

CURRICULUM VITAE

I. Biographical Data

A. Name and Contact Address:

P. Abdul Salam
Energy Program
Department of Energy Environment and Climate Change
School of Environment Resources and Development
Asian Institute of Technology
P.O. Box 4, Klongluang
Pathumthani 12120, Thailand
salam@ait.ac.th

B. Education:

- Doctor of Engineering, Energy Technology, Asian Institute of Technology, Thailand, 2005.
- Master of Engineering, Energy Technology, Asian Institute of Technology, Thailand, 1994.
- Bachelor of Science in Mechanical Engineering, University of Peradeniya, Sri Lanka, 1991.

C. Positions held:

July 2014 - Present	<i>Associate Professor</i> , Asian Institute of Technology
July 2014 – July 2016	<i>Thematic Leader</i> – Low Carbon, and Sustainable Production and Consumption Technologies and Management
October 2009 – June 2014	<i>Assistant Professor</i> , Asian Institute of Technology (AIT)
Oct. 2012 – Oct. 2016	<i>Coordinator</i> , Professional Master in Energy Business Management (PMEBM), AIT
Jan.2013 – July.2013	<i>Acting Leader</i> , Energy and Environment Thematic Area
Sept.2011 – Dec. 2012	<i>Coordinator</i> , Energy Field of Study, AIT
Aug. 2012 – Oct. 2013	<i>Coordinator</i> , MBA in Energy Business, AIT
Sept.2011 – Oct. 2013	<i>Director</i> , Regional Energy Resources Information Centre, AIT
April 2007 - Sept. 2009	<i>General Manager cum Engineering Manager</i> Genesis Engineering and Technical Service Co. Ltd, Thailand.
June 2005 – March 2007	<i>Senior Research Specialist</i> Energy Field of Study, Asian Institute of Technology.

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| June 2002 – May 2005 | Research Specialist
Energy Field of Study, Asian Institute of Technology. |
| June 1999 - May 2002 | Research Engineer
Energy Field of Study, Asian Institute Technology. |
| Aug.1994 - May 1999 | Research Associate
Energy Field of Study, Asian Institute of Technology. |

D. Special honors and awards

1. Thailand Frontier Researcher Award for 2016 in Engineering. In recognition of pioneering a new frontier research, based on core papers comprising the world's top 1% of Highly Cited Papers in the field of Engineering. By Thomson Reuters and Office of Higher Education Commission of Thailand. 25 August 2016. Bangkok, Thailand.
2. Scholarship award from German Academic Exchange Service (DAAD), Bonn, for Master's degree study at Asian Institute of Technology, Thailand. 1993 - 1994.
3. Scholarship award from Islamic Development Bank (IDB), Jeddah, for Bachelor degree study at the University of Peradeniya, Sri Lanka. 1985-1990.

II. Pedagogy

A. Experience as a teacher

1. Courses taught, including courses taught at partner institutions.
 - Biomass Conversion
 - Renewable Energy Resources and Technologies
 - Rationale Use of Energy in Buildings
 - Climate Change Mitigation
 - Design and Management of Energy Systems
 - Clean Coal Technologies and Carbon Capture and Sequestration
 - Corporate Technology Strategy in Renewable Energy
 - RETscreen for Renewable Electricity Generation
2. Current Research Interest:
 - Bioenergy (Hydrogen production from biomass, biofuel production, biogas and densification)
 - Clean coal technologies and carbon capture and storage
 - Climate change mitigation

III. Research

A. Theses supervised. Number of master and doctoral students graduated each year.

So far 2 doctoral and 43 Masters students completed their studies under my supervision. I have been a committee member of 16 doctoral and 85 Masters students.

B. Publications

1. Books and monographs

- i. P. Abdul Salam, Sangam Shrestha, Vishnu Prasad Pandey, Anil K Anal. Water-Energy-Food Nexus: Principles and Practices. Wiley and American Geophysical Union. ISBN: 978-1-119-24313-7. August 2017.
- ii. Sangam Shrestha, Anil K.Anal, P. Abdul Salam, Michael van der Valk. Managing Water Resources under Climate Uncertainty: Examples from Asia, Europe, Latin America, and Australia. Springer, 2015.
- iii. S. C. Bhattacharya and P. Abdul Salam. Biomass Energy in Developing Countries: A Multi-Faceted Study in Asian Countries. 2006. RERIC publication. ISBN 974-8257-33-9.
- iv. S. C. Bhattacharya and P. Abdul Salam. A Review of Selected Biomass Energy Technologies: Gasification, Combustion, Carbonization and Densification. 2006. RERICpublication. ISBN974-8257-14-2.
- v. P. Abdul Salam. A Comparative Study of Hydrodynamics and Gasification Performance of Two Types of Spouted Bed Reactor Designs. Doctoral Dissertation. Asian Institute of Technology, No. ET-05-01, 2005.
- vi. P. Abdul Salam. A Dynamic Simulation Model for a Photovoltaic Refrigeration System. Masters Thesis. Asian Institute of Technology, No. ET-94-31, 1994.

2. Book chapters

- i. P. Abdul Salam, Vishnu Prasad Pandey, Sangam Shrestha, Anil Kumar Anal. The Need for the Nexus Approach. In Water-Energy-Food Nexus: Principles and Practices. Pp 1-10. Wiley and American Geophysical Union. ISBN: 978-1-119-24313-7. August 2017.
- ii. S.C. Bhattacharya and P. Abdul Salam. Biomass Energy in Selected Asian Countries: A Review. In Biomass Energy in Developing Countries: A Multi-Faceted Study in Asian Countries. Pp 1-15, 2006. RERIC publication. ISBN 974-8257-33-9.
- iii. S.C. Bhattacharya, P. Abdul Salam, H.L.Pham, N.H. Ravindranath, Li Junfeng, Hu Runqing, H.I.Somashekhar, P. Sudha, Sandhya Rao, M.P.Koh, W.K. Hoi, J.C. Elauria, M.L.Y. Castro, D.A. Racelis, K.K.C.K. Perera, P.G. Rathnasiri, A.G.T. Sugathapala, Boonrod Sajjakulnukit and Prasert Verapong. Sustainable Biomass Production for Energy in Selected Asian Countries. In Biomass Energy in Developing Countries: A Multi-Faceted Study in Asian Countries. Pp 19-32, 2006. RERIC publication. ISBN 974-8257-33-9.
- iv. S.C. Bhattacharya, P. Abdul Salam, Hu Runqing, H.I.Somashekar, D.A. Racelis, P.G.Rathnasiri, Rungrawee Yingyuad. An Assessment of the Potential for Non-Plantation Biomass Resources in Selected Asian Countries for 2010. In Biomass Energy in Developing Countries: A Multi-Faceted Study in Asian Countries. Pp 151-168, 2006. RERIC publication. ISBN 974-8257-33-9.
- v. S.C. Bhattacharya, P. Abdul Salam, Li Junfeng, N.H. Ravindranath, J.C. Elauria, A.G.T. Sugathapala, B. Sajjakulnukit, B. Limmeechokchai. Ranking of Barriers to Biomass Energy Technologies in Selected Asian Countries. In Biomass Energy in Developing Countries: A Multi-Faceted Study in Asian Countries. Pp 333-359. 2006. RERIC publication. ISBN 974-8257-33-9.
- vi. S.C.Bhattacharya, P. Abdul Salam, X.Yan, U. Rao, J.C. Elauria, K.K.C.K. Perera and B. Limmeechokchai. A Study on Transfer of Biomass Energy Technologies in Selected Asian Countries. In Biomass Energy in Developing Countries: A Multi-

Facetted Study in Asian Countries. Pp 363-373, 2006. RERIC publication. ISBN 974-8257-33-9.

3. Refereed journal articles: international, regional, national.

3.A Articles in Refereed International Journals

- i. Deepanraj.B, M. Srinivas, N. Arun, G.Sankaranarayanan, and P. Abdul Salam. Comparison of Jatropha and Karanja biofuels on their combustion characteristics. *International Journal of Green Energy*. Vol.14, No.15, 1231-1237 (2017).
- ii. Sheikh Aminur Rahaman and P. Abdul Salam. Characterization of cold densified rice straw briquettes and the potential use of sawdust as binder. *Fuel Processing Technology*. 158 (2017) 9-19.
- iii. Joseph Dal Khan Suan, Avishek Datta and P. Abdul Salam. Effect of oil palm fly ash on soil properties and yield of sweet corn in the tropical zone of Thailand. *Communications in Soil Science and Plant Analysis*. Vol.48, No.2, 236-244, 2017.
- iv. Rotchana Intharathirat and P. Abdul Salam. Valorization of MSW-to-Energy in Thailand: Status, Challenges and Prospects. *Waste and Biomass Valorization*. Volume 7, Issue 1, pp 31-57, February 2016.
- v. Rotchana Intharathirat, P. Abdul Salam, S. Kumar and Akarapong Untong. Forecasting of municipal solid waste quantity in a developing country using multivariate grey models, *Waste Management*. 39(2015), 3-14.
- vi. Jakkapong Udomsirichakorn, Prabir Basu, P.Abdul Salam and Bishnu Acharya. CaO-based chemical looping gasification of biomass for hydrogen-enriched gas production with in situ CO₂ capture and tar reduction. *Fuel Processing Technology*. Vol. 127 (2014), pp 7-12.
- vii. Phutcharad Vicharnakorn, Rajendra P. Shrestha, Masahiko Nagai, Abdul P. Salam and Somboon Kiratiprayoon. Carbon Stock Assessment Using Remote Sensing and Forest Inventory Data in Savannakhet, Lao PDR. *Remote Sensing*. 2014, 6, 5452-5479; doi:10.3390/rs6065452.
- viii. Jakkapong Udomsirichakorn and P. Abdul Salam. Review of hydrogen-enriched gas production from steam gasification of biomass: The prospect of CaO-based chemical looping gasification. *Renewable and Sustainable Energy Review*. Vol.30 (2014), pp 565 -579.
- ix. Jakkapong Udomsirichakorn, Prabir Basu, P.Abdul Salam and Bishnu Acharya. Effect of CaO on tar reforming to hydrogen-enriched gas with in-process CO₂ capture in a bubbling fluidized bed biomass steam gasifier. *International Journal of Hydrogen Energy*. Vol.38 (34), 2013. Pp. 14495-14504
- x. S. Kumar, Pujan Shrestha and P. Abdul Salam. A Review of Biofuel Policies in the Major Biofuel Producing Countries of ASEAN: Production, Targets, Policy Drivers and Impacts. *Renewable and Sustainable Energy Review*, Vol.26 (2013), pp 822-836.
- xi. S. Kumar, P. Abdul Salam, Pujan Shrestha and Emmanuel Kofi Ackom. An Assessment of Thailand's Biofuel Development. *Sustainability*. Vol 5, pp. 1577-1597, 2013.
- xii. Daya Nhuchhen and P. Abdul Salam. Estimation of Higher Heating Value of Biomass from Proximate Analysis: A New Approach. *Fuel*, 99 (2012), pp.55-63. Elsevier Science.

- xiii. Daya Nhuchhen and P. Abdul Salam. Experimental Study on Two-Stage Air Supply Downdraft Gasifier and Dual Fuel Engine System. *Biomass Conversion and Biorefinery*, Vol. 2(2), 2012, pp 159 – 168. Springer.
- xiv. P. Abdul Salam and S. C. Bhattacharya. A Comparative Hydrodynamic Study of Two Types of Spouted Bed Reactor Designs. *Chemical Engineering Science*, Vol. 61(6), 2006, pp 1946-1957. Elsevier Science.
- xv. P. Abdul Salam and S. C. Bhattacharya. A Comparative Study of Charcoal Gasification in Two Types of Spouted Bed Reactors. *Energy*, Vol.31 (2006), pp 228-243. Elsevier Science.
- xvi. S. C. Bhattacharya, P. Abdul Salam, Hu Runqing, H.I. Somashekar, D.A. Racelis, P. G. Rathnasiri, Rungrawee Yingyuad. Assessment of Sustainable Energy Potential of Non-plantation Biomass Resources in Selected Asian Countries. *Biomass and Bioenergy*, Vol. 29 (2005), pp 153-166. Elsevier Science.
- xvii. Li Junfeng, Hu Runqing, Song Yangin, Shi Jingli, S. C. Bhattacharya, P. Abdul Salam. Assessment of Sustainable Energy Potential of Non-plantation biomass Resources in China. *Biomass and Bioenergy*, Vol.29 (2005), pp 167 - 177. Elsevier Science.
- xviii. N. H. Ravindranath, H. I. Somashekar, M. S. Nagaraja, P. Sudha, G. Sangeetha, S. C. Bhattacharya, P. Abdul Salam. Assessment of Sustainable Non-plantation biomass Resources Potential for Energy in India. *Biomass and Bioenergy*, Vol.29 (2005), pp 178 - 190. Elsevier Science.
- xix. J. C. Elauria, M. L. Y. Castro, M. M. Elauria, S.C. Bhattacharya, P. Abdul Salam. Assessment of Sustainable Energy Potential of Non-plantation biomass Resources in the Philippines. *Biomass and Bioenergy*, Vol.29 (2005), pp 191 - 198. Elsevier Science.
- xx. K. K. C. K. Perera, P. G. Rathnasiri, S. A. S. Senarath, A.G.T.Sugathapala, S. C. Bhattacharya, P. Abdul Salam. Assessment of Sustainable Energy Potential of Non-plantation biomass Resources in Sri Lanka. *Biomass and Bioenergy*, Vol. 29 (2005), pp 199 - 213. Elsevier Science.
- xxi. Boonrod Sajjakulnukit, Rungrawee Yingyuad, Virach Maneekhao, Veerawan Pongnarintasut, S. C. Bhattacharya, P. Abdul Salam. Assessment of Sustainable Energy Potential of Non-plantation biomass Resources in Thailand. *Biomass and Bioenergy*, Vol. 29 (2005), pp 214 - 224. Elsevier Science.
- xxii. S.C. Bhattacharya, P.Abdul Salam, H.L. Pham and N.H.Ravindranath. Sustainable Biomass Production for Energy in Selected Asian Countries, *Biomass and Bioenergy*, Vol.25 (2003), pp.471-482. Elsevier Science.
- xxiii. S.C. Bhattacharya, D.O.Albina and P.Abdul Salam. Emission Factors of Wood and Charcoal-fired Cookstoves, *Biomass and Bioenergy*, Vol.23 (2002), pp 453-469. Elsevier Science.
- xxiv. S.C. Bhattacharya and P.Abdul Salam. Low Greenhouse Gas Biomass for Cooking in the Developing Countries, *Biomass and Bioenergy*, Vol. 22 (2002), pp 305-317. Elsevier Science.
- xxv. S.C. Bhattacharya, P. Abdul Salam, and Mahen Sharma. Emissions from Biomass Energy Use in Some Selected Asian Countries, *Energy*, Vol 25 (2000), pp169-188, 2000. Elsevier Science.
- xxvi. M. A. Kumaradasa, S. C. Bhattacharya, P. Abdul Salam and Ghulam Qambar Amur. A Study of Biomass as a Source of Energy in Sri Lanka, *ERIC International Energy Journal*. Vol.21 (1999). Pp 55-68.

- xxvii. H. P. Narang, D. C. Parashar, S. C. Bhattacharya and P. Abdul Salam. A Study of Biomass as a Source of Energy in India, *RERIC International Energy Journal*. Vol 21 (1999), pp11-23.
- xxviii. S.C. Bhattacharya, M. Arul Joe, Zahed Kandhekar, P. Abdul Salam and R. M. Shrestha. Greenhouse Gas Emission Mitigation from the Use of Agricultural Residues: the Case of Rice Husk, *Energy*, Vol.24 (1999). pp 43-59. Elsevier Science.
- xxix. S.C. Bhattacharya, R. A. Attalage, M. Augustus Leon, G.Q. Amur, P. Abdul Salam, and C. Thanawat. Potential of Biomass Fuel Conservation in Selected Asian Countries, *Energy Conversion and Management*, Vol.40 (1999). pp 1141-1162. Elsevier Science.
- xxx. S.C. Bhattacharya, Jossy M.Thomas and P.Abdul Salam. Greenhouse Gas Emissions and The Mitigation Potential of using Animal Wastes in Asia, *Energy*, Vol.22 (1997), pp.1079-1085. Elsevier Science.

4. Papers in conference proceedings

- i. Rotchana Intharathirat and P. Abdul Salam. Analytical hierarchy process based decision making for sustainable MSW management systems in small and medium cities. 7th International Conference on Solid Waste Management. 15-17 December 2017. Hyderabad, India.
- ii. Boonyawee Worapipat and P. Abdul Salam. Assessment of energy consumption and GHG emissions of van fleet: case study of Plykeaw tour company, chonburi province, Thailand. Paper presented at the 12th GMSARN International Conference on Energy Connectivity, Environment and Development in GMS. 28-30 November. 2017. Danang. Vietnam.
- iii. P. Abdul Salam and Sheik Aminur Rahaman. Renewable Energy Systems for Sustainable Development of Rural Asia. Paper presented at the International Forum on Education for Rural Transformation. AIT, Thailand. 13-15 November 2017.
- iv. Rathnayake T, Saeteaw N, Abdul Salam P, Visvanathan C. Characterization of food waste of Bangkok, Thailand as feedstock for mesophilic, wet anaerobic digestion. Paper presented at the International Conference on the "Challenges in Environmental Science and Engineering" (CESE-2017) Kunming, China. 11-15 November 2017.
- v. P. Abdul Salam, Visvanathan C, Rahaman S A, Srinivas R A, Radu T. Food Waste based Anaerobic Digestion with Centralized Monitoring System. Paper presented at the 7th International Symposium on Energy Manchester, England. 13-17 August. 2017.
- vi. Joshi P, Do D. T, Saeteaw N, Jumpusri Y, Abdul Salam P, Visvanathan C. Development of a CSTR System for Mesophilic Wet Anaerobic Digestion of Food Waste in Thailand. Paper presented at the 5th International Symposium on Environmental Analytical Chemistry (ISEAC 5 - Asia), Ho Chi Minh City, Viet Nam. 16-20 May, 2017.
- vii. Sachin Muralee Krishna. P. Abdul Salam and Nimal Madhu M. Optimal Sizing and Operational Strategies for Diesel Engine Driven CCHP System. International Conference on Cogeneration, Small Power Plants and District Energy. Bangkok, Thailand. September 14-16, 2016.

- viii. Tanja Radu, Richard Blanchard, Andrew Wheatley, P. Abdul Salam, and C. Visvanathan, and Vincent Smedley. Community Scale, Decentralized Anaerobic Digestion for Energy and Resource Recovery. International Conference on Cogeneration, Small Power Plants and District Energy. Bangkok, Thailand. September 14-16, 2016.
- ix. K. Das, P. Abdul Salam, and S. Nonhebel, Biofuel from Microalgae: Mapping The Developments In Industry, Proceedings of the 11th Conference on Sustainable Development of Energy, Water and Environment Systems, SDEWES2016.0503, 1-17 (2016), Lisbon.
- x. Sachin Muralee Krishna and P. Abdul Salam. Computational Investigations on Producing Diesel-Biodiesel-Ethanol Optimal Fuel Blends – Thailand Perspective. Global Conference on Engineering and Technology. Kuala Lumpur, Malaysia. June 1-2, 2016.
- xi. Sachin Muralee Krishna and P. Abdul Salam. Economic Analysis on Implementing DBE Blends as Diesel Fuel Substitute in Thailand. International Conference on Recent Trends in Engineering and Material Sciences, Jaipur, India. March 17-19, 2016.
- xii. Jakkapong Udomsirichakorn, Prabir Basu, P. Abdul Salam, and Bishnu Acharya. A Study on CaO-based Catalytic Tar Reforming in a Chemical Looping Gasification System. 11th International Conference on Fluidized Bed Technology. Beijing, China, May 14-17, 2014.
- xiii. Rotchana Intharathirat and P. Abdul Salam. Uncertainty of Forecasting Municipal Solid Waste Generation and Composition: A Case Study of Thailand. Euroasia Waste Management Symposium 2014. 28-30 April 2014. Istanbul, Turkey.
- xiv. Karabee Das and P. Abdul Salam. Development of a Generic Methodology for Assessment of Microalgae Cultivation Potential Using GIS. International Conference and Utility Exhibition on Green Energy. 19-21 March 2014. Pattaya, Thailand.
- xv. Jakkapong Udomsirichakorn, Prabir Basu, P. Abdul Salam, and Bishnu Acharya. Effect of CaO on Dual Function of Tar Reforming and CO₂ Capture to Produce Hydrogen-enriched Gas in a Chemical Looping Gasification System. 63rd Canadian Chemical Engineering Conference. Fredericton, NB, Canada, October 20-23, 2013.
- xvi. S. Kumar, Pujan Shrestha and P. Abdul Salam. Energy Access of the Urban Poor in Bangkok, Thailand. An International Energy Conference and 10th Sustainable Energy and Environment (SEE) Forum. Brunei Darussalam . 21st - 23rd November 2012.
- xvii. Wipawan Thammachataree and P. Abdul Salam. Biogas as an Option for a Low Carbon Campus: a Case Study at AIT. Presented at the International Conference and Utility Exhibition 2011 on Power and Energy Systems: Issues and Prospects for Asia. 28 – 30 September 2011, Amari Hotel, Pattaya, Thailand.
- xviii. P. Abdul Salam, S. Kumar and Manjula Sriwardhana. A Review of Biomass Gasification in the Mekong Region. Presented at the International Conference on Innovations for Renewable Energy, September 2010, Hanoi, Vietnam.
- xix. P. Abdul Salam. Biomass Resource Potential and Sustainable Use in Selected Asian Countries. Presented at the International Conference on Sustainability Science in Asia. Nov. 23-24, 2009, held at Asian Institute of Technology. Organized by

Integrated Research System for Sustainability Science (IR3S), The University of Tokyo, Asian Institute of Technology, and United Nations University.

- xx. S. C. Bhattacharya, Elson R.Homes and P.Abdul Salam, Emission of Greenhouse Gases from Charcoal Making, presented in ISES 1997 Solar Energy Congress, Taejon, Korea, August 24 - 29, 1997.
- xxi. S. C. Bhattacharya, Venu M.Singamsetti, P.Abdul Salam, Assessment of Bioenergy Potential in Asia, Presented in the Asian Seminar on Fuel Cell Technology for Rural Electrification, Coimbatore, India, April 25-26, 1996.

5. Papers in workshops

- i. P. Abdul Salam. Examples of WEF Nexus approach from different regions of the world. Regional consultation on innovation strategies for sustainable development through Water-Energy-Food Nexus. Organized by UNCC, Bangkok, Thailand. 28-29 June 2017.
- ii. P. Abdul Salam and Sheik Aminur Rahaman. Rice Straw Densification for Cooking. National Dissemination Workshop of the Project “Turning Rice Straw into Cooking Fuel for Air Quality and Climate Co-benefit in Selected GMS Countries”. 21-22 October 2016, Phnom Penh, Cambodia.
- iii. P. Abdul Salam. Influence of Feedstock Variables on Selection of Biomass Based CHP Systems. Regional workshop on “Overcoming Critical Bottlenecks to Accelerate Renewable Energy Deployment in ASEAN+6 Countries. Organized by APCCT and IRENA. 14-15 June 2016.
- iv. P. Abdul Salam and Didin Agustian. Impacts of using rice straw derived fuels for cooking. PEER Evidence to Action Workshop: Assessment of impacts of emission reduction measures of short-lived climate forcing pollutants on air quality and climate in Southeast Asia (PEER-SEA). AIT, Thailand. 23-25 May 2016.
- v. P. Abdul Salam. Energy Efficiency Status and Opportunities in Asia. Global Workshop to Accelerate Energy Efficiency: Challenges, Opportunities and Roadmaps. Organized by Copenhagen Centre for Energy Efficiency. Copenhagen. Denmark. 8-13 November 2015.
- vi. P. Abdul Salam and S. Kumar. Urban and Peri-urban Energy Access in Myanmar. Workshop on Energy Framework and Rural Electrification for Universal Energy Access. Organized by TERI. New Delhi. 14-15 October 2015.
- vii. P. Abdul Salam. Economic Potential of Biomass Utilization: Case of Thailand. Sixth Regional 3R Forum in Asia and the Pacific. 16-19 August, 2015. Male’, Maldives.
- viii. P. Abdul Salam. Energy Food Nexus: The Case of Rice Production in the Mekong Region. Workshop on “Water Energy Food Nexus: International Cooperation and Technology Transfer”. Science and Technology Days. Organized by SEA-EU-NET. 17-19, March 2015. Paris.
- ix. P. Abdul Salam. Development of Biomass Gasification in ASEAN Region. Second ASEAN Bioenergy Workshop. National Science Technology and Innovation Policy Office. May 29-30, 2014. Bangkok.
- x. P. Abdul Salam. Project Ideas – Tips and Pitfalls. Presented at the Second Regional Capacity Workshop for Asia and CIS on Barrier Analysis, Enabling Environment and Development of Technology Actions Plans. 21-24 February 2012. Novotel Hotel, Bangkok.
- xi. P. Abdul Salam. Modern Energy Use by the Urban Poor in Thailand: A Study of Slum Households in Bangkok and Khon Kaen. Workshop on Urban and Peri-urban

- Energy Access and Development in Asia., Sofitel Centara, Bangkok. Thailand. 4th October 2011.
- xii. P. Abdul Salam. Biomass Gasification in Thailand: Status and Potential. Presented at the International Cooperation Network Promotion Project (ICNPP) in Thailand, Organized by International Centre for Environmental Technology Transfer. Bangkok Imperial Queens Park Hotel, 16 November 2010.
 - xiii. P. Abdul Salam, S. Kumar. Renewable Energy Technology Research at AIT. Presented at the Consultative Meeting on “Establishing an Institutional Cooperation Mechanism to Promote Renewable Energy”, Organized by Asia Pacific Centre for Technology Transfer. 7 - 8 October 2010, AIT.
 - xiv. P. Abdul Salam. Low Carbon Technologies for Cement Sector. Presented at the National Workshop on Low Carbon Technologies for Thai Manufacturing Sectors. 28 February 2010. Century Park Hotel, Bangkok.

6. Development project reports

- i. P. Abdul Salam, Shobhakar Dhakal, Thammarat Koottatep and C. Visvanathan. Decision Making Paper on Mitigation Options in the Thai Waste Sector (Post 2020) and Their Contributions to GHG Mitigation. Submitted to Office of Natural Resources and Environmental Policy and Planning, Thailand. September 2015.
- ii. S. Kumar, P. Abdul Salam and Shobhakar Dhakal. Energy Efficiency Initiatives in Asia and Action Plan to Support Countries. Submitted to UNEP Riso Centre. February 2015.
- iii. S. Kumar, Kyoko Kusakbe, C.O.P. Marpaung, P. Abdul Salam, C. Visvanathan and LAS Ranjith Perera. Action Towards Resource-Efficient and Low Carbon Cities in Asia: Experiences and Highlights. 2013.
- iv. S. Kumar, P. Abdul Salam, C.O.P. Marpaung and R.P. Shrestha. Technology Needs Assessment in Asia and Eastern Europe: A Regional Synthesis Report. Submitted to UNEP Riso. June 2012.
- v. S. Kumar, P. Abdul Salam, C.O.P. Marpaung, J.G. Singh and B.Sireesha. AIT-EHMF Collaborative Project on Micro-Hydro System. Submitted to Ebara foundation. November 2012.
- vi. S. Kumar, P. Abdul Salam and P. Shrestha. Urban Peri-Urban Energy Access (Phase III). A report submitted to the Global Network on Energy for Sustainable Development (GNESD), Copenhagen, Denmark, April 2012.
- vii. P. Abdul Salam, S. Kumar and Manjula Sriwardhana. The Status of Biomass Gasification in Thailand and Cambodia. A report submitted to Energy, Environment Partnership of Mekong Region, October 2010.
- viii. S. Kumar, P. Abdul Salam, Ram M. Shrestha and Manjula Siriwardhana. Bioenergy Thematic Study in Thailand and Indonesia. A report submitted to the Global Network on Energy for Sustainable Development (GNESD), Copenhagen, Denmark, August 2010.
- ix. S. Kumar, P. Abdul Salam and C. Visvanathan. Pilot Appraisal for Low Carbon Technology Innovation and Diffusion in Thai Manufacturing. A report submitted to the United Nations Industrial Development Organization (UNIDO), Austria, July 2010.

7. Non-refereed publications

Contributing author to the following publications:

- i. Renewables 2012: Global Status Report. REN21(Renewable Energy Policy Network for the 21st Century), 2012. Paris.
- ii. Bioenergy: The potential for rural development and poverty alleviation. GNESD (Global Network on Energy for Sustainable Development). UNEP Risoe. 2011. Copenhagen. ISBN 978-87-550-3916-2.
- iii. Technologies for mitigation of greenhouse gas emissions: barriers and promotional approaches – a comparative study in Asia (82 pages). ARRPEEC Publication. Asian Institute of Technology, 2005. ISBN 974-8257-09-6.
- iv. Technologies for mitigation of greenhouse gas emissions: barriers and promotional approaches – China (60 pages). ARRPEEC Publication. Asian Institute of Technology, 2005. ISBN 974-8257-00-2.
- v. Technologies for mitigation of greenhouse gas emissions: barriers and promotional approaches – India (62 pages). ARRPEEC Publication. Asian Institute of Technology, 2005. ISBN 974-8257-02-9.
- vi. Technologies for mitigation of greenhouse gas emissions: barriers and promotional approaches – Philippines (54 pages). ARRPEEC Publication. Asian Institute of Technology, 2005. ISBN 974-8257-04-5.
- vii. Technologies for mitigation of greenhouse gas emissions: barriers and promotional approaches – Sri Lanka (54 pages). ARRPEEC Publication. Asian Institute of Technology, 2005. ISBN 974-8257-05-3.
- viii. Technologies for mitigation of greenhouse gas emissions: barriers and promotional approaches – Thailand (38 pages). ARRPEEC Publication. Asian Institute of Technology, 2005. ISBN 974-8257-06-1.

8. Invited lectures and keynote addresses

- i. Invited lecture. Sustainable and Renewable Energy. Summer Camp Students from JIS Kolkata. AIT. 9 January 2018.
- ii. Invited lecture. Renewable Energy Solutions for Sustainable Development. AIT Day Event in the Philippines. Cagayan De Oro, Mindano, Philippines. 27 May 2017.
- iii. Invited lecture. Experience sharing and way forward on CTCN technical assistance provided on climate change mitigation technologies. Regional forum for CTCN National Designated Entities (NDEs). Bali, Indonesia, 25-28 April, 2017.
- iv. Invited lecture. Rice Straw Densification and Cookstove Systems. PEER Evidence to action workshop on “Assessment of impacts of the emission reduction measures of short-lived climate forcing pollutants on air quality and climate in Southeast Asia”. Organized by AIT and USAID. 23-25 May, 2016. AIT.
- v. Invited lecture. Low Energy Housing in the Tropics. Innovation Seminar on Energy Efficiency in Buildings. Organized by German-Thai Chamber of Commerce, 1 February 2016. AIT.
- vi. Invited lecture. Mapping of climate technology projects, national policies, stakeholders and other issues in Bangladesh. CTCN Request National Consultation in Bangladesh. 21st January 2016, Dhaka, Bangladesh.
- vii. Invited lecture. State of the art Biogas Technologies for Farms and Industries. Reduction of GHG emission through promotion of commercial biogas plants – UNIDO project launching. July 06. 2015, Phnom Penh. Cambodia.
- viii. Invited lecture. Development and Testing of Biomass Cookstoves: Status, Challenges and Opportunities. International Symposium on Renewable Energy and Energy

- Efficiency. Organized by Department of Renewable Energy Bhutan and UNDP Bhutan. Bhutan. 3-5 June 2015.
- ix. Invited lecture. Bioenergy and Climate Change Mitigation: Options and Opportunities. International Symposium on Renewable Energy and Energy Efficiency. Organized by Department of Renewable Energy Bhutan and UNDP Bhutan. Bhutan. 3-5 June 2015.
 - x. Invited lecture. Solid Waste Management and Energy: AIT's Experience. AIT Consulting and Eight Japan Consultants Technical Exchange Seminar. AIT. 23rd April 2015.
 - xi. Invited lecture. Current Situation of Renewable Energy Technology in Thailand and its Future Perspective. SMEs Industry Stakeholders Consultation on "Greening Industry through Low Carbon Technology Application for SMEs". 11th March 2015. Sukosol Hotel. Bangkok.
 - xii. Invited lecture. Biomass Gasification. 3W Expo and Conference 2015. 29-31 January 2015, Bangkok.
 - xiii. Invited lecture. AIT's Experience in Bioenergy. Bioenergy and Food Security Rapid Appraisal Technical Training in Asia. 27-31 October, 2014. Bangkok.
 - xiv. Keynote address. Sustainable Development: Role of Engineers. The Institution of Engineers Sri Lanka – Ampara District Centre. Faculty of Engineering. South Eastern University of Sri Lanka. 25th July 2014.
 - xv. Invited lecture. Development of Biomass Gasification in ASEAN Region. Second ASEAN Bioenergy Workshop. National Science Technology and Innovation Policy Office. May 29-30, 2014. Bangkok.
 - xvi. Keynote address. Carbon Capture, Sequestration and Clean Coal Technologies. International Workshop on Carbon Capture and Clean Coal Technologies. Bankura Unnavani Institute of Engineering. Bankura, West Bengal, India. 14-15 February, 2014.
 - xvii. Keynote address. Carbon Sequestration: Options and Opportunities. International Workshop on Low Carbon Development: Carbon Capture and Carbon Sequestration Route. MCKV Institute of Engineering, Kolkata, West Bengal, India. 12-13 February 2014.
 - xviii. Invited lecture. Ocean Energy. Narula Institute of Technology, Kolkata, West Bengal, India. 11th February, 2014.
 - xix. Keynote address. Climate Change Mitigation: Options and Opportunities. SAITM Research Symposium on Engineering Advancements 2013 (RSEA, 2013). 27 April 2013. Sri Lanka.
 - xx. Invited lectures. Biomass Conversion Technologies: Status and Issues. 3W Expo 2013. BITEC, 22-24 January 2013.
 - xxi. Invited lectures. Biofuels in ASEAN. Low Emission Development Strategy (LEDS) forum. Organized by USAID. Sofitel Hotel. Bangkok. 18 – 21 September 2012.
 - xxii. Invited lectures. Save our planet carbon score card. Save our planet conference series 2011. Organized by ASEAN Affairs. 18 March 2011. Shangri-La Hotel, Bangkok. Thailand.
 - xxiii. Trends in energy consumption and impacts on environment. AIT-EBARA International Training Course on "Energy Saving for Fluid Machinery Equipment and Effective Usage of Unused Energies", 25 – 31 August, 2010, AIT, Thailand.
 - xxiv. E-learning lecture on Best Practices and Case Studies in Renewable Energy Development. Under the UNESCO E-learning course. 25 March 2010, AIT.

- xxv. E-learning lecture on Role of Private Sector in Renewable Energy Development. Under the UNESCO E-learning course. 22 March 2010, AIT.

9. Total number of citations:

Citations (as of 29th January 2018)

- a) Google Scholar:
- h-index = 20
 - i10 index = 26
 - Total number of citations = 1626
- b) Scopus :
- Total number of citations = 932
 - h-index = 18
- c) Research gate
- RG Score = 27.81
 - Citations = 1161
 - h index = 19

C. Research grants and sponsored projects

1. List of research grants and sponsored projects.

Sr. No	Project Title	Duration
1.	Bangchak Initiative and Innovation Centre at AIT	July 2017 – July 2022
2.	Developing policy framework and business model to promote sustainable use of biomass briquettes in Nepal	Sept. 2017 – Dec.2018
3.	ICUE 2018 Green Energy for Sustainable Development	Oct.2017 – March.2019
4.	CTCN Technical Assistance Response Plan for Nepal	Nov.2016 – April 2017
5.	Community scale decentralized anaerobic digestion for energy and resource efficiency (British Council – Newton Fund Institutional Link Grant)	May 2016 - Oct.2018
6.	CTCN Request Incubator Training and National Consultation in Bangladesh	Dec.2015 – April 2016
7.	Assignment of Low-carbon Technology facilitation in Asia in the context of Climate Technology Centre and Networks (CTCN) in Thailand	Nov.2015 – April 2016
8.	Training on Design and Testing of Improved Cookstoves	Sept.2015 – April 2016
9.	Development of a Decision Making Paper on GHG Mitigation Options in Thai Waste Sector	March 2015 – Feb. 2016
10.	Provision of Technical Services in the Area of Renewable Energy Phase II	March 2015- Oct.2016
11.	Turning Rice Straw into Cooking Fuel for Air Quality and Climate Co-benefit in Selected GMS Countries	Dec.2014 – Aug.2016
12.	Technology Needs Assessment for Asia and CIS Phase II	Jan.2015 – January

		2017
13.	Technology Needs Assessment Phase II - Missions	Jan.2015 – January 2017
14.	Technology Needs Assessment Phase II - Workshops	Jan.2015 – January 2017
15.	Technology Needs Assessment Phase II – Global Workshops	Jan.2015 – January 2017
16.	Testing of and Training on Improved Cookstoves	Sep.2014-Feb.2015
17.	Capacity Building on Climate Change: Low Emission Development Assessments, Tools and Strategies	Nov.2014 – April 2015
18.	Assignment on Technology Adaptation and National Capacity Building for CTCN in Thailand	Aug.2014 – April.2015
19.	Energy Efficiency Initiatives in Asia and Action Plan to Support Countries	June 2014 – March 2016
20.	Assessment of Potential Use of EFB Fly Ash	Sept.2014 – Aug.2015
21.	Provision of Technical Services in the Area of Renewable Energy (UNIDO)	March 2014 – February 2015
22.	AIT – Sustainable Living Laboratory – Bioenergy Project	February 2014 – September 2014
23.	Urban Energy Access in Myanmar: Knowledge and Outreach	Nov.2013 – January. 2015
24.	Sustainable Mekong Research Network (Sumernet) partnership initiation	July – August 2013
25.	Low Carbon Cooling Application Systems – study visits	July – August 2013
26.	SEA-EU-NET- II	November 2012 – October 2016
27.	Professional Master in Energy Business Management (PMEBM)	2012 - 2014
28.	Partnership for Market Readiness	March – December 2013
29.	Renewable Powered micro-/mini-grid generation	December 2012 – June 2013
30.	International Training on Design and Management of Domestic Biogas Systems	July 2012 – October 2012
31.	SEA-EU-NET	November 2010 – December 2012
32.	Urban and Peri-urban Energy Access	June 2011 – June 2012
33.	Biofuel Sustainable Policy Study	May 2011 - November 2011
34.	Technology Needs Assessment for Climate Change Mitigation	July 2010 - April 2012
35.	Biomass Gasification Study in the Mekong Region	June 2010 - March 2011
36.	RETScreen Version 4 Training	February 2010 - May 2010
37.	RETScreen Version 4 Integration	February 2010 - May 2010
38.	Micro-Hydro PV Hybrid System	February 2010 - April

		2012
39.	Low Carbon Cities: Learning from the Experiences in France	2010 - 2013
40.	Action Towards Resource Efficient and Low Carbon Cities in Asia	December 2009 - December 2012
41.	Pilot Appraisal of Low Carbon Technology Innovation and Diffusion in Thai Manufacturing Sectors	November 2009 - March 2010

IV. Service/Outreach

A. Professional Service

1. Leadership in policy and program development in professional organizations.
 - i. Member – International Solid Waste Association – since 2017
 - ii. Member – World Bioenergy Association (WBA) – since 2014.
 - iii. Member - American Society of Mechanical Engineers (ASME) – since 1995
 - iv. Member – American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) – since 2009
 - v. Associate Member – Institute of Engineers Sri Lanka (IESL) – since 1992
 - vi. Life Member – Sri Lanka Energy Managers Association (SLEMA) –since 1995
2. Participation in organizational responses to policy, practice, or structural issues, which affect the field.
 - i. Lower Mekong Policy Forum on Energy, Agriculture and Natural Resources. Da Nang, Vietnam, 07-08 December 2017.
 - ii. 2017 Clean Cooking Forum at New Delhi. Organized by Global Alliance for Clean Cooking. New Delhi, India. 24-28 October 2017.
 - iii. InnoBioPlastic2016: Smart Bioplastics, Prospects and Challenges for Future Bio-Economy. BITEC, Thailand. 15-16 September 2016.
 - iv. Lower Mekong Policy Forum on Environment, Agriculture and Livelihoods. 11-12 August 2016, Siem Reap, Cambodia.
 - v. Science and Technology Innovation Days (STI Days) and General Assembly meeting of SEA-EU-NET. Organized by ASEAN-EU. Hanoi. Vietnam. 10-12 May, 2016.
 - vi. Workshop on Biogas Application in Industry and Agriculture. Morakot Regional Centre for Industrial Biogas and Wastewater Research and Development. Chiangmai. Thailand. 15-18 March 2016.
 - vii. Workshop on Future Energy Research: Competences-Opportunities-Networking. AIT, 17-18 December 2015.
 - viii. Fourth Vienna Energy Forum. Organized by UNIDO-Austria. 18-20 June, 2015. Vienna, Austria.
 - ix. Workshop on Biogas for Productive Uses, Industrial and Mobility Applications. Organized by UNIDO-Austria. 17th June 2015. Vienna, Austria.
 - x. Science and Technology Innovation Days (STI Days). Organized by ASEAN-EU. Paris. France. 17-19 March, 2015.
 - xi. SUMERNET Annual Meeting 2015. Bangkok. Thailand. 10-12 February 2015.
 - xii. SE4ALL Consultation Workshop on Energy Efficiency Initiatives and Action Plans to Support Countries, 27 January 2015, Hanoi, Vietnam.

- xiii. Introduction to Low Emissions Development Strategies (LEDS) for Policy Makers in the Asia Region. LEDS Leadership Course, Bangkok, Thailand. 24-26 September 2014.
- xiv. CTNFC Meeting for Regional Institutions with Climate Change Expertise and Project Focal Points, 20-22 August 2014, Bangkok, Thailand.
- xv. SUMERNET 3 Full Proposal Development Workshop. 2-4 July 2014. Eastin Hotel. Bangkok, Thailand.
- xvi. Fourth Regional Forum and Eight Steering Committee Meeting of Energy Environment Partnership for Mekong Region. Siem Reap, Cambodia. 24-25 October 2013.
- xvii. Clean Cooking Forum 2013: Igniting Change, Fueling Markets and Sparking Adoption. March 18-22, 2013. Phnom Penh, Cambodia. Organized by Global Alliance for Clean Cookstoves.
- xviii. Low Emissions Development Strategies (LEDS) Global Partnership *Learning and Leading on LEDS* workshop, held from February 27–March 1, 2013, Amari-Orchid, Pattaya, Thailand, Organized by LEDS Global Partnership Secretariat, NREL, USA.
- xix. ASEAN– EU Week on Science and Technology Cooperation. Organized by International Bureau of the Federal Ministry of Education and Research. Germany. 10-12, December 2012. Brussels.
- xx. Third Regional Forum and Fourth Steering Committee Meeting of Energy Environment Partnership for Mekong Region. Hanoi, Vietnam. 20-21 November 2012.
- xxi. Global Network on Energy for Sustainable Development (GNESD) Working Group and Expert Group Meeting. Copenhagen, Denmark. 29-30 May 2012.
- xxii. Sixth UN-CECAR International Workshop on Strategic Planning. Pathumwan Princess Hotel, Bangkok, Thailand. Organized by University Network for Climate and Ecosystem Change Adaptation Research, Institute for Sustainability and Peace. United Nations University. 24-25 May 2012.
- xxiii. Sixth UN-CECAR International Conference on Renewable Energy. Chulalankorn University, Bangkok, Thailand. Organized by University Network for Climate and Ecosystem Change Adaptation Research, Institute for Sustainability and Peace. United Nations University. 22-23 May 2012.
- xxiv. Global Network on Energy for Sustainable Development (GNESD) Working Group and Expert Group Meeting. Vienna, Austria. 23-24 June 2011.
- xxv. Vienna Energy Forum. Organized by United Nations Industrial Development Organization (UNIDO). Vienna, Austria, 21-22 June 2011.
- xxvi. Sustainable Bio-energy Symposium. Organized by Food and Agriculture Organization. BITEC Conference Centre, Bangkok, 2 June 2011.
- xxvii. International Conference on Renewable Energy: Energy Security in 21st Century. Organized by Joint Graduate School for Energy and Environment (JGSEE). BITEC Conference Centre, Bangkok, 1 June 2011.
- xxviii. World Energy Council (WEC) Asia regional conference and meeting. BITEC Conference Centre, Bangkok. 24 March 2011.
- xxix. Global Network on Energy for Sustainable Development (GNESD) Working Group and Expert Group Meeting. Cancun. Mexico. 5-8 December 2010.
- xxx. Workshop and Field Trip. A cooperative project among APCTT-UNESCAP member countries on the commercialization of Technology in the Area of Jatropha Oil and Wood Pellet Machines and Tools. Chiangmai. Thailand. 28-30 April 2010.

3. Organization of training courses, conferences, seminars, and workshops.

- i. Stakeholder Consultation Workshop on Sustainable use of Biomass Briquettes in Nepal. 22-23 January 2018. Kathmandu, Nepal (with Dr. Shobhakar)
- ii. National Dissemination Workshop of the Project “Turning Rice Straw into Cooking Fuel for Air Quality and Climate Co-benefit in Selected GMS Countries”. 21-22 October 2016, Phnom Penh, Cambodia. (with Prof. Kim Oanh)
- iii. International Conference on Cogeneration, Small Power Plants and District Energy (ICUE 2016). Conference Director. 14-16 September 2016. BITEC. Bangkok. Thailand.
- iv. Biomass and Bioenergy: Technology Options, Challenges and Opportunities. A Training programme organized in Association with Tehno-Biz. Kuala Lumpur. 30-31 May 2016.
- v. Second Regional Capacity Building Workshop for Technology Needs Assessment Phase II (Asia & CIS). Bangkok, Thailand. 8-11 March 2016 (with Prof. Kumar and Prof. Rajendra)
- vi. Second Bangkok Regional Workshop on Low Carbon Technology Transfer and Diffusion. Bangkok. Thailand. 23-24 February 2016 (with Dr. Shobhakar)
- vii. Second Annual Review Workshop of the Project “Turning Rice Straw into Cooking Fuel for Air Quality and Climate Co-benefit in Selected GMS Countries”. AIT. 30th January 2016 (with Prof. Kim Oanh).
- viii. CTCN Request Incubator National Consultation Meeting in Bangladesh. Dhaka, Bangladesh. 21st January 2016.
- ix. CTCN Request Incubator Training Program for Bangladesh. Dhaka, Bangladesh. 19-20 January 2016.
- x. International Expert Workshop “Towards Urban Water Security in Southeast Asia: Managing Risks of Extreme Events.” Phnom Penh. Cambodia. 19-20 November 2015 (with Dr. Anil and Dr. Sangam)
- xi. International Training on Design and Testing of Improved Cookstoves. AIT, Thailand. 5-9 October 2015.
- xii. TNA Phase II First Regional Capacity Building Workshop for Asia and CIS, Bangkok. 6-8 July 2015 (with Prof. Kumar and Prof. Rajendra)
- xiii. TNA Phase II Project Launching and Experience Sharing Workshop. Novotel. Bangkok. 26-27 May 2015 (with Prof. Kumar and Prof. Rajendra)
- xiv. Workshop on Urban and Peri-urban Energy Access in Myanmar: Knowledge and Outreach, Yangon, Myanmar. 30 April 2015 (with Prof. Kmar)
- xv. Bangkok Regional Workshop on Low Carbon Technology Transfer and Diffusion, 2 – 3 March 2015, Hotel Novotel Siam Square, Bangkok (with Dr. Shobhakar).
- xvi. Workshop on Low Carbon Technology Transfer and Diffusion, 12 February 2015, Hotel Novotel Siam Square, Bangkok (with Dr. Shobhakar).
- xvii. SE4ALL Energy Efficiency Consultation Workshop. Hanoi, Vietnam. 27 January 2015 (with Prof. Kumar).
- xviii. International Expert Workshop on Development Planning and Decisions: Impact on Water Energy Food Nexus on Mekong Region. 22-23 January 2014 Bangkok, Thailand (with Dr. Anil and Dr. Sangham).
- xix. SE4ALL Energy Efficiency Consultation Workshop. Jakarta, Indonesia. 25 November, 2014 (with Prof. Kumar).
- xx. Training on Climate Change: Low Emission Development Assessments, Tools and Strategies. 17-23 November, 2014. AIT, Bangkok. (35 Participants from Bhutan).

- xxi. SE4ALL Energy Efficiency Consultation Workshop. Bangkok, Thailand. 11 November 2014 (with Prof.Kumar).
- xxii. Training on Design and Testing of Improved Cookstoves for Participants from Bhutan. 8 – 11 November, 2014. AIT, Bangkok.
- xxiii. Bioenergy and Food Security Rapid Appraisal Technical Training in Asia (BEFS-RA). 27-31 October, 2014. Bangkok. (in collaboration with FAO).
- xxiv. Workshop on Identifying Barriers to Clean Energy Access in Myanmar. Myanmar Engineering Society, 27 June 2014, Myanmar (with Prof. Kumar).
- xxv. International Conference and Utility Exhibition on Green Energy for Sustainable Development. Pattaya, Thailand. 19-21 March 2014 (with Energy FoS faculty and PEA).
- xxvi. Towards Low Carbon Cities: Experience Sharing Workshop. Action Towards Resource-efficient and Low Carbon Cities in Asia. Asia Airport Hotel, Rangsit. 11-12 February 2013 (with Prof. Kumar, Dr. Charles, Dr. K. Kusakabe, Dr. R. Perera and Prof. C. Visvanathan. 60 Participants).
- xxvii. Technology Needs Assessment: Global Experience Sharing Workshop. 10-12 September 2012. Pullman Hotel. Bangkok (with Prof. Kumar, Dr. Charles, and Dr. P. Rajendra. 80 participants).
- xxviii. International Training on Design and Management of Domestic Biogas Systems. 6 – 10th August 2012. Asian Institute of Technology (with Prof. Kumar, 27 Participants)
- xxix. Policy Dialogue on Urban and Peri Urban Energy Access. Novotel Hotel, Bangkok, Thailand. 6th March 2012. (with Prof. Kumar, 15 Participants)
- xxx. Second Regional Capacity Building Workshop in Asia on Barrier Analysis, Enabling Environment and Development of Technology Action Plan (2nd round countries), 21-24, February 2012. Novotel Hotel, Bangkok, Thailand. (with Prof. Kumar, Dr. Charles, and Dr. P. Rajendra. 40 Participants)
- xxxi. Workshop on Urban and Peri-urban Energy Access and Development in Asia., Sofitel Centara, Bangkok. Thailand. 4th October 2011. (with Prof. Kumar. 15 Participants)
- xxxii. International Conference & Utility Exhibition 2011 on Power and Energy Systems: Issues and Prospects for Asia (ICUE 2011). Amari Hotel, Pattaya, Thailand. 28-30 September 2011. (with Energy FoS faculty and PEA. 300 Participants)
- xxxiii. First Regional Capacity Building Workshop in Asia for Technology Needs Assessment Project (2nd round countries). Bangkok, Thailand. 8 – 11 August 2011. (with Prof. Kumar, Dr. Charles, and Dr. P. Rajendra. 23 Participants)
- xxxiv. Training on “Territorial Climate and Energy Plan (TCEP)”, AIT. 18-21 May 2011. (with Prof. Kumar, Dr. Charles, Dr. K. Kusakabe, Dr. R. Perera and Prof. C. Visvanathan. 35 Participants)
- xxxv. Seminar on Low Carbon Initiatives of Cities for GHG Mitigation and Adaptation to Climate Change. Sofitel Centara Grand Hotel, Bangkok, Thailand. 16-17 May 2011. (with Prof. Kumar, Dr. Charles, Dr. K. Kusakabe, Dr. R. Perera and Prof. C. Visvanathan. 62 Participants)
- xxxvi. Second Training on “Bilan Carbone[®] Methodology and Tool for Calculating GHG Emissions”, AIT. 09-12 March 2011. (with Prof. Kumar, Dr. Charles, Dr. K. Kusakabe, Dr. R. Perera and Prof. C. Visvanathan. 10 Participants)
- xxxvii. Second Regional Capacity Building Workshop in Asia on Barrier Analysis, Enabling Environment and Development of Technology Action Plan (1st round countries), 18-21 January 2011. (with Prof. Kumar, Dr. Charles, and Dr. P. Rajendra. 23 Participants)

- xxxviii. Training on “Bilan Carbone® methodology and tool for calculating GHGs”, AIT. 5-9, January, 2011. (with Prof. Kumar, Dr. Charles, Dr. K. Kusakabe, Dr. R. Perera and Prof. C. Visvanathan. 18 Participants)
- xxxix. Consultative Meeting on “Establishing a Regional Institutional Cooperation Mechanism to Promote Renewable Energy in Asia and the Pacific”. 7-8 October 2010. AIT (with Prof. S. Kumar. 20 Participants)
 - xl. First Regional Capacity Building Workshop in Asia for Technology Needs Assessment Project (1st round countries). Bangkok, Thailand. 15 – 17 September 2010. (with Prof. Kumar and Dr. Charles. 50 Participants).
 - xli. Workshop on Masters in Energy Business Management (MEBM), 17 August 2010. Bangkok. (with Energy and SOM Faculty. 30 Participants)
 - xlii. Advisory Group Meeting for AIT – ADEME Project: Actions Towards Resource Efficient and Low Carbon Cities in Asia. 10 August 2010, Bangkok. (with Prof. Kumar, Dr. K. Kusakabe, Dr. R. Perera and Prof. C. Visvanathan. 25 Participants)
 - xliii. International Conference on Energy and Sustainable Development: Issues and Strategies (ESD 2010). The Empress Hotel and Convention Centre, Chinagmai. Thailand. 2 -4 June 2010. (with Energy FoS faculty and PEA. 450 Participants)
 - xliv. Training course on Energy Efficiency Using RETScreen. AIT. 11 May 2010. (with Prof. Kumar. 26 Participants)
 - xlv. National Workshop on Low Carbon Technologies for Thai Manufacturing Sectors. Bangkok. Thailand. 28 February 2010. (with Prof. Kumar and Prof. C. Visvanathan. 45 Participants)

4. Editing or serving on advisory boards of journals

- i. Associate Editor – International Energy Journal, Published by Regional Energy Resources Information Center (RERIC), Asian Institute of Technology.
- ii. Reviewer – International Journal of Exergy
- iii. Reviewer – International Journal of Energy Policy
- iv. Reviewer – Fuel
- v. Reviewer – Energy Conversion and Management
- vi. Reviewer – Energy for Sustainable Development
- vii. Reviewer – Fuel Processing Technology
- viii. Reviewer – International Journal of Hydrogen Energy
- ix. Reviewer – Renewable and Sustainable Energy Reviews
- x. Reviewer – Waste Management
- xi. Reviewer – Energy and Buildings
- xii. Reviewer – Biomass and Bioenergy
- xiii. Reviewer - Resources, Conservation and Recycling
- xiv. Reviewer – Sustainable Cities and Society

5. Government or international organization panels, expert witness, reports to government or international agencies

- i. Steering Committee Member – Energy Environment Partnership for Mekong Region (EEP – Mekong). From August 2012 to December 2014.

B. Significant institute committee service (*Indicate the period of service*)

1. Field-of-Study/Program

- i. Member of the committee for selecting faculty member for Energy Economics and Planning, July 2013.

- ii. Member of the committee for selecting faculty member for Energy Economics and Policy Planning, August 2011.
- iii. Member of the interview committee for selecting students from Provincial Electricity Authority (PEA) of Thailand. December 2009.
- iv. Member of the interview committee for selecting Lab supervisor for the Energy Field of Study. 2009 and 2010.

2. School

- i. Member of the faculty recruitment committee for UEM program. March 2013.
- ii. Member, SERD Working Group on Development of Curriculum for Energy & Environment. 2012.
- iii. Member, SERD promotion committee, 2012.
- iv. Member, SERD Task force for undergraduate programme in chemical engineering
- v. Member, Committee for class room improvement, SERD. 2011.

3. Institute

- i. Member (Elected) – Faculty Relation Committee (FRC). June 2017.
- ii. Member – Scientific Committee. Regional Forum on Climate Change. Low Carbon and Climate Resilient Societies: Bridging Science, Practice and Policy.
- iii. Member – Steering Committee for CTCN at AIT From 2014.
- iv. Member (Elected) - Faculty Relation Committee (FRC). June 2013.
- v. Member, Academic Senate appointed Task Force on RCM – Overhead Review (May 2013)
- vi. Member, Academic Development and Review Committee (ADRC), From April 2012 to March 2014.

C. Administrative service (*Indicate the period of service*)

1. Field-of-Study/Program

- i. Coordinator, Energy Field of Study. From 1st September 2011 to December 2012.
- ii. Coordinator, MBA in Energy Business Program From 1st September 2011 to December 2014.
- iii. Coordinator, Professional Master in Energy Business Management (PMEBM) Program. From 1st September 2011 to December 2014.

2. School

- i. Acting Leader – Energy and Environment Thematic Area, January 2013 to July 2013.

3. Institute

- i. Thematic Leader – Low Carbon, and Sustainable Production & Consumption Technologies & Management. From July 2014 to May 2016.

V. Industrial Experiences:

From April 2007 to September 2009 employed at Genesis Engineering and Technical Service Co. Ltd., Thailand, as a Engineering Manager cum General Manager.

Responsibilities:

- Providing guidance, leadership, mentoring and intervention as necessary to strengthen the discipline, quality, reliability and rigor of the engineering work.

- Technical engineering leadership and oversight for quality engineering design, execution and product safety for the portfolio of renewable energy, energy efficiency and heat recovery systems related products and services.
- Characterization of renewable energy technologies and study on the potential of renewable energy technologies and the barriers to their commercialization in Thailand Market.
- Technology transfer of energy efficient and environmentally sound technologies such as biomass fired fluidized bed boilers, heat recovery steam generators (HRSGs), solar thermal power plant etc. to the Thai market in technical collaboration with Thai and Non-Thai based companies.
- Identification of energy conservation opportunities and the estimation of its potential through energy auditing.
- Feasibility studies on the GHG emission reduction, and energy saving opportunities and potentials through fuel switching in various industries.
- Design of all kind of heat exchangers (i.e. air coolers, air heaters, shell and tube condensers, coolers etc.), dryers, ovens (Using the latest softwares such as Aspen Plus Engineering Suite and HTRI).
- Design of Heat recovery equipment and systems such as economizer and air to air heat exchanger.
- Design of pressure vessels as per the ASME pressure vessel design code, i.e. section VIII Div. 1 (Using the latest softwares such as PV Elite).

CERTIFICATION: I, the undersigned, certify that, to the best of my knowledge and belief, these biodata correctly describe myself, my qualifications and my experience. I understand that any willful misstatement described herein may lead to my disqualification.

SIGNATURE: _____  _____

DATE: ___29th January 2018_____

Day / Month / Year