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EXPERIENCE

- 2015 - **Dean**
Asian Development College for Community Economy and Technology (adiCET)
Chiang Mai Rajabhat University, Chiang Mai, Thailand
- 2013-2014 **Acting Director**
Asian Development Institute for Community Economy and Technology
Chiang Mai Rajabhat University, Chiang Mai, Thailand
- 2010 - 2013 **Vice-Director**
Asian Development Institute for Community Economy and Technology
Chiang Mai Rajabhat University, Chiang Mai, Thailand
- 2007-2009 **Postdoctoral Appointee**
Argonne National Laboratory, Illinois, USA
Chemical Sciences and Engineering Division
- 2002 - 2006 **Graduate Student Research Assistant**
University of Michigan, Chemical Engineering Department
- Fall 2005 **Graduate Student Instructor**
University of Michigan, Chemical Engineering Department
- 2000 - 01 **Research Assistant**
King Mongkut's University of Technology Thonburi
Food Engineering Department
- 2000 **Assistant Manager**
Procter and Gamble Manufacturing (Thailand) Ltd., Bangkok, Thailand
Engineering and Technical Support Department

EDUCATION

- 2006 **Ph.D., Chemical Engineering**
University of Michigan
Ann Arbor, MI, USA
- 2002 **M.S.E., Chemical Engineering**
University of Michigan
Ann Arbor, MI, USA
- 2000 **B.Eng., Chemical Engineering**
King Mongkut's University of Technology Thonburi
Bangkok, Thailand

RESEARCH PROJECT EXPERIENCE

Project Leader

- Smart Community and Micro Smart Grid Integration Model for Thai Communities, Energy Conservation Fund, Ministry of Energy, Thailand (2017)
- Distributed Generations and Load Monitoring Platform for Community Power System, NICOP Grant, supported by the Office of Naval Research, USA (2017)
- High Efficient Smart Home Integrated with DC Appliances, supported by the Office of Naval Research, USA (2015)
- PV-Biodiesel Hybrid-DC Microgrid for Community, supported by the Office of Naval Research, USA (2013)
- 10 Year – Renewable Energy and Energy Conservation Policy with the Ministry of Energy: World Alternative Energy Forum (WAEF 2012), supported by the Department of Alternative Energy Development and Efficiency, Ministry of Energy, Thailand (2012)

- Carbon Storage Road via Waste Plastic Bag in Asphaltic Concrete, supported by Chiang Mai Rajabhat University (2012)
- The Development of Energy Efficiency Classroom from Novel and Natural Materials, supported by Chiang Mai Rajabhat University (2012)
- PV-DC Community Power Grid, supported by the Office of Naval Research, USA (2011)
- Community Bio-gas System in Mae Kapieng Subdistrict for 50 households, Chiang Mai, supported by the National Research Council of Thailand (NRCT) (2011)

Project Member

- The Study of Renewable Energy Potential in Northern of Thailand, supported by Petroleum Authority of Thailand (PTT) (2013)
- Low Carbon Society Model with Community Power from Renewable Energy, supported by the Energy Policy and Planning Office (EPPO), Ministry of Energy, Thailand (2012)
- The Design and Evaluation of Energy Efficient Building by EPS, supported by NRCT (2011)

ACADEMIC SERVICE & CONSULTATION PROJECT EXPERIENCE

Project Overseer/Manager

- Technology transfer of biomass waste to energy for reducing open field burning in Omkoi, Chiang Mai, supported by National Research Council of Thailand (2017).
- Monitoring and Evaluation of Power Consumer Contract Standard for 13 Energy Districts, supported by the Energy Regulatory Commission of Thailand (2016)
- EWG 14 2015A - Small and Medium PV System Database in the APEC Region, supported by APEC Secretariat (2015-2016)
- EWG24 2015A - Case Studies on the Best Practice of Wind Energy Development in APEC Region, Vietnam Ministry of Industry and Trade, supported by APEC Secretariat (2015-2016)
- Technology Transfer Workshop for Small Rice Mills, supported by National Research Council of Thailand (2015).
- The Promotion of Energy Awareness and Participation of Energy Regulations in Energy District 7 of Thailand, supported by the Energy Regulatory Commission of Thailand (2014)
- Technology Transfer Workshop for the Application of PV Systems, supported by NRCT, Thailand (2014)
- Technology Transfer Workshop for Small PV Systems, supported by NRCT, Thailand (2014)
- Technology Transfer Workshop for Household and Community Biogas System from Animal Wastes, supported by NRCT, Thailand (2014)
- The Campaign for Energy User Protection, supported by the Energy Regulatory Commission of Thailand (2014)
- Workshop on Solar Energy System for Buildings, supported by the Royal Thai Aide-De-Camp Department (2014)
- EWG 06 2013A - APEC Smart DC Community Power Opportunity Assessment, supported by APEC Secretariat (2013)
- The Promotion of Energy Awareness and Participation of Energy Regulations in Energy District 2 of Thailand, supported by the Energy Regulatory Commission of Thailand (2013)
- The Promotion of Energy Awareness and Participation of Energy Regulations in Energy District 3 of Thailand, supported by the Energy Regulatory Commission of Thailand (2013)
- The Promotion and Technology Transfer of Low Cost Community Renewable Energy System, supported by NRCT, Thailand (2013)
- The Installation of Solar Pumping System for Health Promotion Hospital in Kaojao Subdistrict, Pranburi District, Prachuabkhiran Province, supported by DuPont Co, Ltd. (Thailand) (2013)
- The Promotion of Applied Energy Course for Non-formal and Vocational Education, supported by the Office of Permanent Secretary, Ministry of Energy, Thailand (2012)

Project Member

- Recycle Road technology transfer to 4 regions of Thailand, supported by National Research Council of Thailand (2016).
- The Conservation and Promotion of Renewable Energy in the Royal Initiated Area and the Royal Projects at Chiang Mai, Energy Conservation Fund, Ministry of Energy, Thailand (2015)
- The Study of Renewable Energy Potential in the Northern Part of Thailand, supported PTT Company (2013)
- Evaluating and Improving Online Data Collection System for Off-Grid Solar Monitoring Sites, supported by the Department of Alternative Energy Development and Efficiency, Ministry of Energy, Thailand (2010)

Expert Committee

- Coordinator for TRF-Global Funding Agencies Alliance Program (TRF-GFAA), supported by Thailand Research Fund (TRF), Thailand, 2015-2016
- Expert for SEG 4 - Systems Evaluation Group - Low Voltage Direct Current Applications, Distribution and Safety for use in Developed and Developing Economies, International Electrotechnical Commission (IEC), 2015-2016
- Expert for SEG 6 - Systems Evaluation Group - Non-Conventional Distribution Networks / Microgrids, International Electrotechnical Commission (IEC), 2015-2016

CONFERENCE COMMITTEE AND ORGANIZER

- SAFE 2018: International Workshop on Developing Smart Communities with Green Technology, February 4-6, 2018, Chiang Mai, Thailand, supported by the Asia Pacific Network for Sustainable Agriculture Food and Energy (SAFE NETWORK) (*Co-Organizer*)
- ICGHIT 2018: International Conference on Green and Human Information Technology, “Workshop on Smart City & Farm”, January 31 – February 2, 2018, Chiang Mai, Thailand, supported by the Institute of Electronics and Information Engineers, IEEE Seoul Section (*Co-Organizer, International Advisory Committee*)
- The 2nd APEC Workshop on Small and Medium Photovoltaic System Database in the APEC Region, October 23, 2017, Tokyo, Japan, supported by the APEC Secretariat (*Organizer*)
- ASEAN Smart Grid Congress 2, 8-10 November 2016, UiTM, Shah Alam, Malaysia, supported by ONRG (*Co-organizer*)
- APEC Workshop on Small and Medium Photovoltaic System Database in the APEC Region, September 26-27, 2016, Chiang Mai, Thailand, supported by the APEC Secretariat
- ASEAN Smart Grid Congress 1, 17-18 December 2015, University of Phayao, Thailand, supported by ONRG (*Co-organizer*)
- APEC Workshop on Smart DC Power Opportunity for Community, November 10-11, 2014, Chiang Mai, Thailand, supported by the APEC Secretariat
- Thai – U.S 180 years Anniversary, January 22, 2014, Chiang Mai World Green City, Chiang Mai, Thailand
- ASEAN Renewable Energy Workshop (AREW 2013), December 11-13, 2013, Chiang Mai, Thailand, supported by ONRG, USA
- World Green City & Eco-Product Exhibition (GreenEXPO 2012), December 10-20 2012, Chiang Mai World Green City, Chiang Mai, Thailand, supported by the Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy, Thailand
- World Alternative Energy Forum (WAEF 2012), December 13-15, 2012, Chiang Mai, Thailand, supported by DEDE, Thailand
- The 3rd Workshop on Alternative and Renewable Energy for Sustainability “Decentralized Power Solutions for Community and Islands” (WARES 3), December 10, 2012, Chiang Mai, Thailand supported by ONRG, USA

- Thai – German Workshop (TG 2012), December 11-12, 2012, Chiang Mai, Thailand, supported by the National Research Council of Thailand and German Research Foundation (DFG), Germany
- The 5th Thailand Renewable Energy for Community Conference, December 8-20, 2012, Chiang Mai, Thailand
- The 2nd Workshop on Alternative and Renewable Energy for Sustainability “Exploring Smart Community (WARES2011), December 15-16, 2011, Chiang Mai, Thailand, supported by The New Energy and Industrial Technology Development Organization (NEDO), Japan
- Workshop on Alternative and Renewable Energy for Sustainability “Exploring Technologies for Building a Green City” (WARES2010), December 8-10, 2010, Chiang Mai, Thailand, supported by the Office of Naval Research-Global (ONRG), USA

PUBLICATIONS

- Mensin, P., Kijsanayothin, P., & **Setthapun, W.** (2017). Scalable Data Integration System using REST. *Walailak Journal of Science and Technology*, 14(4), 299-313.
- Kamching, R., Pattarapremcharoen, M., Nirunsin, S. & **Setthapun, W.**, (2017). Spatial Mapping Analysis for Renewable Energy Agricultural Water System of Small Community Farm. *IIRE International Journal of Renewable Energy*, 12(2), 39-51.
- Poonpolsub, S., Jakrawatana, N., Pattarapremcharoen, M. and **Setthapun, W.** (2017). Carbon Footprint Reduction from Bangkok Urban Home Vegetable Garden. *IIRE International Journal of Renewable Energy*, 12(2), 75-86.
- เวชสุวรรณค์ หล้าภาค, วรจิตต์ เศรษฐสุวรรณค์ และ ไกรสร ลักษณะนิศิริ (2560). กระบวนการสร้างถนนแอสฟัลติกคอนกรีตเพื่อลดปัญหาขยะพลาสติกในชุมชน. *วารสารวิชาการมหาวิทยาลัยราชภัฏอุตรดิตถ์*, 12(1) 41-53.
- Nirunsin, R., **Setthapun, W.**, Dussadee, N., & Ninsonti, H. (2017). Enhancement of Household Biogas Production by Solar Collector and Solar Greenhouse. *IIRE International Journal of Renewable Energy*, 12(1), 103-116.
- Pingarm, P., Ninsonti, H., Pavasant, P., Jesdapipat, S., & **Setthapun, W.** (2017). Scenario Analysis for Green City Model: Case Study of Chiang Mai World Green City Model, Thailand. *IIRE International Journal of Renewable Energy*, 12(1), 23 - 36.
- Asadathorn, P., Rakwichian, W., Kusolsatit, T. and **Setthapun, W.** (2016). Development of growing media from sugar industrial waste. *Research Journal-Rajamangala University of Technology Thanyaburi*, 15(2), 14-21.
- Srikaew, S., Setthapun W., & Ninsonti, H. (2016). PV-Biodiesel Hybrid-DC Grid for Chiang Mai World Green City Community Model. *Research Journal Rajamangala University of Technology Thanyaburi “Science and Technology”*, 15(2), 7-13.
- Mensin, Y., Rakwichian, W., **Setthapun, W.**, & Chokmaviroj, S. (2016). Development of a novel software to identify the real-time energy (kWh) flows among multiple loads and sources including renewables in a smart grid. *Applied Mechanics and Materials*, 839, 107-113.
- **W. Setthapun**; Srikaew, Suchat; Rakwichian, Jiratkwini; Tantranont, Nuttiya; Rakwichian, Wattanapong; Singh, Rajindra, "The integration and transition to a DC based community: A case study of the Smart Community in Chiang Mai World Green City," 2015 IEEE First International Conference on DC Microgrids (ICDCM), pp.205-209, 7-10 June 2015 doi: 10.1109/ICDCM.2015.7152039
- S. Srikaew, J. Rakwichian, M.Y.C. Lo, and **W. Setthapun** (2015). Low Voltage Direct Current System for Household and Community Application. *IGEC-X Proceedings*. Paper presented at the 10th International Green Energy Conference, Evergreen Laurel Hotel, Taichung, Taiwan, 25-27 May 2015 (pp.39-43).
- W. Lakas, **W. Setthapun**, and K. Lucksiri (2015). Development of Asphaltic Concrete Pavement to Reduce Plastic Waste Problem in the Community. *IGEC-X Proceedings*. Paper presented at The 10th International Green Energy Conference, Evergreen Laurel Hotel, Taichung, Taiwan, 25-27 May 2015 (pp.70-74).

- Y. Mensin, **W. Setthapun** and W. Rakwichian, "Simulation for the management of power exchange and payment between renewable energy and electric utility network," *Energy Procedia* 56 (2014), 394-405.
- P. Pinngarm, **W. Setthapun**, P. Pavasant, and S. Jesdapipat (2013). Linear Regression and Forecasting Analysis for Green City Model: Case Study of Chiang Mai World Green City Model, Thailand. World Biodiversity Congress: The Development Dimension of Thai Graduate to ASEAN Citizenship: dd-TGAC 2013. Paper presented at The World Biodiversity Congress, Chiang Mai, Thailand, 26-30 November 2013 (pp. 42-52).
- R. Kamching and **W. Setthapun** (2013). Low Carbon Agriculture for Community Food Security. World Biodiversity Congress: The Development Dimension of Thai Graduate to ASEAN Citizenship: dd-TGAC 2013. Paper presented at The World Biodiversity Congress, Chiang Mai, Thailand, 26-30 November 2013 (pp. 53-60).
- S. Srikaew, W. Rakwichian, and **W. Setthapun** (2013). The Design of Community PV-DC Power Grid System. IES Proceedings. Paper presented at The Third International Conference on Sustainable Energy Development Institute of Energy Science, Vietnam Academy of Science and Technology, Hanoi, Vietnam, 16-18 October (pp. 212-218).
- R. Niransin, **W. Setthapun**, and N. Dusadee (2013). Design of solar heating system for anaerobic digestion of organic waste in the cold region of Thailand. *International Conference on Interdisciplinary Research and Development in ASEAN Universities Proceedings*. Paper presented at The International Conference on Interdisciplinary Research and Development in ASEAN Universities, Imperial Mae Ping Hotel, Chiang Mai, Thailand, 8-10 August (pp. 254-259).
- A. Vonasorn, S. Chuntranuluck, **W. Setthapun**, and W. Rakwichian, "Development of Mouth Care Product Mixing with Boesenbergia Pandurata Extract for Inhibiting of Streptococcus Mutans," *Asian Journal of Applied Science* 6 (2) (2013), 90.
- J.A. Enterkin, **W. Setthapun**, J.W. Elam, S.T. Christensen, F.A. Rabuffetti, L.D. Marks, P.C. Stair, K.R. Poepelmeier and C.L. Marshall "Propane Oxidation over Pt/SrTiO₃ Nanocuboids," *ACS Catalysis*, 1 (2011) 629.
- W. Deng, R. Lobo, **W. Setthapun**, S.T. Christensen, J.W. Elam and C.L. Marshall "Oxidative Hydrolysis of Cellobiose to Glucose," *Catalysis Letters*, 141 (2011) 498.
- **W. Setthapun**, W.D. Williams, S.M. Kim, H. Feng, J. Elam, F.A. Rabuffeti, K. Poepelmeier, P. Stair, E. Stach, F. Ribeiro, J.T. Miller, C.L. Marshall, "Genesis and Evolution of Surface Species during Pt Atomic Layer Deposition on Oxide Supports Characterized by In-Situ XAFS Analysis and Water-Gas Shift Reaction," *Journal of Physical Chemistry C*, 114 (2010) 9758.
- J. Elam, H. Feng, P. Stair, J. Libera, **W. Setthapun**, "Palladium Catalysts Synthesized by Atomic Layer Deposition for Methanol Decomposition," *Chemistry of Materials*, 22 (2010) 3133.
- C.L. Marshall, E.A. Mader, **W. Setthapun**, J.T. Miller, "In situ characterization of catalysts using synchrotron radiation," *Abstracts of Papers of the American Chemical Society*, 239 (2010) 174-CATL.
- **W. Setthapun**, S.K. Bej and L.T. Thompson, "Carbide and Nitride Supported Methanol Steam Reforming Catalysts: Combinatorial Synthesis and High Throughput Screening," *Topics in Catalysis*, 49 (2008) 73.
- **W. Setthapun**, Y. Kato, S.K. Bej and L.T. Thompson, "System for Combinatorial Synthesis and High Through-Put Screening of Compound Catalysts," *Confidential Disclosure of Invention, University of Michigan Office of Technology* (2003)

KEYNOTE/ INVITED PRESENTATIONS/ PANEL/ MEETINGS

- **W. Setthapun**, "The 1st Meeting of ERIA Research Project FY2017, Working Group on "Assessment of Electricity Storage Technology for Solar PV," Economic Research Institute for ASEAN and East Asia (ERIA), The Institute of Energy Economics, Japan (IEEJ), Putrajaya, Malaysia, 23 February 2018. (*Country Expert*)
- **W. Setthapun**, "Progress toward SDG7: Sharing experiences from the ground Interactive Dialogues between panelists and participants," Global SDG7 Conference, United Nation Department of

Economic and Social Affairs, Thailand Ministry of Energy, UN ESCAP, Bangkok, **Thailand**, 21-22 February 2018. *(Panel)*

- **W. Setthapun**, “Sustainable Energy for a Smart Community,” International Workshop on Developing Smart Communities with Green Technology, SAFE NETWORK, Chiang Mai, **Thailand**, 4-6 February 2018. *(Invited)*
- **W. Setthapun**, “Smart Energy Infrastructure for Smart Community: Case Study of Chiang Mai World Green City,” ICGHIT 2018: International Conference on Green and Human Information Technology, Workshop on Smart City & Farm”, The Institute of Electronics and Information Engineers, IEEE Seoul Section, Chiang Mai, Thailand, February 1, 2018. *(Invited)*
- **W. Setthapun**, “Integration of Renewable Energy for Thailand’s Low Carbon City Experience Sharing from adiCET’s Smart Community,” EAST ASIA SUMMIT – NEW ENERGY FORUM, Ministry of Science and Technology, YASTI, Kunming, **China**, 2-3 November 2017. *(Invited speaker and Chair)*
- **W. Setthapun**, “Thailand’s Low Carbon City Progress & Experience Sharing from adiCET’s Smart Community,” International Cooperation Forum on Low Carbon City and Climate Change Impact, I-Lan University, I-Lan, **Taiwan**, 5 October 2017. *(Invited)*
- **W. Setthapun**, “Community Smart Grid: Integrating Renewable Energy with Green Technologies,” International Workshop on Development and Application of Solar Technologies and Products, YASTI, Kunming, **China**, 4 September 2017. *(Invited)*
- **W. Setthapun**, “Smart Grid Infrastructure of the Green Community for the Green Economy,” APEC-ACABT YES Challenge “Green Economy and Social Innovation”, APEC Research Center for Advanced Biohydrogen Technology (ACABT), Feng Chia University, Taichung, **Chinese Taipei**, 29 August 2017. *(Invited)*
- **W. Setthapun**, “Building Smart Communities with Green Technologies,” International Conference on Sustainable Agriculture, Food, and Energy SAFE2017: Global Innovation on Sustainability, SAFE Network-Asia Pacific Network for Sustainable Agriculture, Food and Energy, Kuala Lumpur, **Malaysia**, 23 August 2017. *(Keynote)*
- **W. Setthapun**, “Experiences from adiCET-CMRU Technology Transfer, Capacity Building, Curriculum, Student & Faculty Exchanges,” ASEAN Workshop on Promoting Transfer of Renewable Energy Technologies for Low Carbon Resilient Development (Sharing Thailand Experiences with UNFCCC Mechanisms),” NRCT and University of Phayao, Chiang Mai, **Thailand**, 24-27 July 2017. *(Invited)*
- **W. Setthapun**, “adiCET Experience in Training and Technology Transfer,” 2017 SOUTH AND SOUTHEAST ASIA TECHNOLOGY TRANSFER MATCHMAKING CONFERENCE, YASTI, Kunming, **China**, 13 June 2017. *(Invited)*
- **W. Setthapun**, “adiCET Experience in Training and Technology Transfer,” ASEAN Workshop on Promoting Transfer of Renewable Energy Technologies for Low Carbon Resilient Development (Sharing Thailand Experiences with UNFCCC Mechanisms),” NRCT and University of Phayao, Phayao, **Thailand**, 23 May 2017. *(Invited)*
- **W. Setthapun**, “Building Smart Communities through Bioenergy Cycles with Sufficiency Economy Concept,” International Workshop on BioEnergy, National Taiwan University, Taipei, **Taiwan**, 1 May 2017. *(Invited)*
- **W. Setthapun**, ASEAN Next 2017: Creating Smart Community through STI Collaboration, Ministry of Science and Technology – Thailand, Dusit Thani, Bangkok, **Thailand**, 6-10 March 2017. *(Invited)*
- **W. Setthapun**, “Chiang Mai World Green City - Smart Community,” ASEAN Smart Grid Congress 2, UiTM, Shah Alam, **Malaysia**, 8-10 November 2016. *(Invited)*
- **W. Setthapun**, “Community based DC Microgrid at Chiang Mai World Green City, Thailand,” CIRED Conference, DeCent Digital Current Technology Conference, BIXPO 2016 – To the Future of Electric Power Technology, Gwangju, Korea, 3 November 2016. *(Invited)*

- **W. Setthapun**, “Community based DC Microgrid at Chiang Mai World Green City, Thailand,” KEPRI Invitation Seminar KEPRI, The 2 Research Building 7th Floor Meeting Room, Daejeon, Korea 2 November 2016. *(Invited)*
- **W. Setthapun**, “Renewable Energy Integration for Local Community Development,” International Tropical Renewable Energy Conference (i-TREC) 2016, University of Indonesia, Aston Bogor Hotel & Resort, Bogor, **Indonesia**, 26 October 2016. *(Invited)*
- **W. Setthapun**, “Smart DC Power Opportunity for Community and Farm in Thailand,” APEC Workshop on Developing the Green Energy Smart Farm, BPPT, Jakarta, **Indonesia**, 12 October 2016. *(Invited)*
- **W. Setthapun**, “Smart Grid for Rural Communities – Thailand Experience,” IGEM Conference 2016 on Solar PV - Bridging Key Performers, Kuala Lumpur, **Malaysia**, 6 October 2016. *(Invited)*
- **W. Setthapun**, “Case Study on Best Practices of Wind Energy Development in Thailand,” APEC Seminar on Best Practices of Wind Energy Development in the APEC Region, Ministry of Industry – Vietnam, Pan Pacific hotel, Ha Noi, **Viet Nam**, 4-5 October 2016. *(Invited)*
- **W. Setthapun**, “Role of Women in Developing Energy Resiliency in Off-Grid Areas Case Study: Thailand,” Workshop on Improving Energy Resiliency in Off-Grid Areas in APEC Member Economies, Boracay, **The Philippines**, 15 June 2016. *(Invited)*
- **W. Setthapun**, “Smart DC Power Opportunity for Community and Farm,” APEC Workshop on Developing the Green Energy Smart Farm, Splendor Hotel, Taichung, **Chinese Taipei**, 12 April 2016. *(Invited)*
- **W. Setthapun**, “Building a Green Community from Green Technologies Integration – Case Study: Chiang Mai World Green City,” International Urban Sustainability & Green Building Conference 2016 (IUS GBC 2016), Malaysia Green Building Confederation (MGBC), Kuala Lumpur, **Malaysia**, 4-5 March 2016. *(Invited)*
- **W. Setthapun**, “Low Carbon-Smart Community Project: Case Study – Chiang Mai World Green City,” Joint Seminar on Eco-Town Project ERIA – Chiang Mai University – ERIN, Chiang Mai, **Thailand**, 19 January 2016. *(Invited)*
- **W. Setthapun**, “Model 2: Community based Living Laboratory to International Collaboration,” TRF-OHEC Annual Congress 2016 (TOAC2016) – Session: Research grant hunting from international funding agencies: how to start and how to expand?, **Thailand**, 6 January 2016. *(Invited)*
- **W. Setthapun**, “Lesson Learned from the Application of Community Based DC Microgrid,” LVDC Redefining Electricity: First International Conference on Low Voltage Direct Current organized by International Electrotechnical Commission (IEC) and Bureau of Indian Standards (BIS), 26-27 Oct 2015, New Delhi, **India** *(Invited)*
- **W. Setthapun**, “DC Smart Community: Living Laboratory in Chiang Mai World Green City,” The 37th IEEE PELS, International Telecommunication Energy Conference 2015 (INTELEC), Osaka, **Japan**, 18-22 October 2015. *(Invited)*
- **W. Setthapun**, “The integration and transition to a DC based community: A case study of the Smart Community in Chiang Mai World Green City,” 2015 IEEE First International Conference on DC Microgrids (ICDCM), Atlanta, Georgia, **USA**, 7-10 June 2015. *(Invited)*
- **W. Setthapun**, “Community DC Microgrid System in Chiang Mai World Green City,” APEC Workshop on Smart DC Power Opportunity for Community, Chiang Mai, **Thailand**, 10-11 November 2014. *(Invited)*
- **W. Setthapun**, “The Development of Smart Community in the Chiang Mai World Green City, Thailand,” The 4th Workshop and Technical Training Course on South-South Cooperation on Science and Technology to Address Climate Change, Kunming, **China**, October 22, 2014. *(Invited)*
- **W. Setthapun**, “The Development of Smart Community in the Chiang Mai World Green City, Thailand,” APEC Conference on Future Energy Smart Communities Model, Taipei, **Chinese Taipei**, October 16-17, 2014. *(Invited)*

- **W. Setthapun**, “Mitigating Climate Change – Low Carbon Community: Chiang Mai World Green City,” China-ASEAN Science & Technology Forum: China-ASEAN Cooperation Forum for Addressing Climate Change, Kunming, **China**, June 17-18, 2014. *(Invited)*
- **W. Setthapun**, “Community PV-DC Microgrid,” APEC Workshop on Small Hydro and Renewable Grid Integration, Hanoi, **Viet Nam**, April 3-5, 2013. *(Invited)*

CONFERENCE PRESENTATIONS

- Tanomkiat, P., Sriprapha, K., Sintuya, H., Tantranont, N., & **Setthapun, W.** (2018). The Development of Smart Farm with Environmental Analysis. 6th International Conference on Green and Human Information Technology (ICGHIT 2018). Holiday Inn Chiang Mai Hotel, Thailand, 31 Jan – 2 Feb 2018, 41-50.
 - Sawetrattanakul, S., Sintuya, H., Tantranont, N., & **Setthapun, W.** (2018). The Development of Smart Community Index for Smart Community Model. 6th International Conference on Green and Human Information Technology (ICGHIT 2018). Holiday Inn Chiang Mai Hotel, Chiang Mai, Thailand, 31 Jan – 2 Feb 2018, 81-87.
 - Tonsing, M., Rakwichian, J., Plangklang, B., & **Setthapun, W.** (2018). AC/DC Microgrid Hybrid System Modelling Comparison for Small Communities. 6th International Conference on Green and Human Information Technology (ICGHIT 2018). Holiday Inn Chiang Mai Hotel, Chiang Mai, Thailand, 31 Jan – 2 Feb 2018, 71-80.
 - Songkittirote, N., **Setthapun, W.**, & Sintuya, H. (2018). Development of DC Smart Plug Control System. 6th International Conference on Green and Human Information Technology (ICGHIT 2018). Holiday Inn Chiang Mai Hotel, Chiang Mai, Thailand, 31 Jan – 2 Feb 2018, 130-142.
- วรพจน์ โพธาเจริญ รุ่งนภาจุลศักดิ์ วรจิตต์ เศรษฐพรศักดิ์ (2560) การผลิตเชื้อเพลิงชีวมวลอัดแห้ง (RDF-5) จากใบไม้ของต้นเต็งรังเพื่อใช้เป็นพลังงานทดแทนและลดปัญหาหมอกควัน การประชุมสัมมนาวิชาการรูปแบบพลังงานทดแทนสู่ชุมชนแห่งประเทศไทย ครั้งที่ 10 (TREC-10) มหาวิทยาลัยทักษิณ วิทยาเขตพัทลุง 29-30 พฤศจิกายน - 1 ธันวาคม 2560, 100-108.
- มานิชญ์ ดนสิงห์ จิรศักดิ์ วัชรวิเชียร บุญยั้ง ปลั่งกลาง วรจิตต์ เศรษฐพรศักดิ์ (2560) แบบจำลองระบบ AC Microgrid สำหรับชุมชนขนาดเล็ก, การประชุมสัมมนาวิชาการรูปแบบพลังงานทดแทนสู่ชุมชนแห่งประเทศไทย ครั้งที่ 10 (TREC-10) มหาวิทยาลัยทักษิณ วิทยาเขตพัทลุง 29-30 พฤศจิกายน - 1 ธันวาคม 2560, 593-600.
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- **W. Setthapun**, J.W. Elam, F.A. Rabuffetti, P.C. Stair, K.R. Poepelmeier and C.L. Marshall, "Propane Oxidation with Pt/ SrTiO_3 Nanocubes," Argonne National Laboratory Postdoctoral Research Symposium, Argonne, IL, Sept 2008 (Poster).

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- **W. Setthapun**, S.K. Bej and L.T. Thompson, “Combinatorial Synthesis and High Throughput Screening of Carbide and Nitride Supported Methanol Steam Reforming Catalysts,” American Institute of Chemical Engineers Annual Meeting, Cincinnati, OH, Nov 2005.
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AWARDS

- **ASEAN – U.S. Women in Science Prize (2016)**
- **ASEAN – U.S. Science and Technology Fellows:** ASEAN Secretariat and USAID (2015) with placement at Ministry of Energy, Thailand for 1 year
- **Visitor Support Program Grant:** Office of Naval Research, USA (2013)
- **Outstanding Student Presentation Award:** Michigan Catalysis Society, USA (2005)
- **Fulbright Scholarship:** Thailand-United States Educational Foundation, Open Competition (2001)

AFFILIATIONS

- IEEE Power & Energy Society Member
- Thailand Renewable Energy for Community Association (TREC-A)
- Asian European Renewable Energy Cooperation Agency (AERECA)
- Postdoctoral Association at Argonne National Laboratory
- North American Catalysis Society (NACS)
- American Institute of Chemical Engineers (AIChE)
- Michigan Catalysis Society (MCS)
- Society of Women Engineers (SWE)