星期四(8:00 am - 5:00 pm)

2019年10月11日，星期五(8:00 am - 2:00 pm)

会议和被动房展会目标群体：

建筑师，设计师，工程师，能源顾问，能源供应商，施工人员，科学家和研究人员，零售商，制造商，地方当局，地产商，学生

展览区主题

- 保温隔热
- 门窗
- 热回收新风机, 紧凑型热泵系统, 分体式空调机组, 地源热交换器, 锅炉和供热系统, 太阳能/光伏系统
- 气密性和通风检测设备, 红外成像仪
- 气密性产品
- 预制房屋和构件
- 建筑公司, 行业协会, 建筑设计和工程公司, 能源咨询, 质控专家
- 软件, 文献, 进阶教育
- 被动房建筑的可再生能源解决方案

WORKSHOPS



Workshops

Basic Workshops | Tuesday, 8 October 2019

- Passive House Basics (in Chinese)
- PHPP basics (in Chinese)
- Passive House design: designPH (in Chinese)

Advanced Workshops | Saturday, 12 October 2019
(Consecutive translation into Chinese)

- Cooling and dehumidification (in English)
- Airtightness (in English)
- bim2PH - BIM and PHPP (in English)
- Energy efficient hot water systems (in English)
- Commissioning and monitoring (in English)
- Climate protection at district level - planning and evaluation with districtPH (in English)

Advanced Workshops | Sunday, 13 October 2019
(Consecutive translation into Chinese)

- Thermal Bridge calculation (in English)
- Ventilation (in English)
- Windows Workshop (in English)



专题课程

基础专题课程 - 2019年10月8日 星期二

- 被动房基础 (中文)
- 被动房设计: PHPP基础 (中文)
- 被动房设计: design PH (中文)

进阶专题课程 - 2019年10月12日 星期六
(将提供中文交替传译)

- 制冷和除湿 (英语)
- 气密性 (英语)
- bim2PH - BIM 及 PHPP (英语)
- 高效能的热热水系统(英语)
- 运行调试和数据监测(英语)
- 地区性的气候保护 - 使用 districtPH (被动房小区规划) 工具进行规划和评估(英语)

进阶专题课程 - 2019年10月13日 星期日
(将提供中文交替传译)

- 热桥计算 (英语)
- 通风系统(英语)
- 被动房窗户(用英语)

Workshops

Take the opportunity to deepen your knowledge in the run up to the conference or right after the event! Passive House Institute offers a variety of basic and advanced workshops. Please note, that these workshops are not included in the conference ticket and have to be booked and paid additionally. (All English workshops will be consecutively translated into Chinese.)

Venue:

ShengLin HuaYuan International Hotel
Address: No. 58 Xinhua Main Street,
Gaobeidian, China

Basic Workshops**Passive House Basics (in Chinese)**

Tuesday, 8 October 2019, 9:00 am - 6:00 pm

For representatives, administrative and technical staff from municipalities, cities and rural districts, this event offers successful practical examples with concrete tips and instructions for implementation. Beginners and experts will get an overview of the technical and economic possibilities and developments in energy efficient construction.

PHPP basics (in Chinese)

Tuesday, 8 October 2019, 9:00 am - 6:00 pm

This workshop provides basic knowledge of the Passive House Planning Package (PHPP), the energy balancing and planning tool for efficient buildings and retrofits.

Passive House design: designPH (in Chinese)

Tuesday, 8 October 2019, 9:00 am - 6:00 pm

We will demonstrate how a building model can easily be set up using the 3D planning tool designPH, to receive preliminary feedback on the energy performance of your sketch designs. Learn how to refine the building energy model to improve the efficiency.

专题课程

把握难得机会，于会议其间进一步拓展、提升您的被动房知识! 被动房研究所提供各种基础和进阶专题课程。
请注意，此专题课程不包括在大会门票中，必须另外预订和付费。
(将提供中文交替传译)

地点: 圣林国际酒店

高碑店市新华大街58号

基础专题课程**被动房基础 (中文)**

2019年10月8日 星期二, 9:00 am - 6:00 pm

本专题课程针对来自省级、市级和县市级地区的相关部门代表，公务人员、和技术人员，通过成功的项目实例提供（被动房项目）相关具体建议和实施指导。（被动房）初识人员和专家也可以通过该课程获得被动房技术及经济性选择以及节能施工发展的概况。

被动房设计: PHPP基础 (中文)

2019年10月8日 星期二, 9:00 am - 6:00 pm

此专题课程将提供被动房设计包(PHPP)基础知识。被动房设计包 (PHPP)为一款用于节能建筑设计及既有建筑节能改造的能耗计算规划工具。

被动房设计: design PH (中文)

2019年10月8日 星期二, 9:00 am - 6:00 pm

我们将展示如何使用3D规划工具 design-PH 轻松建立建筑模型，从而在草案设计阶段获得有关能耗相关的初步反馈。了解如何改进建筑能耗模型以提高工作效率。

Advanced Workshops | Saturday, 12 October 2019**Cooling and dehumidification (in English)**

Saturday, 12 October 2019 (9:00am - 1:00pm)

This workshop provides an overview of cooling and dehumidification strategies for Passive House buildings. After initial considerations on the reduction of cooling energy demand, the main focus will be on the energy efficient, cost-effective and efficient supply and distribution of cooling in Passive House buildings in warm climates.

Airtightness (in English)

Saturday, 12 October 2019 (9:00am - 1:00pm)

This workshop will summarise the findings from various studies on Passive Houses in different climates of the world, carried out at the Passive House Institute. The importance of airtight construction and the influences on energetic and moisture issues under the major climatic boundary conditions will be pointed out.

bim2PH - BIM and PHPP (in English)

Saturday, 12 October 2019 (9:00am - 1:00pm)

BIM2PH is the new interface concept for BIM tools to export project data from 3D models to PHPP. This workshop will explain how to introduce energy efficiency parameters into BIM models and introduce the features of the BIM2PH converter tool to export data to PHPP.

Energy efficient hot water systems (in English)

Saturday, 12 October 2019 (2:30pm - 6:30pm)

The energy demand for the provision of hot water plays a dominant role in the energy balance of residential Passive House buildings. This workshop presents and discusses saving potentials and planning recommendations.

进阶专题课程**制冷和除湿 (英语)**

2019年10月12日 星期六 (9:00am - 1:00pm)

本专题课程将介绍被动房建筑制冷和除湿策略。由降低制冷需求这一原则出发，课程将主要介绍炎热气候气候区域被动房中降低制冷能耗以及经济有效的制冷分配

气密性 (英语)

2019年10月12日 星期六 (9:00am - 1:00pm)

本专题课程将总结被动房研究所关于在世界不同气候分区建被动房的研究成果。其中重点涉及气密性施工的重要性，以及大多数气候分区中湿度问题对建筑能效的影响。

bim2PH - BIM 及 PHPP (英语)

2019年10月12日 星期六 (9:00am - 1:00pm)

作为BIM工具的全新交互概念，BIM2PH可将项目数据从三维模型导出到PHPP。本次专题课程将讲解如何在BIM模型中设置能耗计算参数，并介绍BIM 2PH转换工具的特点，用以将数据导出到PHPP。

高效能的热热水系统 (英语)

2019年10月12日 星期六 (2:30pm - 6:30pm)

在被动房居住建筑能耗中由热水供应所产生的能耗占主导地位。本专题课程将就此进行说明并进一步探讨其节能潜能及规划建议。



Commissioning and monitoring (in English)

Saturday, 12 October 2019 (2:30pm - 6:30pm)

The workshop will focus on quality assurance as well as common MVHR commissioning issues and suggestions on how to tackle them. The most important findings of the 52nd session of the Research group for cost-effective Passive House buildings will be summarised.

Climate protection at district level – planning and evaluation with districtPH (in English)

Saturday, 12 October 2019 (2:30pm - 6:30pm)

Passive House Institute has developed a tool with which development or retrofitting scenarios can be evaluated at district level. districtPH helps with questions about suitable supply options and sensible design for remediation subsidies and shows how a net zero-energy district can be achieved. This workshop will present the basic features of districtPH and present practical examples.

Advanced Workshops | Sunday, 13 October 2019**Thermal Bridge calculation (in English)**

Sunday, 13 October 2019, 9:00 am - 6:30 pm

Acquire in-depth knowledge on the subject of thermal bridges – indispensable for the energy efficient planning of complex buildings. You will also learn how to calculate thermal bridges using the free THERM programme.

Ventilation (in English)

Sunday, 13 October 2019, 9:00 am - 6:30 pm

Become familiar with concepts of controlled ventilation including a promising approach towards less investment costs: facade-integrated ventilation, decentralized solutions and compact units.

Windows Workshop (in English)

Sunday, 13 October 2019, 9:00 am - 6:30 pm

The global demand for highly efficient and cost-effective windows exceeds the current production expertise thus leading to market shortages. This workshop is intended to contribute towards eliminating these shortages by providing specialist knowledge on high-performance windows. Additionally, participants will be able to convince producers in their regional markets to manufacture these high-performance windows in their respective regions.

运行调试和数据监测 (英语)

2019年10月12日 星期六 (2:30pm - 6:30pm)

本专题课程将集中讨论（施工）质量控制以及常见的 MVHR（机械通风系统）运行调试以及如何解决相关问题建议。并将总结第52届经济性被动房研讨会研究成果。

地区性的气候保护 - 使用 districtPH被动房小区规划) 工具进行规划和评估(英语)

2019年10月12日 星期六 (2:30pm - 6:30pm)

作为被动房研究院新近开发的一款工具，可在区域性尺度层面对新建项目开发或既有建筑改造进行（能耗）评估。districtPH可协助在有补贴资金的项目中，其能耗方案选择及对应补贴要求的关键性设计问题，以表明如何打造一个近零能耗社区。此专题课程将涉及districtPH工具的基本特性并展示应用实例。

进阶专题课程 | 2019年10月13日**热桥计算 (英语)**

2019年10月13日，星期日，09:00 am - 06:30 pm

对于复杂建筑的节能规划，深入理解热桥是不可或缺的。除此之外，您还将学习如何使用免费的热桥计算软件THERM。

通风系统(英语)

2019年10月13日，星期日，09:00 am - 06:30pm

通过课程了解可控制通风的概念，同时包括减少投资成本的可行性方案介绍:立面集成式通风、分散式解决方案和紧凑型机组。

被动房窗户 (英语)

2019年10月13日，星期日，09:00 am - 06:30pm

面临全球对高效能且有成本效益的窗户需求已超过目前生产专业知识，而导致市场短缺。此专题课程将提供专业的高性能窗户知识，更进一步解决市场短缺问题。除此之外，参与者将有机会了解如何与其区域制造商生产此高效能窗户并推广。



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Registration must be submitted online via the online registration form. The contracting party is the Chinese company, Hebei Dingtai Hua'ao Investment Co., Ltd. EAST OF 112 ROAD SOUTH OF DONGFANG ROAD, GAOBEIDIAN CITY, HEBEI, CHINA.

The Passivhaus Dienstleistung GmbH is providing the web interface for the registration process, but all detailed negotiations about participation and bookings will be organized by Hebei Dingtai Hua'ao Investment Co., Ltd. Registrations are binding and will be processed in the order in which they are received. The number of participants is limited. After registration, you will receive an invoice. The registration period is from now till September 20. The early booking discount can only be granted if the registration is made before August 31 2019 and payment is completed by September 7 2019. Only those people who have paid the applicable fees in full will be admitted to the conference. Only cancellations in writing will be accepted.

All cancellations after July 31 2019 will incur a €70 (RMB 550 Yuan) processing fee, while cancellations made after August 31 2019 will incur a fee equal to 50% of the total registration cost. For those individuals who cancel, or confirm their non appearance after September 20 2019, there will be no refund of the registration fee. However, the registered participant will have 5 days after the date of their withdrawal to nominate a substitute participant and advise the Organizing Committee of the Passive House Conference. Conference admission documents are not transferable, except with the written permission of the Organizing Committee of the Passive House Conference.

Services

The scope of services includes: the conference proceedings with all written contributions, lunch, coffee breaks and simultaneous translation into English and Chinese at all the sessions. The organisers reserve the right to make any necessary changes to the programme.

Cancellation, limitation of liability

In the event that the 23rd International Passive House Conference or any part of the framework programme must be cancelled, the participants will be notified immediately and any participation fees already paid will be reimbursed. The liability of the organiser, Hebei Dingtai Hua'ao Investment Co., Ltd. EAST OF 112 ROAD SOUTH OF DONGFANG ROAD, GAOBEIDIAN CITY, HEBEI, CHINA, is limited to reimbursement of the paid participation fee only.

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于2019年7月31日后取消参会人员，将收取70欧元(人民币550元)手续费；于2019年8月31日后取消参会人员，将收取注册费总额约50%费用；于2019年9月20日之后取消参会或确认未能到场的人员，全额支付参会费用不予退还。但参会人员可在取消后5天内提名另一名代表参加，并提交代表人员的相关信息，经被动房大会组委会确认后参加。

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Summary |
Conference proceedings



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Ernst Ulrich von Weizsäcker
Environmental Scientist,
Honorary President
of the Club of Rome,
Co-Chair International
Resource Panel

„Come on!“

Celebrating its 50th anniversary in 2018, the Club of Rome published a new report titled „Come on!“. Co-authors Ernst Ulrich von Weizsäcker and Anders Wijkman suggest solutions to the global ecological and social crisis: „We can no longer depend on a societal model that was developed for a world of less than one billion people.“ In „Come on!“ the authors comprise practical examples and success stories to oppose a flawed system exploiting the planet’s resources.



Hou Li’an
Environmental Engineering
Specialist Academician,
Chinese Academy of Engineering

„Indoor air quality control
for a healthy China“

Hou Li’an, born in Xuzhou, Jiangsu Province, is an Environmental Engineering Specialist. In 2009, he was rated as Academician of Chinese Academy of Engineering. Hou Li’an has long dedicated himself to scientific research, engineering design and technical management work in the field of environmental construction.



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Diana Üрге-Vorsatz
Environmental Scientist and
Engineer. Professor, Department
of Environmental Sciences and
Policy, Central European
University

„IPCC report 2018/2019 –
A summary“

Diana Üрге-Vorsatz is one of the contributors to the IPCC Special Report „Global warming of 1,5 °C“ published in 2018. The report predicts an increase in number and intensity of heat waves, draughts and extreme rainfalls in the following decades due to global warming if the global temperature rises over 1,5 °C. Thus, also the stable production of alimentation is endangered. The IPCC report demands, among other things, reduction of emissions in the energy sector, saving energy on the part of the consumers as well as climate friendly cities.



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Wolfgang Feist
Founder of the Passive House
Institute, Professor at the
University of Innsbruck

„Passive House – building
healthy, comfortable and
sustainable constructions
globally“

Energy efficiency is key to the success of the energy transformation in a completely sustainable economy. It turns out, that the most important energy services can be provided using much less energy than today. The Passive House standard presents a tangible example for this very concept: Here, we have a way of providing comfortable living space for everyone on the planet, regardless of where they are located using the renewable energy available in the region.

总结 |
大会论文集**Ernst Ulrich
von Weizsäcker**

魏伯乐

环境科学家和罗马俱乐部荣誉主席
联合国环境规划署可持续资源利用
委员会联合主席

“ 一起行动! ”

2018于罗马俱乐部成立50周年纪念日发布了一份题为“一起行动”的报告。在这份报告中，魏伯乐和安德斯·维克曼对于全球生态和社会危机提到“我们不应该只依赖当前给十亿人的社会模式”。在此报告中，作者提出具体的案例和成功的经验，以反证当前不恰当的使用地球资源。

Hou Li'an

侯立安

环境工程专家
中国工程院院士

“ 健康中国的室内空气质量控制 ”

侯立安出生江苏省徐州市，环境工程专家，2009年被评为中国工程院院士。侯立安长期致力于环境工程领域的科学研究、工程设计和技术管理工作！

Diana Ürge-Vorsatz

戴安娜·悦格弗萨茨

环境科学家和工程师，中欧大学 -
环境科学和政策部门教授“ 2018/2019 政府间气候变化专门
委员会 (IPCC) 评估报导 - 总结 ”

戴安娜主要致力于减少建筑和城市的碳排放，以及气候变化的重要性。戴安娜是《联合国政府间气候变化专门委员会(IPCC)特别报告——全球变暖1.5°C》主要撰稿人之一。此报告于2018年发布，其内容预测，若全球平均温度上升1.5度，在接下来十年内全球暖化结果将造成热浪、干旱和极端降雨情况急剧增加。此外，稳定的食物链正面临危机。此报告更推动减少能源产业其能耗，鼓励消费者着手节能以及绿能城市的促进。

Wolfgang Feist

沃尔夫冈·费斯特

被动房创始者
因斯布鲁克大学教授“ 被动房——在全球建造健康、舒
适、可持续的建筑 ”

在可持续能源社会中，能源效率是能源转型成功的关键。然而，如何提供比当今更低耗损的能源服务是目前重要议题。被动房标准是一个具体例子：今天，我们为地球上每个人提供舒适生活空间，不管我们在地球上哪一角落，再生能源的使用就在你我身边。

1:30 pm

Zhang Zhaorui

Share of case of first Premium Passive House in China

This paper briefly describes the calculation process of PHPP and how to achieve the first Premium grade Passive House in China by optimizing doors and windows, thermal insulation, thermal bridges, fresh air system, heat pumps and renewable energy resources. The paper also elaborates the differences between PHI standard and the calculation methods for glass parameters and the test methods for fresh air system in China.

张昭瑞

中国首个Premium等级被动房案例分享

本文以大自然广场2#楼被动房为案例，简述了PHPP的计算流程以及如何通过对门窗、保温、热桥、新风系统、热泵和可再生能源进行优化，从而实现国内首个Premium等级被动房。同时，本文也对PHI标准与国内关于玻璃参数计算和新风系统的测试方法之间的差异进行了阐述。

1:55 pm

Dawid Michulec

Passive House experience from South China, Hangzhou/Jiaxing

Through regular consultations and joint visits of the execution with the Passive House building certifier Ing. Dawid Michulec, a very good quality of execution could be guaranteed for both projects. Monitoring systems were installed in both projects to optimally regulate energy consumption and comfort.

大卫·米舒列克

杭州/嘉兴，华南地区被动房经验

通过与被动房建筑认证员戴维德·米丘莱克进行定期磋商和联合访问，保证了两个项目良好的完成质量。两个项目都安装了监控系统，用于优化调节能耗，改善舒适度。

2:20 pm

Tian Shuhui

R&D Centre Hebei Academy of Building Research

The Hebei Academy of Building Research Centre is the first completed large-scale non residential project in the field of Sino-German cooperation of low-energy Passive House. The building is the first of the dena Sino-German energy efficient non-residential buildings in China, completed end of 2014.

田树辉

河北省建筑科技研发中心科研楼

河北省建筑科学研究院研发中心是首个中德低能耗被动房合作领域的大型非住宅项目。该建筑是德国能源署中德节能项目在中国的第一座非住宅建筑，于2014年底竣工。

2:45 pm

Yingying Li

Research on key technologies for passive ultra-low energy consumption in China's Central Plains region

This paper mainly studies the key technologies for passive ultra-low energy consumption in central China. The paper analyzes the process of airtightness detection, and reaches a conclusion that the energy-saving rate of the vertical louver shading compared with no shading is up to 1.52%, and exhibits the best effectiveness at the angle of inclination of 0°.

李莹莹

中原地区被动式超低能耗关键技术研究

本文主要研究了中原地区被动式超低能耗关键技术。气密性检测过程分析；垂直百叶遮阳相比于无遮阳节能率可达1.52%，且倾斜角度为0°时效果最佳；理论分析全热回收新风系统，表明夏季工况下节约的空调能耗十分可观；文章也分析了建筑全年空调能耗特征，为空调系统的设计提供参考；最后引入可再生能源利用的一种新型式。

3:10 pm

Deng Bintao

From 0 to 1

This paper focuses on the development of Passive House in China, starting from nothing, and then to a comprehensive promotion. Projects throughout China's 22 provinces and cities are supported by the relevant government departments in order to encourage the development of Passive House.

邓滨涛

从0到1

本文重点介绍了被动房在中国的发展情况，从无到有，再到全面推广。示范项目遍及中国的22个省市，政府相关部门提供诸多支持，以鼓励被动房的发展。

1:30 pm **Jürgen Schnieders**
Guidelines for airtightness measurements in high-rise buildings

In high-rise buildings, the stack effect can cause pressure differences of more than 50 Pa between the ground and top floors. For valid airtightness measurements, it is particularly important to avoid measurement points where underpressure and overpressure are present simultaneously in the building.

尤尔根·施尼德斯
高层建筑的气密性导则

在高层建筑中, 烟囱效应会导致地面和顶层之间的压差超过50帕。为保证气密性测量的有效性, 避免建筑物中同时存在负压和超压的测量点尤为重要。

1:55 pm **Qian Cai**
The selection of materials and measures for the airtightness of Passive Houses with different construction types
This paper sorts out and analyses the airtight materials used in the market at present, proposes the applicability of different airtight materials, and summarizes the corresponding key nodes of the airtightness and treatment measures in combination with the structural characteristics of different buildings.

蔡倩
气密性材料的选用及不同结构被动房的气密性措施

随着国内被动房技术的引入, 建筑气密性作为被动房的一个关键技术要点而受到关注, 但目前国内普通节能建筑对气密性不做要求, 也没有相关气密性材料产品和标准。针对这一情况, 本文对目前市面上常用的气密性材料进行梳理分析, 提出不同气密性材料的适用性, 并结合不同建筑的结构特点, 总结提出相应的气密性关键节点及处理措施。

2:20 pm **Michael Meyer-Olbersleben**
Measuring the airtightness in high-rise buildings

In the last decade we have been 22 times in China to do measurements and workshops during the construction of the first Passive Houses in China. We have seen, that it is possible to obtain very good results. These good results are necessary for the function of these buildings. But we have also seen, that we need to upskill all people who are involved in the value chain of construction.

迈克·迈耶-奥伯斯莱本
高层建筑的气密性测试

在过去十年中国建设第一批被动房期间, 我们访问了中国22次, 进行测试和研讨。现在, 我们已经看到, 它有可能获得非常良好、为实现这批被动房建筑功能所必需的结果。不过同时, 我们也感受到了提升所有参与价值链建设人员的技能的必要性。

2:45 pm **Bai Yu**
Construction control and energy consumption functioning in renovation project of Passive ultra-low energy green buildings – with Landsea Huabei Passive House experience center as an example
This paper focuses on the existing buildings, how to realize the renovation of passive low-energy buildings. From the aspect of construction and functioning, the paper will introduce and analyze the different building parts' construction and analyze energy consumption functioning through the actual use of the building.

白羽
被动式超低能耗绿色建筑改造项目的施工控制与能耗运行

朗诗华北被动房体验中心项目已于2018年2月28日获得PHI Plus级别认证, 于2018年4月投入体验使用。本文针对该项目如何实现被动式超低能耗建筑的改造, 从施工与运行角度, 介绍与分析不同部位的施工与建造过程, 并结合项目实际使用情况, 分析其能耗运行, 总结既有建筑实现被动式超低能耗建筑的项目实践经验。

3:10 pm **Mengyue Peng**
Practice and thoughts on whole-process quality control of ultra-low energy passive buildings in China
This paper introduces the development status of the passive ultra-low energy buildings in China. It explains how good planning and high quality construction of passive low energy buildings in China can be ensured and proposes recommendations for the large-scale and high quality development of passive low energy buildings in China.

彭梦月
中国被动式超低能耗建筑全过程质量控制的实践与思考

本文介绍中国被动式超低能耗建筑发展现状及采用基于第三方咨询的全过程质量控制模式的必要性; 通过全过程质量控制的案例分析来说明如何通过设计审核、现场施工质量控制、测试监测等措施保障中国被动式超低能耗建筑项目的精细化设计和高质量建造; 对中国被动式超低能耗建筑规模化及高质量发展提出建议。

1:30 pm **Andrea Bombasaro**
 Innovative strategy for tall buildings retrofit: the case of Torri M. Bianca, Trento Italy
 This paper will discuss the solutions and challenges involved in retrofitting 3 towers located in the modernist social housing district of Madonna Bianca in Trento, Italy. Results will show a radical reduction in terms of energy consumption and a significant improvement of living comfort.

安德里亚·博马萨罗
 高层既改建筑的创新策略 - 意大利·特兰托 Torri M. Bianca案例
 本文对位于意大利特伦托市麦当娜·比安卡现代社会住宅区的三座塔楼进行改造所涉及的解决方案和挑战展开讨论。结果表明, 能源消耗大幅减少, 生活舒适性得到显著改善。

1:55 pm **Fabian Ochs**
 Ventilation, heating and domestic hot water preparation with decentral compact heat pumps
 For multi-family buildings a complete renovation including conversion to central heating systems is often not possible. Very compact heat pumps are developed that can be integrated into the window parapet or into a prefabricated timber façade. The wall integration has a high potential in prefabrication and leads to an optimal solution for small apartments.

费比安·奥克斯
 集新风, 供暖及生活热水制备一体的分散式紧凑型热泵机组
 多单元建筑的全面翻新, 包括转变成中央供暖系统, 通常是无法完成的。为了将热泵集成到窗栏或预制木墙中, 开发了非常紧凑的热泵。墙板集成在预制上具有非常大的潜力, 也成为小型公寓的理想解决方案。

2:20 pm **Xing Wei**
 Research on air distribution of all-in-one HVAC systems based on Airpak simulation
 One of the necessary conditions for Passive Houses is the environment all-in-one HVAC system with the heat recovery function. This paper simulates the airflow distribution of the environment all-in-one HVAC system by means of Airpak 3.0.16 software.

魏兴
 基于Airpak环境一体机暖通系统气流组织模拟研究
 被动房的必要条件之一是带热回收功能的环境一体机暖通系统。本文利用Airpak 3.0.16软件对环境一体机暖通系统的气流组织进行了模拟。

2:45 pm **Fanxuan Xia**
 Humidity management within ventilation systems dependig on heat recovery mode to avoid too high air-humidity in airducts
 This paper focuses on the influence of heat and energy ventilation units on humidity and cleanliness management of exhaust air ducts in the Longfor Railway City Passive House project. It shows that energy recovery has a better performance than heat recovery, which can reduce the hygiene risks.

夏凡轩
 热回收模式对被动式住宅排风系统湿度和洁净度控制的影响
 本文主要研究龙湖列车新城被动房项目中, 显热和全热回收新风系统对于排风侧湿度及洁净度的影响。研究显示全热回收相比于显热回收有更好的性能, 能够降低卫生风险。

3:10 pm **Berthold Kaufmann, Huijun Jiang**
 Ventilation+AC design layout for apartments in (Chinese) cooling climates
 Highly-efficient heat exchanger and fans are indispensable for highly efficient ventilation unit. Other aspects must be paid attention to as well: good airtightness, well-insulated casing, hygiene through filter, balanced airflow, proper condensate water drain, good accessibility of components and unit for maintenance to exclude performance gap.

江慧君, 贝特霍尔德·考夫曼
 在(中国)寒冷气候条件下公寓的通风+空调设计布局
 高效的换热器和风机对于高效通风系统是必不可少的。其他也必须要关注的方面有: 良好的气密性, 良好的隔热机壳, 通过过滤器保证洁净, 平衡的气流, 合适的冷凝水排放, 有便于维修机组和组件的通道以排除机组性能偏差。

1:30 pm **Martin Aichholzer**
 Use of sustainable building materials on the example of the "House of Learning"
 When the „House of Learning“ was designed, an attempt was made to keep the ecological footprint as small as possible, whereby the client’s socio-cultural and economic aspects play an equally role. There were many small measures and unconventional approaches necessary to pursue these goals.

1:55 pm **Ann-Marie Fallon**
 ‘High-rise’ Passivhaus development in the UK: Carbon impact study
 Agar Grove block is the largest scale Passive House development in the UK. It drove innovative ways of dealing with a masonry construction typical of the UK at scale. A growing awareness of embodied carbon led to research on the next phase comparing the construction and tender material carbon impacts.

2:20 pm **Jason Quinn**
 PHPP and LCAQuick – an integrated energy / Life Cycle Assessment toolset
 Demonstration of the integration between the Microsoft Excel based LCAQuick and PHPP which allows simultaneous calculation of the Life Cycle Assessment (LCA). This allows the designer to optimize the building to minimize energy and multiple environmental indicators simultaneously.

2:45 pm **Jessica Grove-Smith**
 Climate-specific renewable primary energy factors across China
 This paper describes the PER (primary energy renewable) approach based on selected examples from different climate zones in China. It explains how and why PER weighting factors vary for different locations and highlights the implications for combining energy efficiency and renewable energy supply.

3:10 pm **Burkhard Schulze Darup**
 Sustainable supply systems in multi-storey residential buildings
 The paradigm shift from fossil fuel based building services technology to a renewable energy supply makes possible new decentral techniques with a very favourable life cycle assessment. In the next few years, the opportunity must be seized to bring sustainable technology onto the market on an industrial scale.

马丁·艾克霍泽
 以“学习之家”为例，使用生态建筑材料

在设计“学习之家”时，我们试图尽可能减少生态足迹，因此客户的社会文化和经济要素发挥着同等作用。为了实现这些目标，采取了许多小措施和非常规方法。

安-玛丽·法伦
 英国“高层”被动房发展：碳影响研究

Agar Grove大厦是英国最大规模的被动房建筑，其推动产生了处理“砖石建筑(大规模普遍存在于英国)”的创新方法。对隐含碳意识的增强也催生了下一阶段的研究——比较建筑和招标材料的碳影响。

詹森·奎因
 PHPP和LCAQuick—综合能耗及全生命周期的分析工具

演示LCAQuick(基于Microsoft Excel)和被动式房屋规划设计软件包(PHPP)(允许同步进行生命周期评估计算)的集成，允许同时计算生命周期评估(LCA)。这能够让设计者优化建筑，同时降低能耗和多个环境指标。

杰西卡·格罗夫-史密斯
 气候因素决定的可再生一次能源系数在中国的应用

本文基于从中国不同气候区选取的实例，介绍了PER(可再生一次能源)方法，解释了每个PER加权因子在不同地点的变化方式和原因，并强调了能效和可再生能源供应的综合影响。

伯克哈特·舒兹·德瑞普
 多层住宅中的可持续性能源系统

以化石燃料为基础的建筑服务技术模式转变为可再生能源模式，可能会带来新的分散技术，并且还将具备非常有利的生命周期评估(工具)。在未来几年内，必须抓住机遇，将可持续技术以工业化规模推向市场。

1:30 pm **Camille Sifferlen**
 designPH 2.0 – What the new shading algorithms can do for you!
 This paper will explain the differences between the new shading concept of the plugin designPH 2.0 and the current concept of PHPP. It will also explore the potential of these new algorithms via a case study in different climate zones and to finish with, present some future development ideas.

卡米·西非玲
 全新 designPH2.0 —— 新的遮阳算法可以为你做什么!
 本文将解释插件designPH2.0的新遮挡概念与当前PHPP概念之间的差异, 还将通过在不同气候区的案例研究来探讨这些新算法的潜力, 最终提出一些未来的发展思路。

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2:20 pm **Dragos Arnautu**
 designPH 2.0 explained – how to apply the new shading
 In the new designPH shading detection, single or multiple measuring points and different detection solutions can be chosen from, dependent on window area and the shading objects and distance. The paper will explain how to apply the new shading analysis according to different shading situations, so reliable shading factors can be generated for design or certification purposes.

德拉戈斯·阿诺图
 全新 designPH2.0 —— 如何应用新遮阳算法!
 在新的designPH遮阳测试里, 根据窗户和遮阳物的距离, 可选择从单一或数个测量点或使用不同方法进行测试。此报告根据不同的遮阳方法计算准确的遮阳数据, 藉由设计和认证可以提供更可靠数据。

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3:10 pm **Edwin May**
 Using SketchUp as an information modeler for enhancing accuracy and simplifying certification
 Digital workers involved in the creation and management of large datasets need to develop the skills for creating custom tools to help improve accuracy and streamline their work. This session will present a particular case where a simple extension was created in order to help manage building room-level data in a 'Sketchup' 3D model.

爱德文·玛雅
 使用SketchUp创建的信息模型改进准确性并简化认证
 创建和管理大型数据库的技术人员需要培养创建自定义工具的技能, 以帮助提高精确度并简化其工作。此小节将展示一个特别的案例——创建一个简单的扩展工具, 来帮助管理“Sketchup” 3D模型中的建筑物房间级数据。

4:00 pm **Oscar Flechas**
 The Valleyview Town Hall: Energy efficiency in the Canadian subarctic
 The Valleyview Town Hall sets an example of a fiscally and environmentally responsible approach to new municipal buildings in northern Canada. This case study describes the challenges overcome by the municipality and design team to meet the Passive House standard in the Canadian subarctic.

4:25 pm **Thomas Lebinger**
 Passive Houses for active students – providing knowledge about eco-efficient buildings
 It is the aim of the OeAD-Housing Office to convey knowledge about eco-friendly building to future generations and to offer the highest possible standard of living with the lowest environmental impact. This paper highlights two OeAD-Guesthouses in Vienna and Leoben.

4:50 pm **Maria Chiara Failla**
 The impact of thermal bridges in reinforced-concrete multi-family house and high-rise projects
 An evaluation of the heat losses caused by typical thermal bridges in a reinforced-concrete building and their impact on the energy balance was conducted for a 5-storey and a 15-storey building. The analysed thermal bridges can be reduced though flanking insulation, punctual penetrations or thermal breaks.

5:15 pm **Georg Reinberg**
 Realizing the ecological civilisation
 Using typical examples, this presentation shows that through the Passive House concept and energy generation, the goals of an “ecological civilisation” can be successfully achieved today. Subsequent monitoring proved the workability of energy producing and ecological Passive Houses.

5:40 pm **Søren Dietz:** Passive House School in the northern part of Denmark: 7 years’ consumption below PHPP calculated values | Gaps between calculated and measured energy demand of more than 100% have been questioning the value of calculated energy building design [Gram-Hansen,2016]. 7 years of monitoring the Passive House school show no rebound effect. **Graeme Verhulst:** Passive House goes to work: A commercial office case study | The Charter Telecom building, the first Passive House office in Western Canada and first engineered mass timber building in our region, is presented as a case study in applying the Passive House standard to non-residential buildings in the context of North-Western North America. **Dan Whitmore:** Verified successful airtightness approaches in the US and the PNW | Selection of a specific air-barrier system alone, does not guarantee the whole building air-tightness will be Passive House level. Strict quality control is still required during the course of construction. Testing prior to concealing air-barrier components, are vital to ensure successful execution. **Johannes Kreißig:** Similarities of the Passive House and the DGNB-sustainability certification concepts | The Passive House standard stands for healthy, comfortable living and highest energy efficiency. There are parallels to the goals of green building rating schemes like the DGNB, but comparing the output of the certification systems is difficult.

奥斯卡·弗勒查斯
 古景市市政厅：加拿大亚寒带气候区的节能建筑
 关于“如何对财政和环境负责”，瓦利维尤市政厅上为加拿大北部的新市政建筑树立了一个榜样。此案例研究描述了市政府和设计团队在加拿大亚北极地区为满足被动式房屋标准所面临的种种挑战。

托马斯·莱宾格
 主动地学习被动房——高效建筑教学
 主动地学习被动房——高效建筑教学
 OeAD-Housing Office的目标是向后代传播环保建筑的相关知识，并在对环境影响最小的程度上提供最高水平的生活。本文重点介绍了维也纳和莱奥本的两个OeAD宾馆。

玛利亚·基娅拉·法伊拉
 热桥对钢筋混凝土集合住宅及高层项目的影响
 对5层和15层建筑分别进行评估，测试典型热桥在钢筋混凝土建筑物中产生的热损耗及其对能量平衡的影响。分析显示，侧面隔热，准时穿透或热断裂可以减少热桥。

乔治·莱茵贝格
 生态文明发展之路
 此演示使用经典实例表明，“生态文明”目标可以通过被动房概念和能源生产成功得以实现。后续的监测也证明了能源生产和生态被动房的可行性。

Søren Dietz 索伦·迪茨: 丹麦被动房学校：运行七年的能耗低于php计算结果 | 能源需求计算值和测量值之间相差100%的差距让能源建筑设计的价值一直处于质疑声中 [Gram-Hansen, 2016]。被动房学校7年的监测显示没有反弹效应。此外，被动式房屋规划设计软件包 (PHPP)标准天气数据仍“安全”。 | Graeme Verhulst 格雷姆·维尔豪斯特: 达到被动房标准：一个商业办公案例研究 | 单单选择一个特定的空气屏障系统，并不能保证整个建筑物的气密性都在被动房标准之内。施工过程中仍然需要严格的质量控制。在隐藏隔气组件之前进行测试对于确保成功执行至关重要。 Dan Whitmore 丹·惠特莫尔: 美国及西太平洋区域气密性建筑 Johannes Kreißig 约翰内斯·克里茨基: 被动房认证与DGNB可持续认证的概念相似性 | 被动房标准代表着健康、舒适的生活和最高的能源效率，与DGNB等绿色建筑评级方案的目标有相似之处，但比较认证系统的输出存在一定困难。因此，对认证系统之间的协同效应进行了研究分析。

海报
 POSTER

4:00 pm **Kong Lingchen**
Key points of Passive House design and construction control from developer's perspective –Take Gaobeidian Railway-City project as an example
In Gaobeidian Train New Town Project, Longfor Group has summarized a set of control points for the Passive House design through continuous exploration, hoping to provide some guidance for the Owner's management of Passive House projects in the future.

4:25 pm **Zhang Shaobiao**
Technology and application analysis of prefabricated ultra-low-energy buildings in cold areas
The heat transfer coefficient of prefabricated sandwich insulation wall board can meet the requirement of less than $0.15 \text{ w}/(\text{m}^2 \cdot \text{K})$ when the anchor made of GFRP material are placed in the middle with insulation of 200~300mm.

4:50 pm **Xianghui Pan**
German Passive House technology "Chinese re-innovation"
With the development of China's construction industry and the popularization of new national codes, more and more Passive Houses will be built in different climatic zones in China. As more and more experienced professionals continue to work in the field of Passive Houses, there will be more new directions and better localized technical solutions for the re-innovation of Passive Houses in China.

5:15 pm **Mou Yu**
Let Passive House construction become "non-passive"
This paper demonstrates the influences of design on economy of the Passive House projects with the project cases, explains the misunderstanding to the Passive Houses and it's design, and calls on everyone to regard the Passive Houses rationally.

5:40 pm **Shuo Li**: Research on Passive House thermal bridge free design - taking the Passive House residential extension and demonstration community project in Sino-German Ecopark as an example | **Qi Li**: Discussion on design of passive ultra-low energy building based on performance measurements | The passive ultra-low energy building can improve the building energy-saving performance in China. However, the relevant standards of design and construction are distempered. Based on the technical standards at home and abroad, the practice and performance test of passive ultra-low-energy buildings in Shandong Province will be discussed. **Funan Zhang**: Analysis of thermal bridges of door and window openings in the walls of Passive ultra-low energy buildings | **Wen Tao**: Analysis for outdoor air system heat recovery of commercial Passive House | **Yu Chuai**: PHI certified steel precast construction systems

孔令晨
甲方视角下的被动房建筑设计管控要点
龙湖集团在高碑店列车新城项目中, 经过不断探索, 总结出一套被动式建筑设计管控要点, 以期对未来被动式建筑项目的甲方管理工作具有一定的指导意义。

张少彪
装配式超低能耗建筑发展现状及应用浅析
本文结合国内外装配式超低能耗建筑的发展背景及现状, 针对中国北方寒冷地区, 在对预制夹芯保温墙板满足外墙传热系数小于 $0.15 \text{ w}/(\text{m}^2 \cdot \text{k})$ 的条件下, 对GFRP材质和不锈钢材质的拉结件进行了研究分析, 并对不同材质的拉结件进行比选建议, 为国内工程提供了借鉴。

潘向辉
德国被动房技术 "中国式再创新"
被动房技术的全球化推广需要考虑到建筑属地化, 考虑建筑所在地的居住需求, 气候特点, 建筑文化等因素, 根据我们在中国不同气候区已经竣工及在建的近百万平米被动房项目的实践经验, 我们整理出了一套适合在中国各个气候区建造被动房项目的 "德国被动房技术中国式创新" 方案。其 "中国式创新" 主要体现在下面几点: 1) 中德建筑特点不同带来的创新2) 中德居住需求不同导致的创新3) 中德气候不同带来的技术创新4) 中国南方潮湿地区的除湿解决创新 5) 中德项目开发模式的不同带来的PHI认证创新。

牟裕
让被动房的建造变得 "不被动"
本文以项目实例论证设计对被动房项目经济性的影响, 解释对被动房本身及被动房设计理解的误区, 呼吁大家理性的看待被动房。并提出节能潜力的发掘、全专业的配合及节能贡献率等多个角被动房设计过程中需要关注的重点, 并以此强调了设计在被动房项目中的影响力与重要性。

Shuo Li 李硕: 被动房无热桥设计研究--以中德生态园被动房住宅推广示范小区项目为例 | 无热桥设计作为被动房设计的重点要素, 对建筑的节能效率有重大影响。文章以中德生态园被动房住宅推广示范小区项目为例, 针对项目的出屋面排水立管等几何热桥特殊点, 对其设计、计算、施工等问题进行针对性的分析和优化措施, 为今后无热桥设计提出更多的方法和参考
Qi Li 李琪: 基于性能实测的被动式超低能耗建筑设计若干问题的探讨 | 被动式超低能耗建筑可以提高中国的建筑节能性能。但是, 相关设计和施工标准尚未健全。将根据国内外技术标准, 探讨山东省被动式超低能耗建筑的做法和性能测试。
Funan Zhang 张福南: 门窗安装在不同墙体结构最佳保温位置的性能研究 | 门窗安装位置的选择对整窗的传热系数有着至关重要的影响, 如果被动式超低能耗建筑门窗安装选择位置不当, 就可完全抵消设计师对提高门窗本身的保温性能所做的优化设计[1]。我们根据软件fixo pro 8计算模拟窗户洞口的线传热系数, 得出门窗与不同墙体结构之间线传热系数最小的窗户安装位置和影响门窗洞口线传热系数的决定性因素。
Wen Tao 文韬: 被动房商业建筑新风热回收分析 |
Yu Chuai 揣雨: 被动房研究所认证的钢结构装配式建筑系统

海报
POSTER

4:00 pm **Franz Freundorfer**
 Passive House Building envelope in all climatic regions – solutions for the practice
 The Passive House should be marketed as one single product. Convincing decision makers at the very beginning of any planning process of the cost-efficiency of the Passive House standard results in success. The Passive House should also be produced as one single product, as it is more than the sum of its components.

弗朗茨·弗罗因多费尔
 适用于所有气候区域的被动房外围护结构——可实施性的解决方案
 被动房应作为单一产品销售。在任何规划过程的一开始, 如果能使决策者相信被动房标准的成本效益, 就能取得成功。被动房也应作为单一产品生产, 因为它超过了其组成部分的总和。

4:25 pm **Ludwig Rongen**
 Prefabricated Passive Houses in modular construction
 The prototype of a highly energy-efficient house with Passive House components, developed in prefabricated modular construction for the warm and humid climate of Quanzhou's summer is to be produced in industrial mass production using robotic technology.

路德维希·隆恩
 装配式被动房模块化建造
 为了适应泉州夏季温暖潮湿的气候, 采用预制模块化结构开发了一种使用被动房组件的高效节能房屋模型, 将在工业化大规模生产中采用机器人技术生产。

4:50 pm **Soraya Lopez**
 Uptake of native certified Passive House components by the Chinese passive construction sector – a gap analysis
 Recent years have seen widespread adoption of Passive House in China, both for buildings and construction products. This paper examines which locally manufactured construction systems, windows and HVAC units are being used in Chinese developments, with a view to spotting trends and opportunities.

索拉雅·洛佩兹
 中国本土被动房建筑行业认证组件制造商的飞跃——发展分析
 近年来, 中国在建筑物和建筑产品上都普遍采用了被动房技术。本文将考察在中国发展中使用了哪些本土制造的建筑系统、窗户和暖通空调装置, 以期发现趋势和机遇。

5:15 pm **Xiaodong Xia**
 Prefabricated, thermal bridge-free light steel and light slurry walls
 This paper introduces the structure and process of fabrication and installation of prefabricated, thermal bridge-free light steel and light slurry walls, and explains how such series walls are widely applicable to enclosure structures of various low-rise and multi-story prefabricated Passive House buildings.

夏晓东
 预制轻钢轻浆料无热桥墙体
 本文介绍了预制轻钢轻浆料无热桥墙体的构造和制作安装工艺, 并说明了该系列墙体如何广泛适用于各类低多层装配式被动房建筑围护结构。

5:40 pm **Marcus Strang**
 Material benefits and risks of cross laminated timber for Passive House construction in tropical climates
 Climate-appropriate design changes for Passive House that employs Cross Laminated Timber in Australian hot-humid climate using a well-received case study. Achieved through assessment of design solutions and hygrothermal analysis to inform an optimised CLT envelope assembly.

马库斯·斯特朗
 正交胶合木在热带地区被动房应用的优势及风险
 正交胶合木在热带地区被动房应用的优势及风险
 根据气候, 在被动房中设计合适的变化——在澳大利亚炎热潮湿的气候中, 采用交叉层压木材而广受欢迎的案例研究。通过评估设计解决方案和湿热分析实现优化的CLT封套装配。



4:00 pm

Dragos Arnautu

Lessons from an EnerPHit industrial building in Sri Lanka

This paper will tell the success story of an outdated factory in Katunayake, Sri Lanka, that has been retrofitted and turned into an EnerPHit certified garment manufacturing facility by a remotely collaborating team of Jordan Parnass Digital Architecture, Steven Winter Associates and the Passive House Institute.

德拉戈斯·阿诺图

斯里兰卡既改被动房项目的经验教训

本文讲述了一家位于斯里兰卡市卡图纳亚克的落后工厂的成功案例，该工厂由约旦帕纳斯数字建筑公司 (Jordan Parnass Digital Architecture)、史蒂文温特联合公司 (Steven Winter Associates) 和被动房研究所的远程合作团队进行改造，转变成一家经过EnerPHit认证的服装制造厂。

4:25 pm

Milica Tumbas

Old Quad – Significant heritage building retrofitting to Passive House EnerPHit standard

The Old Quad project is the first where the EnerPHit standard has been applied to a significant heritage building in Australia. The application of EnerPHit standards in this heritage building delivers a balance between the heritage values and achieving thermal comfort and economic efficiency.

米立卡·托姆巴斯

"老宅" ——以被动房既改建筑标准修复的重要历史保护建筑

"老宅" 项目是被动式节能改造标准首次被应用于澳大利亚的重要历史建筑中。此次应用在历史文物价值与实现热舒适性和经济效率之间实现了平衡。

4:50 pm

Michael Ingui

Combining a systematic approach with final design benefits for Passive House retrofits

Engine 16 is an adaptive reuse of a historic firehouse converted into multifamily residences with a public community facility. It's one of 7 Passive Houses Baxt Ingui has under construction. We're excited to share the details, decisions, and the systematic approach used on this unique project.

迈克尔·因古伊

将建筑改造的系统方法与改造设计的优势相结合

发动机16是对历史消防站进行合适的再利用，将其转化为一个具有公共社区设施的多单元住宅。它是7个被动房之一，Baxt Ingui正在建设中。我们很高兴和您分享这个独特项目中的细节、决策和使用的系统方法。

5:15 pm

Xing Zhao, Hsuanyin Peng

Building airtightness and Chinese craft – the Ao'ni Courtyard project in Songyang, China, as an example of how traditional timber construction can achieve EnerPHit

This EnerPHit project shows how to realize the building airtightness, and to substantially improve its thermal performance, prolong the service life of main structures, and tackle the challenge for comfort and energy conservation, protection and reuse of buildings in traditional timber structure

赵星, 彭宣颖

建筑气密与中国工艺——以松阳畚呢院子传统木结构被动房改造项目为例

吾方(北京)建筑科技有限公司在松阳畚呢院子中国传统木结构三合院被动房改造项目中，从构造入手更新传统民居建筑外围护结构的做法，在传统建造方式的基础上创新应用思家SIGA产品实现满足被动房标准的建筑气密，从而大幅提升建筑热工性能，延长主体结构使用寿命，并达成传统木结构建筑舒适度与节能、保护与再利用的挑战。

5:40 pm

Zhiyong Tian: Retrofitting according to the EnerPHit Standard in cold climate – components | The object of retrofitting is one of the smaller typical Norwegian wooden houses from the 60s. Optimal packages of measures, including mechanical components, were determined using the Passive House Planning Package according to the EnerPHit criteria for energy retrofit with the energy demand method. **Søren Dietz:** Final renovated social housing to PH standard with district heating, CO₂ emissions of future energy systems | Prim/End factor in Building code DK2015 and DK2020 are unrealistic. Renovation to NZB as Toftebo Case and fossil free district heat by 2035 and 2050 can fulfil low emission demand. Prim/End 2035 and 2050 are calculated to 0,88 and 0,97. Prim/End wind elec. drops from 2,5 to 1,13 in 2050.

海报
POSTER

Zhiyong Tian 田志勇:

寒冷气候下改建被动房项目——组件 | 改造对象是一座60年代挪威典型小木房。根据被动式节能改造标准并借助能源需求法，使用被动房规划包确定包括机械部件在内的最佳工具方案。

Søren Dietz 索伦·迪茨: 社会保障性住房改造达到PH标准，住区未来供热总二氧化碳排放量 | 建筑规范DK2015和DK2020中的Prim / End因素是不现实的。到2035年和2050年，作为Toftebo Case和无化石区域供热的NZB改造可以满足低排放需求。 Prim / End 2035和2050计算值为0,88和0,97。 Prim / End 风电到2050年将从2,5降至1,13。

4:00 pm **Peng Xiao**
 Fume exhaust and air-makeup and exhaust system in kitchens of Passive Buildings
 This paper, with Qingdao Sino-German Ecopark as a case, carries out research on the differences between the fume exhaust and air-makeup and exhaust systems in kitchens of Chinese and German Passive Houses, and optimizes the scheme for the fume exhaust and air-makeup and exhaust system in the kitchen of Passive buildings proposed by PHI from the perspective of use of Chinese kitchens.

4:25 pm **Haifeng Guo**
 Study of kitchen HVAC design complications and overall ventilation systems in Chinese Passive House residential buildings. This paper studies the characteristics of Chinese style kitchen and HVAC design schemes. In combination with the technical points, the paper analyzes the technical difficulties in HVAC design and ventilation system in the kitchen of the Passive House, and proposes four schemes.

4:50 pm **Zhao Yang**
 Discussion of selfbalance oil fume purifier in passive room kitchen
 Self-balance Oil Fume Purifier (SOFP) will not pump out the indoor air to outdoors when removing fume thoroughly. As a result, SOFP technology can fulfill the requirements of low energy consumption in Passive House.

5:15 pm **Stefan Schirmer**
 Ventilation system in Chinese Passive House: Challenges with integration of WC and kitchen in heat recovery
 This paper identifies various challenges in the Chinese market and shows that they can only very slowly be improved by know-how transfer, steadily improved quality of products and control of design, energy calculation and construction quality.

5:40 pm **Sichen Sheng, Berthold Kaufmann**
 Extractor hoods in kitchens in energy efficient buildings
 Extractor hoods have the task of reducing air pollution caused by cooking. The paper presents the results of a research project on cooker hoods in living kitchens and derives recommendations for Passive Houses.

肖鹏
 被动式居住建筑内厨房排油烟与补风排风系统
 由于国情、人们的生活习惯不同以及建筑的形式存在差异, 在某些细节上德国的被动房技术能否本土化? 这是一个值得探讨的问题。本论文以青岛中德生态园被动式示范小区为案例, 就中国与德国被动房内厨房排烟与补风排风系统的差异进行研究, 从中国厨房使用角度出发, 优化PHI提出的被动式建筑内厨房排烟与补风排风系统的方案。

果海凤
 被动房住宅内中式厨房的暖通设计难点及通风系统研究
 本文以正在设计和准备申报德国PHI认证的首开通州共有产权房被动房项目为计算模型, 研究了中式厨房特点及暖通设计方案。结合被动房技术要点, 分析了被动房内厨房的暖通设计和通风系统的技术难点, 并提出了四种解决方案。通过PHPP软件, 计算了四种通风补风方案对负荷及能耗的影响, 探寻被动房内中式厨房最合理、最经济、最节能的暖通设计方案。

杨肇
 论零和式油烟净化器在被动房厨房中的应用
 在清除油烟时, 零和式油烟净化器(SOFP)不会将大量室内空气抽出室外。零和式油烟净化器技术符合可被动房低能耗的标准。

石特凡
 被动房通风系统: 厨房与卫生间一体化热回收的挑战
 本文分析了中国市场面临的各种挑战, 指出只有通过技术转让、稳步提高产品质量、控制设计、能源计算和施工质量, 才能非常缓慢地改善这些状况。

盛巴宸, 贝特霍尔德·考夫曼
 节能建筑厨房中的油烟机
 抽油烟机的任务是减少烹饪过程中造成的空气污染, 该报告介绍了关于住宅厨房抽油烟机的课题研究成果, 并提出了针对被动房的相关建议。



11:30 am Christopher Higgins
 City process for ensuring projects target and achieve Passive House certification
 Vancouver has made great progress to 2 million square feet of Passive House in permitting or under construction. This presentation gives an overview of processes Vancouver has gone through to encourage Passive House projects. We will show other cities how they can lead with Passive House focused policy.

克里斯托弗·希金斯
 为确保项目目标并取得被动房认证的城市化进程
 温哥华正着手建造约200万平方英尺的被动房计划。此报告将针对此项目汇报，并分享如何于其他城市推动被动房相关政策。

11:55 am Ralf Bermich
 Passive House city district Heidelberg-Bahnstadt – experience and evaluation
 The City of Heidelberg is committed to ambitious climate protection and sustainable development. The new city district Bahnstadt is developed on the area of the former freight yard. With an area of 1.16 square kilometer Bahnstadt is the first quarter of this dimension entirely built in Passive House standard.

拉尔夫·贝尔米西
 海德堡被动房城市街区 —— 列车新城项目经验及评估
 海德堡市耗资巨大致力于气候保护和可持续发展。新城区 Bahnstadt是在原有货运车站的旧址上开发出来的。占地面积1.16平方公里，Bahnstadt是完全采用被动式房屋标准建造的世界最大的被动房居住区。

12:20 am Jürgen Schnieders
 Implementation of the Passive House standard in social housing in Mexico, lessons learned
 The LAIF Component of the Ecocasa Program ran until 2018 in Mexico, with the aim of reducing CO₂ emissions in social houses by 80% through the cost-efficient implementation of the Passive House standard. This paper includes the main outcomes and the lessons learned during implementation.

尤尔根·施尼德斯
 墨西哥经济适用房的被动房标准施行及经验
 墨西哥Ecocasa项目的LAIF部分一直持续至2018年，目标是通过经济高效地实施被动房标准，将社会住房中的二氧化碳排放量减少80%。本文概述了其重要成果和实施过程中的经验教训。

12:45 pm Han Fei
 Large-scale certified Passive House development in Qingdao, China – demonstrative residential project settles in Sino-German Ecopark
 Passive Houses reduce greatly the dependence on fossil fuel energy while providing high indoor comfort. The innovative large-scale development of Passive House residences in the Ecopark Qingdao can abolish the district heating and reduce infrastructure investment, in this way the passive house residences will save a lot of energy and emit less CO₂ and dust pollution, contributing to the environment quality.

韩飞
 中国青岛大规模被动房开发认证
 被动房大大降低了对化石燃料能源的依赖性，同时提供了高度舒适的室内环境。在青岛生态园内进行大规模被动式住宅创新开发，可以消除中央供暖、减少基础设施方面的投资，由此节省大量能源，减少二氧化碳和粉尘的污染，并提升环境质量。

1:10 pm Günter Lang
 The reduction by 50% of the energy demand until 2050
 It's possible to reduce the energy demand to 50% of the whole building sector until 2050, if actions are taken consequent and immediate, like a field analysis of two city areas shows. Therefore, the focus must be put on the best available building standards, both for new buildings and for refurbishments.

君特·朗
 2050年减碳50%：比较三个城市和农村的被动房目标区域
 如果能够及时采取行动，就像两个城区的实地分析所显示的那样，到2050年整个建筑行业的能源需求将减少50%。因此，对于新建筑和翻新工程而言，重点都必须放在最佳建筑标准上。

11:30 am	<p>Susanne Winkel Quality assurance through further training</p> <p>For the past 12 years the PHI, together with more than 100 partner organisations, has been providing training and further education in the field of highly energy efficient construction around the world. Since 2018, this program has been modularized and gradually expanded to cover the entire planning and construction process of highly energy efficient buildings.</p>	<p>苏珊娜·温克尔 通过进修保证良好的素质</p> <p>在过去的12年中, 被动房研究所与100多个合作组织一起, 一直在全球提供高效节能建筑领域相关的培训和继续教育。自2018年以来, 该计划已经完成模块化, 并逐步扩展到整个高能效建筑的规划和建设过程中。</p>
11:55 am	<p>Daxiong Si The significance of Passive House education in Chinese colleges and universities This paper analyzes the characteristics of the Passive House course and the way of talent cultivation of Hefei University, and provides a case for the development of Passive House in Chinese universities. In the future, the mode of cultivation of the passive house technicians in which course, experiment and project practice are combined will be attempted.</p>	<p>司大雄 被动房课程在中国高校开展的意义</p> <p>由于被动房在中国的发展, 培养更多的被动房技术人员是迫在眉睫的事情, 高等教育环节的被动房课程教学未来将成为被动房技术人才培养的一个重要组成部分。本文分析了合肥学院被动房课程的特色、人才培养方式, 为被动房在中国高校方面的发展提供了案例。未来将尝试课程、实验以及项目实践结合的被动房技术人才培养方式。</p>
12:20 am	<p>Enrico Bonilauri Re-Learning Training: The need and potential for regional and trades-specific training Emu Systems' curriculum covers CPHT learning objectives in North American conditions, from Florida to Alaska. Responding to participants' requests, Emu also added a workshop: at its core are the Emu Passive Pods, micro Passive Houses including exercises designed around the CPHT learning objectives.</p>	<p>恩里科·伯尼拉瑞 再学习培训: 区域及行业性培训的需求和潜力</p> <p>Emu Systems的课程涵盖了从佛罗里达到阿拉斯加的北美条件下的CPHT学习目标。响应参与者的要求, Emu还增加了一个研讨会: 其核心是Emu Passive Pods, 微型被动房, 包括围绕CPHT学习目标设计的练习。</p>
12:45 pm	<p>Wolfgang Frey Thermal comfort in summer versus large windows The global spread of the Passive House and climate change make summer comfort increasingly important. With thoughtful design, multifunctional façades and structural shading, planners can develop intelligent, economical and energy efficient buildings. This paper shows examples from Germany and China.</p>	<p>沃尔夫冈·弗莱 大面积玻璃窗对夏季舒适度的影响</p> <p>被动式建筑目前正在世界各地的不同气候带建造发展, 由于气候变化和全球变暖的影响, 温带气候区的规划者也面临降温和除湿的挑战, 以确保舒适和卫生的条件。节能建筑始于智能的设计, 巧妙安排功能区域, 将夏季的热量保持在建筑物外。尤其是, 结构遮蔽是降低建筑物中冷却符合并确保舒适度的合适方式。当这些结构方面的措施巧妙的与可再生能源(尤其是光伏能源)相结合时, 就会产生高效智能和经济的解决方案。本文介绍了一些德国和中国项目的案例。</p>
1:10 pm	<p>Huifang Zhang Design strategies for thermally broken Passive House details This paper introduces definition and influences of thermal bridges, and explains the importance of anti-thermal bridge design in the Passive House projects. The paper also shares the methods and ideas for handling thermal bridges from design of nodes, calculation of thermal bridges and cost economy to construction communication in combination with the domestic project experience and examples.</p>	<p>张慧芳 被动房断热桥节点的设计思路与方法</p> <p>本文介绍热桥的定义与影响, 讲解断热桥设计在被动房项目中的重要性。并结合国内项目经验与实例, 从节点设计、热桥计算、成本经济性到施工沟通等方面分享对热桥处理的方法及思路。</p>

11:30 am **Ernst Schriefl, Berthold Kaufmann, Dawid Michulec**
Office and residential Passive House building in Zhuozhou, China – focus on monitoring
As of today, not many Passive House buildings in China have been monitored so far. But the information from measurements are essential to know what the buildings behavior is in reality and if the users are happy with this new building conception and living experience there. This article outlines the data and the experience gained from ZhuoZhou office building.

厄恩斯特·施里夫, 贝特霍尔德·考夫曼, 大卫·米舒列克
中国涿州办公及住宅被动房项目 —— 关注监测

在中国, 时至今日对被动房建筑进行的跟踪调查并不多。但是, 测量获得的信息对于了解建筑物的实际表现以及用户是否对这种新的建筑概念和生活体验感到满意至关重要。本文概述了从涿州办公楼获得的数据和体验。

11:55 am **Andrea Frisque**
The Wood Innovation Research Laborator at UNBC, Prince George, BC, Canada
The Wood Innovation Research Lab, certified Passive House in 2018, is a small university laboratory with an industrial workshop with large equipment for developing wood products, a small office component, and one seminar room. It achieved exceptional airtightness with a final test result of 0.07 ac/h.

安德里亚·弗瑞斯科

加拿大乔治王子城不列颠哥伦比亚大学. 木材创新研究实验室

木材创新研究实验室是一个小型的大学实验室, 于2018年获得被动房认证, 拥有一个工业厂房, 配备了用于开发木材产品的大型设备、一个小型办公室和一个会议室。该实验室达到了非常高的气密性, 最终测试结果为0.07 ac/h。

12:20 am **Marine Sanchez**
Strategies for improving energy efficiencies in large institutional kitchens
The University of Victoria's PH student residences is among the few projects aiming to reach the standard with a fully-equipped commercial kitchen. The design adopts a wide range of measures, detailed and assessed in PHPP, to reduce the high-energy intensity embedded in the kitchen operation.

马林·桑切斯

提高用于机构的大型厨房的节能政策

维多利亚大学的被动房学生宿舍, 是少数几个旨在通过设备齐全的商业厨房达到标准的项目。该设计采用了广泛的措施, 在被动式房屋规划设计软件包 (PHPP) 中进行了细化和评估, 以减少厨房操作中存在的高能量强度。

12:45 am **Andrew Peel**
Shifting gears: A Passive House car dealership in the making
This paper explores the challenges and solutions of the world's first Passive House Car Dealership. Strict requirements, a tough climate, and operational realities forced the design team to continually re-evaluate proposed solutions. What resulted is an innovative building that will serve as a beacon for Passive House buildings around the world.

安德鲁·皮尔

换挡: 一家正在成长的被动房车经销商

本文探讨了世界上第一个被动房车经销的挑战和解决方案。严格的要求、艰难的环境和运营现实迫使设计团队不断重新评估提出的解决方案。最终才有了, 作为世界上被动房建筑灯塔的创新建筑。

1:10 pm **Jessica Grove-Smith**
Passive House guidelines for indoor swimming pools
Based on in-use experience of the first completed Passive House indoor swimming pool projects and supplementary research, the Passive House Institute has released a comprehensive report and general guidelines of recommended efficiency measures for indoor pools. This contribution summarises the main findings.

杰西卡·格鲁夫史密斯

被动房游泳馆设计指南

根据首批已建成且正在使用的被动房室内游泳池项目的实际效果以及后续进行的研究, 被动房研究所发布了一项综合报告, 并对所建议的室内泳池的增效措施提出了总体指南。上述报告及总体指南对所发现的情况进行了总结。

11:30 am **Jesus Menendez**
Keeping overheating cool

This paper presents passive and active cooling strategies for Passivhaus buildings in warm and hot climates. Passive strategies include the orientation and geometry of the building, windows, shading devices, thermal mass, dense insulation and summer ventilation. Active HVLS fans are not considered within the PHPP but can improve the indoor climate with little energy input.

杰西·梅南德斯
预防过热

本文呈现了温暖和炎热条件下被动房建筑的被动和主动冷却策略。被动策略包括建筑物的朝向和几何形状、窗户、遮阳设备、热质量、密集隔热和夏季通风。有源HVLS风扇不在被动式房屋规划设计软件包 (PHPP) 考虑范围内, 但可以通过很少的能量输入改善室内环境。

11:55 am **Miwa Mori**
Measured data of the Passive Town Phase 3 in Kurobe

Apartment units of the Passive Town Phase 3 Building J with EnerPHit cert. have been monitored for a year. Its energy consumption and indoor climate shows that cooling energy would not increase, if the air-conditioner is running constantly.

森美和
黑部市被动房村三期监测数据

被动房城镇3期J楼的公寓单元, 为被动式节能改造标准所认证, 且受监控一年。它的能耗和室内环境表明, 如果空调一直在运行中, 冷却能源将不会增加。

12:20 am **Marco Filippi**
Pilot Passive House in UAE – Results from monitoring

An important feature of the very first PH in UAE is the monitoring system that allows to verify crucial parameters, such as the indoor quality and the energy consumption. The article shows the results from the monitoring over 2017/2018, comparing designed and measured values and identifying the chances for improvement for the PH in the very hot climate.

马尔科·菲莉比
阿联酋的被动房试点项目 —— 监测结果

阿联酋首个被动房具有一个重要的特征: 监测系统可以验证关键参数, 如室内质量和能耗。本文展示了2017/2018年监测的结果, 比较了设计值和测量值, 并发现了被动房在炎热环境中应用的改进机会。

12:45 am **Georgios Dermentzis**
Three years monitoring analysis of two multi-story net zero energy buildings

Two new multi-family Passive Houses that aim to achieve net zero energy building (NZEB) standard are monitored in Innsbruck. Monitoring results for three years are presented and discussed. The energy performance is also compared with the one calculated with PHPP. The importance of quality assurance control e.g. with monitoring is highlighted.

乔治·德门子
两个近零能耗住宅的三年监测分析

在因斯布鲁克, 两座新的计划实现净零能耗建设 (NZEB) 标准的多单元被动房一直在检测中。三年的监测结果被呈现出来并进行讨论, 针对能量性能, 与被动式房屋规划设计软件包 (PHPP) 的计算结果进行了比较。质量监控保障的重要性, 如监控, 受到了强调

1:10 pm **Liu Bin, Berthold Kaufmann**
Qingdao PHTEC monitoring within two years of operation

Monitoring during two years of operation of the Qingdao PHTEC building shows that optimization of the building service systems operation strategies could improve the energy efficiency and keep the average indoor temperature (23°C) and relative humidity (48%) at a constant first class comfort level.

刘斌, 贝特霍尔德·考夫曼
青岛生态园技术中心两年运行监控

对青岛PHTEC大厦两年运行情况的监测表明, 优化建筑服务系统运行策略可以提高能效, 使室内平均温度 (23°C) 和相对湿度 (48%) 保持在恒定的一级舒适水平。



11:30 am **Sichen Sheng, Soraya Lopez**
Component Award 2019 – Window of the future

The Award has been accomplished successfully. 23 companies from 12 countries took part with 31 products. The jury awarded 10 regular and 3 special prizes. High life cycle cost as well as CO₂ savings are possible with Passive House windows. Care has to be taken of thermal bridges caused by shutter housings. But the award showed excellent solutions.

盛巳宸, 索拉亚·洛佩兹
2019年组件奖——未来之窗

该奖项颁发已圆满完成。来自12个国家的23家公司参与了31种产品的生产。评委会颁发了10个常规奖和3个特别奖。使用被动房窗户可以大量节省生活成本, 降低二氧化碳排放, 但必须注意百叶窗外壳引起的热桥。该奖项展示了出色的解决方案。

11:55 am **Franz Freundorfer**
20 years of development work on the Passive House window, a cool story

Wolfgang Feist's definition of criteria for windows usable in Passive Houses has changed the window world. The smaller wood window producer followed the findings of PHI scientists as the first group. The result is, that PH window quality is present as the highest level in beauty, sustainability and energy-plus cost efficiency.

弗朗茨·弗罗因多费尔
20年的被动窗开发工作——一个很酷的故事

沃尔夫冈·费斯特对被动窗可用标准的定义改变了窗户世界。小型木窗生产商作为第一个群体, 接受了被动房研究所科学家们的发现。结果, 被动窗的质量, 无论是在美观性、可持续性、能耗还是在成本效率上, 都处于最高水平。

12:20 am **Hagen Weber**
Passive House certified curtain walls / The difficult relation between demand & reality

The requirements on Passive House certified windows for cool temperate climate regions are versatile. Besides the required total U value and the corresponding reference, glazing must also reach a value of $U_{w,installed} \leq 0.85 \text{ W/m}^2\text{K}$. And it's not only about the total U-value. All the specifications of the Passive House certificates must be fulfilled.

哈根·韦伯
被动房认证幕墙系统 / 需求与现实的矛盾关系

寒温带气候区的被动房认证窗户需满足多方面的要求。除了所要求的总U值和相应的参考U值外, 安装玻璃的UW值也必须达到 $\leq 0.85 \text{ W/m}^2\text{K}$ 的标准。不仅要满足总U值, 还必须满足被动房认证的所有规范。

12:45 am **Roman Krame**
Reducing structural thermal bridge effects – a best practice study on Passive House projects in China

Established European thermal break solutions must be assessed regarding their compliance with Chinese building codes. Available systems for balconies and air-condition slabs (but also façade fixings) have already been successfully evaluated and approved by certified national test centres in China.

罗成
减少结构性热桥效应——中国被动房优秀项目研究

公认的欧洲隔热解决方案, 必须根据是否符合中国建筑规范对其进行评估。可用于阳台和空调板(以及外墙固定件)的系统, 已经成功通过中国国家认证检测中心的评估和审核。

1:10 pm **Soraya Lopez**
Passive House Institute certification of transparent and opaque building envelope components

Comprehensive overview of the current level of development of Passive House components globally. Presentation of the underlying principles of the Components Certification System, going. Brief overview of the standing certified components and outlook to current innovation challenges.

索拉亚·洛佩兹
被动房透明及非透明外围护结构认证

全面概述全球被动房组件当前发展水平, 介绍了组件认证系统的基本原则。简要概述了现有的已认证组件, 并展望了当前的创新挑战。



2:30 pm **Laszlo Lepp**
SINFONIA – selection of outcomes and best practice examples from Innsbruck
A selection of implemented best practice solutions for energy efficient and affordable measures in large scale renovation buildings in Innsbruck will be shown in this presentation. Furthermore, an overview of the outcomes of SINFONIA will give an insight into this research project.

2:55 pm **Martin Huber**
Refurbishment of the Primary School and Gymnasium, Ziersdorf
A primary school and gymnasium built in the 1970s were substantially refurbished in terms of energy and function in the space of only 13 months. Thanks to cooperative project-management from the outset, a 94% improvement in energy performance was recorded while the building was in operation.

3:20 pm **Wolfgang Streicher**
Results of deep renovation of two Austrian schools
In the EU-project SINFONIA, two public schools in Innsbruck, Austria, built 1960 and 1955, were deeply refurbished and equipped with a ventilation system. A one year measurement campaign shows that all comfort criteria were met and the energy consumption after refurbishment was lower than predicted.

3:45 pm **Bernd Steinmüller**
From Experimental to Passive House Plus – some 4-decade insights
The oil crisis 1973 triggered energy and first Passive House research some 4 decades ago. The author, one of the “Passive House Pioneers”, is still active in the field and will share his insights gained on the road from early Experimental to latest Passive House Plus projects in new and old buildings.

4:10 pm **Helmut Schöberl, Ernst Schriefl**
EnerPHit renovation of a residential building in Vienna with preservation of its historical façade
In Vienna (Austria) a 19th century residential building was renovated after a gas explosion to a very good energetic standard (EnerPHit). The facades were insulated with hemp and aerogel plaster. As a result the external appearance of the historic building could be restored.

拉斯洛·莱普
SINFONIA 项目——因斯布鲁克的优秀案例节选

本演示文稿将介绍在因斯布鲁克的大型翻新建筑中选择实施的节能和廉价措施的最佳实践解决方案。此外，SINFONIA成果概览将会为该研究项目添加一个新的洞察视角。

马丁·胡贝尔
齐斯多夫小学和健身馆的翻新

仅耗时13个月，对一所建于1970年代的小学和体育馆，进行了彻底的能源和功能翻新。由于从一开始就进行了合作项目管理，在建筑运营期间，能源性能提升了94%。

沃尔夫冈·施特莱彻
两所奥地利学校深度改造成果

在欧盟项目SINFONIA中，奥地利因斯布鲁克有两所公立学校分别建于1960年和1955年，对它们进行了深度改造并配备了通风系统。一年后的测量活动表明，所有舒适指标均达标，且翻新后的能耗低于预期。

贝恩德·斯坦米勒
从实验到实现——40年优级被动房之路

大约40年前，1973年的石油危机引发了针对能源和第一个被动房的研究。该作者，也是“被动房先锋”之一，仍然活跃于该领域。他将分享他这一路，从早期的实验到最新的“新旧建筑被动房投资组合”项目中所获得的一些洞察。

赫尔穆特·旭博, 厄恩斯特·施里夫

以EnerPHit标准改造 - 维也纳历史保护区居住建筑的外观

在维也纳(奥地利)，一座19世纪的住宅楼在瓦斯爆炸后进行了改造，达到了非常好的能量标准(EnerPHit)。外墙用大麻和气凝胶膏隔热。因此，历史建筑的外观可以恢复。

2:30 pm **Pablo Carranza Navarro, Clara Lorente Martin**
Basa I, Passive House multi-family dwelling in Zaragoza (Spain)

The paper covers the main passive design strategies that have been chosen to achieve energy balance in adverse climate conditions, describing how the Passive House five principles have been applied and the strategies used to simulate and achieve Passive House standard requirements.

巴勃罗·卡兰扎·纳瓦罗, 克拉拉·洛伦特·马丁
萨拉戈萨 (西班牙) 的被动房集合住宅: Basa I

本文介绍了为在不利气候条件下实现能源平衡所选择的主要被动式设计策略, 描述了如何应用被动房的五项原则, 以及模拟和实现被动房标准要求所采用的策略。

2:55 pm **Sichen Sheng**
Efficient cooling and dehumidification strategies for Passive Houses in warm and hot climates
This paper summarizes the common cooling and dehumidification systems in Passive House and evaluates their efficiencies in different climates. It can give designers a first guideline how to choose an efficient cooling concept and show the manufactures what system could be suitable for Passive House in the future.

盛巳宸
在温暖和炎热气候里被动房有效的制冷和除湿战略

本文综述了在被动房中常见制冷系统及除湿系统, 并评估了在不同气候中这些系统的能效, 可以为设计者选择有效的制冷系统提供初始性指南, 并向制造商展示了未来被动房中适合安装的制冷及除湿系统。

3:20 pm **Piero Russo**
Cost-effective multi-family building in warm climate

A Passivhaus in Southern Italy at the same selling costs of a building meeting the minimum energy performance by code was the main target to achieve. Integrated design, also in the early stages and PHPP used as a design tool made it possible to optimise the envelope and an appropriate MEP solution.

皮耶罗·拉索
温暖气候区经济性集合住宅建筑

在意大利南部, 被动房要实现的主要目标是, 在销售成本相同的条件下, 满足建筑规范规定的最低能耗。同样处于早期阶段的集成设计以及作为设计工具使用的PHPP (被动房设计包), 使优化围护结构和适当的MEP解决方案成为可能。

3:45 pm **Micheel Wassouf**
Chengdu mixed use building – a Passive House challenge in the heart of China
This paper aims at describing the passive and active strategies of a mixed-use building in Sichuan capital city of Chengdu, pretending to reach the Passive House standard. The presented building has a thermal floor area of 2637 m2. Construction works are planned to start in July 2019.

米歇尔·沃索弗
成都混合功能建筑——中国中心区域的被动房挑战

本文旨在描述四川省会成都市混合用途建筑的被动和主动策略, 以此假装达到被动式房屋标准。该建筑的热建筑面积为2637平方米。建筑工程计划于2019年7月开始。

4:10 pm **Pablo Sepulveda Corradini**
Meeting the Passive House standard through parametric design
A new 150-room, 6-storey student accommodation for Monash University in Australia, designed in Cross Laminated Timber (CLT). The architectural design was streamlined through Parametric Design and aligned with the University's commitment to reach net zero carbon emissions by 2030.

巴勃罗·塞普维达·科拉蒂尼
通过参数化设计满足被动房标准

澳大利亚莫纳什大学新建的学生宿舍, 150间房, 6层高, 采用交叉层压木材 (CLT) 设计。通过参数化设计简化了建筑设计, 并达成了与学校的承诺——2030年实现净零碳排放量。

2:30 pm **Hartmut Murschall**
 Passive Houses in 50 solar- and 100 climate protection estates in the former coal-and steel-region North Rhine-Westphalia
 Since the 1990s, NRW has been promoting Passive Houses: 6000 residential units, several other building types, and 150 solar/climate protection housing estates. Continuous governmental support for Passive Houses, with renewables in the context of urban development, is the most successful strategy.

2:55 pm **Helmut Krapmeier**
 Only numbers count – life cycle costs in social housing
 Austrian research project, KliNaWo, demonstrates that social housing projects with high energetic qualities can be realised with very little additional cost, of approximately only 3%. The measured energy consumption of 14 kWh/m²net dwelling area corresponds very well to the demand calculated using the PHPP.

3:20 pm **Carl-Peter Goossen**
 New finance model for apartments to approaches neutral living expenses before and after EnerPHit renovation
 New finance model for home owners to approaches neutral living expenses after the deep retrofit. Financing is crucial to unlock the enormous potential of energy efficiency. With the savings on energy and the savings of 30 years maintenance the loan plus interest can be paid back easily.

3:45 pm **Thilo Cunz, Johann Souvestre**
 Long-term monitoring of the successful energy efficient Brunck-Quarter modernization
 In 2001 BASF revitalized a residential district, the first time use of Passive House components in a district refurbishment. Ten years later a monitoring program confirmed that all buildings still perform as expected. Achieving nearly the Passive House standard in a modernization is currently possible with a payback of 20 years (2018).

4:10 pm **Lloyd Alter**
 Framing the conversation: How do we talk about Passivhaus
 On TreeHugger website ca. 300 Passivhaus stories are published. We looked at what posts and titles interest readers the most, analyzing content and comments to see if there are themes and trends. The intent of this work is to determine what attracts the public to the concept, and how to frame the argument for Passive House.

哈特穆特·穆沙尔
 北莱茵-威斯特法伦州前煤炭和钢铁区域的50个太阳能及100个气候保护被动房
 自20世纪90年代以来, 北莱茵-威斯特伐利亚州 (NRW) 一直在推广被动房: 6000个住宅单元、若干其他建筑类型和150个太阳能/气候保护住宅区。在城市发展的背景下, 政府对被动房和可再生能源的持续支持是最具成效的战略。

赫尔穆特·科瑞迈耶
 只有数字可靠 —— 保障性住房实际生命周期成本
 奥地利研究项目KliNaWo表明, 具有高能量的社会住房项目可以用很少的额外成本实现, 大约只有3%。测量能耗为净14千瓦时/平方米的住宅与被动式房屋规划设计软件包 (PHPP)计算出来的数值完美对应。

卡尔·彼得·古森斯
 通过公寓被动房既改前后的新财务模型验证低生活成本
 新财务模型帮助房主在深度改造后接近生活成本持平。融资对于释放能源效率的巨大潜力至关重要。通过节能和30年生活费节省省下的钱, 可以轻松把贷款和利息偿清。

蒂洛·孔兹, 约翰·梭维斯特
 布伦克街区有效节能改造的长期监控成果
 2001年, 巴斯夫重建了一个住宅小区, 并首次在区域改造中使用被动式房屋组件。十年后, 监控程序确认所有建筑物如预期般良好。目前, 20年回收投资, 实现近乎被动式房屋标准的现代化是可能的 (2018年)。

罗爱德·奥尔特
 构思对话: 我们如何谈论被动房
 在TreeHugger网站已公布约300篇关于被动房故事。我们针对读者对文章和标题点阅率进行分析, 并讨论目前被动房的趋势。此报告主要探讨被动房的主流客群以及被动房的相关论点。

2:30 pm

Rolf Demmler

Tianjin eco-city residential high-rise Passive House

A case study of the holistic design approach to design and construction of two Passive House residential high-rise towers in Tianjin's Eco-City and implemented strategies for wider replication. Once certified (summer 2019), the towers will be considered as among the tallest Passive House buildings in Asia.

罗尔夫·丹穆勒

天津生态城高层被动房项目

研究天津生态城设计建造的两栋高层住宅被动房的整体设计方法, 以及如何推广上述设计方法。一经认证, 这两栋建筑将成为亚洲最高的被动房建筑之一

2:55 pm

Chun Li

Optimization of the U-value of exterior walls with external insulation and of the g-value of glass in Chinese hot-summer and cold-winter regions

With a project in Wuhan located in hot summer and cold winter areas of China as an example, this paper analyzes the influences of U-value of external insulation of exterior walls and g-value of glass on energy consumption of the building through PHPP software and the control variable method, and discusses the methods and ways for optimization of parameters.

李淳

夏热冬冷地区外墙外保温U值与玻璃g值的优化

在被动房技术中, 不透明围护结构的传热系数 (U值) 和玻璃太阳能总透射比 (g值) 是两个非常重要的技术参数, 它们的取值对建筑能耗的大小起着至关重要的作用。本文以位于中国夏热冬冷地区的武汉某项目为例, 通过PHPP软件采用控制变量法分析外墙外保温U值和玻璃g值对建筑能耗的影响, 探讨参数优化方法及途径。

3:20 pm

Fuzhao Jiang

Design, optimization and construction of residential building 40# in Project Phase I in Beijing (Caofeidian) Modern Industry Development Experimental Zone (first zone of Eco-city)

In the design process of Passive Houses, the physical elements, including building envelope, doors and windows, thermal bridges and ventilation shall be considered. In the meantime, the living habits of the future residents that directly affect the actual energy demand of the building during use in the future shall also be taken into full account.

姜福翌

北京(曹妃甸)现代产业发展实验区(生态城先行启动区)一期40#住宅楼项目的设计, 优化以及施工

在被动房的设计过程中, 不仅仅要考虑到建筑的外围护结构, 门窗, 热桥, 通风等建筑物理要素, 同时还要充分考虑到未来居住者的生活习惯, 居住者的生活习惯直接影响了建筑在未来使用过程中的实际能源需求。另外施工也是至关重要的, 建筑的气密性直接反映了施工质量, 正所谓三分设计, 七分施工。

3:45 pm

Aurelia Lippolis

Multi-family homes in China – initial design, optimization potentials and the impact of it

Optimising the building's architectural design and the building technology is a confident way to go to achieve a better building performance, e.g. low energy consumption and low carbon footprint.

奥列里亚·利波利斯

中国集合住宅——初步设计、优化潜力及其影响

优化建筑设计和建筑技术是实现更好建筑性能的自信方式, 例如, 低能耗和低碳足迹。

4:10 pm

Huanlin Zhang: Huangshan reception center project of Shandong Hua Jian Aluminum Industry Group | In the construction of light steel passive house, the key to reach the standard of passive house is as following: Focus on dealing with the air tightness of the house, layout air-tight film, paste airtight tape to meet the requirements of the standard, the careful and serious work of the construction staff.

Stefan Schirmer: Social housing in Beijing in Passive House standard | A residential high-rise building with 240 apartments is build in Beijing according to the Passive House standard for socially disadvantaged people. Besides a well-insulated and airtight thermal envelope challenges, are building services with two central ventilation systems with heat recovery and the fresh and exhaust air of kitchen area in the 25m² small units.

Shou-Kong Chen: Sunyoung Pavilion – A Passive House in Shanghai | Sunyoung Pavilion, build in 2018, is the first certified Passive House building in Shanghai after the German Pavilion of EXPO 2010. Wood structure filled with rock wool insulation, triple glazing windows, as well as ventilation system with heat and humidity recovery and integrated heating/cooling fulfil the PH-standards.

Park Byoungyeol: A Passive House village in Korea | We succeeded to realize 18 certified Passive Houses or Low Energy Buildings in a small settlement. Among 18 6 achieved the Passive House standard and 12 the Low Energy Building standard. The reason why only 6 achieved the Passive House standard is that majority of the houses (11) are east oriented.

Huanlin Zhang 张环林: 山东建华铝业黄山接待中心项目 | 在建造轻型钢结构被动房过程中, 满足被动房标准的关键点如下: 着重解决房屋气密性问题, 对气密膜进行合理布局并粘贴密封胶以满足标准要求, 以及建筑人员细致认真地工作。

Stefan Schirmer ---石特凡: 北京经济适用房项目 | 据被动式房屋标准, 北京为社会弱势群体建造了一栋拥有240套公寓的高层住宅小区。除了有效隔绝和气密围护结构挑战外, 还要建设两个具备热回收功能的中央通风服务系统, 处理25平米单元内厨房的新鲜空气和废气流通。

Shou-Kong Chen 陈守恭: 上海舜元被动房项目 | 舜元, 建于2018年, 是自2010德国馆亮相于世博会, 上海首家获得认证的被动式房屋建筑。木材结构填充岩棉保温, 三层玻璃窗, 以及具备热回收和湿度调节的通风系统、集成加热/冷却符合被动房标准。

Park Byoungyeol 朴伯烈: 韩国被动房村 | 我们在一个小居民点中成功地实现了18所认证的被动房或低能耗建筑。在这18所房屋中, 6所达到被动房标准, 12所达到低能耗建筑标准。因为大多数房屋 (11所) 朝东, 所以只有6所房屋达到被动房标准。

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2:30 pm **Jan Steiger**
PHPP 10 – The design tool for robustness and future proof buildings
In PHPP, the Passive House standard can be verified using standard assumptions for climate or boundary conditions. PHPP 10 will contain various evaluation possibilities to also assess the performance of the buildings under extreme situations, like extreme climate conditions, for example due to climate change, or extreme user behavior or building use.

2:55 pm **Cheney Chen, Cillian Collins**
Explorations in optimizing PHPP using „Grasshopper“
This paper showcases computational design processes and tools Perkins and Will Architects in Vancouver are exploring in order to help early stage design on large scale projects aiming for the Passive House Standard. The future ambition is to integrate PHPP into Design Space Construction (DSC).

3:20 pm **Jürgen Schnieders**
PHPP validation according to ASHRAE 140
The ASHRAE standard 140 is a test suite for building simulation programs that contains results for the annual heating and cooling demand for a reference building and 20 variants. The PHPP successfully passed this test.

3:45 pm **Jessica Grove-Smith**
Project-specific primary energy requirements for Passive House certification
This paper outlines the methodology to derive PE/PER targets for residential projects with high density. These are calculated with a tool that is linked to a PHPP file, and are based on the sum of primary energy requirements for individual end-uses in the building (e.g.: lighting, elevators, etc.).

4:10 pm **Wolfgang Hasper, Berthold Kaufmann**
Performance monitoring and evaluation with PHPP: new features for PHPP 10
PHPP V10 will comprise tools for simplified performance evaluation of buildings. To this end, the energy balance calculations can be updated with the measured boundary conditions of the period under consideration. Thus, the building's operation can be followed up on a monthly basis. Deviations from the designed performance are detected early on and may be traced back and rectified systematically.

4:35 pm **Jürgen Schnieders:** A calculation procedure for the heat losses caused by vented drain pipes

Programme, subject to change! 议程将依现场情况变动!

杨·施泰格
PHPP 10 —— 稳健的设计工具和未来建筑

在PHPP中, 被动房标准可采用气候或边界条件的标准假设进行验证。PHPP 10将包含各种评估可能性, 以评估极端情况下建筑物的性能, 例如气候变化带来的极端气候条件、极端用户行为或建筑物使用。

切尼·陈, 西莉安·柯林斯
使用“Grasshopper (蟋蟀)”优化被动房遮阳的计算

本文展示了温哥华珀金斯和威尔建筑师事务所 (Perkins and Will Architects) 正在研究的计算设计流程和工具, 用以帮助以实现被动房标准为目标的大规模项目的早期设计。未来的目标是将PHPP集成到设计空间结构 (DSC) 中。

尤尔根·施尼德斯
根据ASHRAE 140进行PHPP验证

ASHRAE标准140是一套用于建筑模拟程序的测试套件, 其中包含了参照建筑和20个其他类型建筑的年度供暖和制冷需求的结果。PHPP成功地通过了此测试。

杰西卡·格罗夫·史密斯
被动房认证具体项目主要能源的需求

本文概述了用于获得大型住宅项目一次能源 (PE) /一次能源需求 (PER) 目标的各种方法, 以实现最低能耗。通过链接到PHPP的工具进行计算, 基于单独终端用途 (如电灯、电梯等) 的一次能源需求总量, 得出新的PE与PER目标。

沃尔夫冈·哈斯佩, 贝特霍尔德·考夫曼
使用新PHPP进行性能监视及评估:PHPP10的新特性

被动式房屋规划设计软件包 (PHPP)第10版将包含简化版的建筑物性能评估工具。为此, 可以使用所考虑时段内的测量边界条件来更新能量平衡计算。因此, 可以对建筑物的运行进行月度跟踪监测。这样一来, 在早期检测到的性能偏差, 就可以追溯并系统纠正。

海报

POSTER

尤尔根·施尼德斯: 排 (污) 水管热损失计算方法 | 热封套中的排水管向外排风, 从而引起额外的热损失。对被动房规划设计软件包9 (PHPP 9) 中的现行计算程序进行更新, 用以解释通过上述管道中的气流逐渐变暖的过程。尤其是针对高层建筑热损失较低的结果。

1:30 pm

Welcome

Günter Lang, LANG consulting
Friedrich Stift, Ambassador, Embassy of Austria in Beijing, China
Baoding Government Representative

The Republic of Austria is one of the world's technology leaders in the Passive House segment. Ecological innovations like this made in Austria are appreciated internationally to support sustainable urban development. The Republic of Austria would be happy to cooperate with the People's Republic of China in all areas of environmental protection and renewable energy technologies, especially in the Passive House technology sector.

欢迎致辞

君特·朗, Lang 管理咨询顾问公司
史迪福, 奥地利驻华大使馆大使
保定政府领导

奥地利共和国是被动房屋领域的世界技术领导者之一。奥地利共和国制造的这种生态创新支持可持续城市发展而在国际上受到赞赏。奥地利很乐意在环境保护和可再生能源技术的所有领域特别是在被动房屋技术领域与中国合作。

1:45 pm

Georg Reinberg

Austria, Passive House and Reinberg's Architecture: an evolution 1982-2020

The Austrian architect Georg W. Reinberg looks back to the development of his architectural work. He presents projects which can be seen exemplary for the evolution of the Passive House and it's technic during this time. He gives also an outlook how could be the new develop in the near future.

乔治·莱茵贝格

奥地利, 被动式房屋和安比亚格的建筑设计: 1982-2020的演变

奥地利建筑师格尤戈·安比亚格回顾了他的建筑作品的发展。他介绍的项目可以看作是被动式房屋发展及当时技术的典范。他还提出了在不久的将来的发展前景。

2:00 pm

Wolfgang Streicher

New and refurbished low Cost Passive Houses in Tyrol/Austria – technology and results of measurements

In the city of Innsbruck/Austria two housing companies, NHT and IIG, are building their new buildings in Passive House Standard since 2010. Renting costs are around 7.5 €/m²a. They renovated multi-family houses during tenants occupation and schools down to 20 to 30 kWh/m²a space heating energy demand.

沃尔夫冈·施特莱尔

因斯布鲁克/奥地利社会福利房及改造项目中的被动房

在奥地利的因斯布鲁克市有两大房屋开发公司, 分别为NHT及IIG, 这两家公司自2010年起都开始根据被动房标准建造新的建筑, 租金约为7.5€/m²a。这两家公司在房屋出租期间对很多住宅楼进行了改进, 并对很多学校进行了改进, 使这些住宅楼和学校的供暖能源需求降至20-30 kWh/m²。

2:15 pm

Helmut Krapmeier

Austrian State Award for Architecture and Sustainability

Since 2006, the Austrian Ministry of the Environment has been rewarding the State Prize for Architecture and Sustainability. The multitude of objects impressively proves that high-quality architecture and ambitious requirements for sustainability do not contradict each other, and are a clear and effective sign of climate and environmental protection.

海姆特·科哈麦尔

奥地利建筑与可持续发展奖

自2006年以来, 奥地利环境部开始颁发建筑与可持续发展的国家奖。大量奖项证明高质量的建筑与对可持续发展的严格要求并不矛盾, 这些建筑也成为保护气候及环境的显著标志。

2:30 pm

Laszlo Lepp

Awarded Chinese office buildings – Certified supermarkets and other non-residentials from Austria

Certified office buildings, supermarkets, hotels or student dormitories in China and Austria – quality assured and certified non-residential Passive House buildings are a success story of the Passive House Institute in Innsbruck.

拉兹洛·莱普

奥地利获奖的中国办公楼, 被动房超市以及其他奥地利公共建筑项目

中国和奥地利经认证的办公楼、超市、酒店或学生宿舍——具备质量保证, 且经认证的非住宅被动房建筑是因斯布鲁克被动房研究所的一个成功案例。

Programme, subject to change! 议程将依现场情况变动!

2:45 pm **Martin Huber**
Lower Austrian State Buildings as pioneers of the Passive House standard

In 2008, the Federal State of Lower Austria decided to construct all its state buildings in accordance with the Passive House standard. Thus, beacon projects were used to initiate the development of know-how and the gathering of practical experience in the construction industry. The local construction industry was thus able to achieve a competitive advantage.

马丁·胡贝尔
下奥地利州建筑成为被动房标准的先驱

2008年，下奥地利州决定根据被动房标准建造该州的所有建筑。因此启动了灯塔计划，旨在掌握更多建造被动房的技术，并在建筑实践中收集实际经验，当地建筑业也由此获得了竞争优势。

03:00 pm **Ernst Schriefl**
World's first plus-energy office high-rise building (Vienna, Austria)

In Vienna a former high-rise laboratory building from the 1970s was renovated to an office-building in plus-energy standard (feeding more electricity from PV into the power grid than energy needed for building operation and use). An extreme reduction of energy demand through the optimization of 9,300 components was crucial to achieve this standard.

恩斯特·斯瑞佛
世界首个最低能耗高层建筑（奥地利，维也纳）

在维也纳，自二十世纪70年代起将一栋高层实验楼改建为满足最低能耗标准的办公楼，使太阳能光伏发电向电网提供的电能比该楼运行和使用所需的电能更多。通过对9,300个部件进行优化，将电能需要降到最小，是达到上述标准的关键。

3:15 pm **Dawid Michulec**
Lessons learned after 5 years of pioneering work in ASIA

During the execution of the first certified Passive House buildings in the cool temperate north and the first Passive House buildings in the humid south as well as the trainings of the most Certified Passive House Designer in the People's Republic of China by Dawid Michulec, NEUBAU best.energy many interesting experiences could be gained.

大卫·米舒列克
经过5年在亚洲的开拓性工作后的经验教训

大卫·米西尔在凉爽的北部和潮湿的南部参与了第一个经过认证的被动式房屋建筑的建造。也在中华人民共和国对被动房屋规划者进行了培训。由此我们获得许多有趣的经验。

3:30 pm **Martin Aichholzer**
It's always a question of resources

With the establishment of the Passive House standard and standards that create buildings producing energy, it was a lot achieved in terms of resource conservation. The great ecological footprint of the postindustrial states show that a huge amount of work has to be put into the further reduction of resource consumption in the construction industry.

马丁·爱克霍泽
资源仍然是问题

随着被动房标准和建筑节能标准的确立，在资源节约方面取得了很大成就。后工业国家的巨大生态足迹表明，要进一步减少建筑业的资源消耗，必须进行大量的工作。

3:45 pm **Thomas Lebinger, Marcello Turrini**
Green Building Solutions for students – Summer School Design Workshop

Organized since 2011, the G.B.S. Summer School provides the alumni (320 from 76 countries so far) the expertise to design a Passive House and to make it the center of a holistic approach that enhances its sustainable features. My talk promotes the duplication of our concept in other countries.

马尔切洛·图希尼, 托马斯·莱宾格
学生绿色建筑指南-暑期设计研讨班

自2011年组织上述研讨会以来，绿色建筑解决方法暑期研讨班向参与研讨会的人员（至今有来自76个国家的320名人员）提供设计被动房的专业知识，并使这些技术成为提高房屋可持续性整体方法的核心内容。我的发言使我们的理念在其他国家得到了推广。

23. INTERNATIONAL PASSIVE HOUSE CONFERENCE 2019 国际被动房大会2019

Organiser of the 23rd International Passive House Conference:
主办单位



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This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No 609019



Affordable Zero Energy Buildings



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 756778

Address of the 23rd International Passive House Conference:
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