Curriculum Vitae

Ke-Sheng CHENG, Ph.D., Professor

Department of Bioenvironmental Systems Engineering National Taiwan University, Taipei, Taiwan Phone: +886-2-33663465, Fax: +886-2-23635854 Email: rslab@ntu.edu.tw

EDUCATION

- Ph.D. Agricultural and Biological Engineering Department, University of Florida, USA (Minor: Statistics)
- M.S. Agricultural Engineering Department, National Taiwan University, Taiwan
- B.S. Agricultural Engineering Department, National Taiwan University, Taiwan

SPECIALTIES

Remote sensing applications to hydrology, water resources management and environmental monitoring

Stochastic simulation and modeling of environmental and hydrological processes Hydrological modeling and design

Spatial statistics and spatiotemporal modeling

PROFESSIONAL EXPERIENCE

08/2003 –	Department Chair, Department of Bioenvironmental
07/2006	Systems Engineering, National Taiwan University
08/2011 to	Visiting professor, School of Geographical Sciences,
09/2011	University of Bristol, UK
08/2012 ~	Editor-in-Chief, Journal of Agricultural Engineering,
	published by the Taiwan Agricultural Engineering Society
04/2006 ~	Editor of the Hydrology Section, Terrestrial, Atmospheric
	and Oceanic Sciences
04/2011 ~	Member, Scientific Steering Committee, AsiaFlux

08/2011 to	Visiting Professor, School of Geographical Sciences,
09/2011	University of Bristol, UK
09/2009 ~	Editor, Paddy and Water Environment
12/2004 to	Editor Board, Landscape and Ecological Engineering
12/2008	
09/2006 –	Guest Professor, Division of Environmental Science and
02/2007	Technology, Graduate School of Agriculture, Kyoto University
11/2002 to	Managing Editor, Paddy and Water Environment
11/2006	
08/2003 –	Vice Chairman, Chinese-Taipei Committee, International
07/2006	Commission on Irrigation and Drainage (ICID)
01/2001 –	Secretary General, Taiwan Agricultural Engineering Society
08/2006	
01/2003 –	Guest Professor, Division of Environmental Science and
03/2003	Technology, Graduate School of Agriculture, Kyoto University
07/2001 –	Visiting Professor, Department of Geography, University of
09/2001	Southampton, United Kingdom
08/1998 –	Courtesy Professor, Mathematics Department,
07/1999	University of Florida, USA
05/1991 –	Staff Engineer, KBN Engineering & Applied Sciences, Inc.,
02/1992	Gainesville, Florida, U.S.A.
06/1990 –	Senior Associate Engineer, Environmental Science &
04/1991	Engineering, Inc., Gainesville, Florida, U.S.A.

HONORS AND AWARDS

Academic and Professional Society Services

- 2013 International Award, International Society of Paddy and Water Environment Engineering (PAWEES).
- 2012 Water Resources Contribution Award, Water Resources Agency of Taiwan, R.O.C.
- 2011 Academic Award, Taiwan Agricultural Engineering Society

- Paper award Journal of the Taiwan Society of Agricultural Engineers.
 (2010, 2009, 2005, 2004, 2001, 1999)
- 2009 Top reviewer of the Elsevier Publishing Company (Geoscience Category).
- Reviewer Award 2008, Paddy and Water Environment. Journal of the International Society of Paddy and Water Environment Engineering.
- Member of the Honor Society of Agriculture, USA

Invited Speeches

- Distinguished Lecture Hydrological Sciences Section, 2014 Annual
 Meeting, Asia Oceania Geosciences Society (AOGS)
- Invited speaker at the International Workshop on Sustainable Paddy Farming and Healthy Environment, INWEPF & ICID, Changwon City, Korea, 2008.
- Invited speaker at the INWEPF & ICID WG-SDTA Joint Workshop on Sustainable Paddy Farming in Asian Monsoon Region, Korea National Committee of INWEPF, Seoul, Korea, 2007.

Teaching and Research

- Teaching Award, National Taiwan University (2013, 1999)
- Teaching Award, College of Bioresources and Agriculture, National Taiwan University (2012, 2011, 2009)

Special Projects and Grants

- Awarded JAXA ALOS AR4 research projects (2013 2016)
- Awarded JAXA ALOS AR2, AR3 research projects (2007 2012)
- Awarded JAXA GOSAT AR3 research project (2011 2014)

PUBLICATIONS

Refereed Journal Papers

- 1. <u>Cheng, K.S.</u>, Lien, Y.T., Su, Y.F., Liou, J.J., 2014. On the criteria for model performance evaluation. Hydrological Processes, in review. (SCI)
- 2. Hsieh, H.I., Su, M.D., Cheng, K.S., 2014. Multisite Spatiotemporal Streamflow Simulation With an Application to Irrigation Water Shortage Risk

- Assessment. Terrestrial, Atmospheric, Oceanic Sciences, 25(2): 255-266. (SCI)
- Chiang, J.L., Liou, J.J., Wei, C., <u>Cheng, K.S.</u>, 2014. A Feature-Space Indicator Kriging Approach for Remote Sensing Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 52(7): 4046 – 4055. (SCI)
- 4. Su, Y.F., Foody, G.M., <u>Cheng, K.S.</u>, 2012. Spatial non-stationarity in the relationships between land cover and surface temperature in an urban heat island and its impacts on thermally sensitive populations. *Landscape and Urban Planning*, Vol. 107, 172 180. (SCI)
- Su, Y.F., Foody, G.M., Muad, A.M., <u>Cheng, K.S.</u>, 2012. Combining Hopfield Neural Network and contouring methods to enhance super-resolution mapping. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* (JSTARS), 5(5):1403-1417. (SCI)
- 6. Su, Y.F., Foody, G.M., Muad, A.M., <u>Cheng, K.S.</u>, 2012. Combining Pixel Swapping and Contouring Methods to Enhance Super-Resolution Mapping *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* (JSTARS), 5(5): 1428 1437. (SCI)
- 7. Chen, H.W., <u>Cheng, K.S.</u>, 2012. A Conceptual model of surface reflectance estimation for satellite remote sensing images using *in situ* reference data. *Remote Sensing*, 4(4): 934-949. (SCI)
- Wu, Y.C., Liou, J.J., <u>Cheng, K.S.</u>, 2012. Establishing acceptance regions for L-moments based goodness-of-fit tests for the Pearson type III distribution. Stochastic Environmental Research and Risk Assessment, 26: 873-885, DOI 10.1007/s00477-011-0519-z. (SCI)
- Cheng, K.S., Su, Y.F., Yeh, H.C., Chang, J.H., Hung, W.C., 2012. A path radiance estimation algorithm using reflectance measurements in radiometric control areas. *International Journal of Remote Sensing*, Vol. 33(5): 1543-1566. DOI:10.1080/01431161.2011.583290. (SCI)
- 10. Wu, Y.C., Hou, J.C., Liou, J.J., Su, Y.F., Cheng, K.S., 2012. Assessing the impact of climate change on basin-average annual typhoon rainfalls with

- consideration of multisite correlation. *Paddy and Water Environment*, 10(2): 103-112, DOI 10.1007/s10333-011-0271-5. (SCI)
- Liou, J.J. Su, Y.F., Chiang, J.L., <u>Cheng, K.S.</u>, 2011. Gamma random field simulation by a covariance matrix transformation method. *Stochastic Environmental Research and Risk Assessment*, 25(2): 235 251, DOI: 10.1007/s00477-010-0434-8. (SCI)
- Cheng, K.S., Hou, J.C., Liou, J.J., Wu, Y.C., Chiang, J.L., 2011. Stochastic Simulation of Bivariate Gamma Distribution – A Frequency-Factor Based Approach. Stochastic Environmental Research and Risk Assessment, 25(2): 107 – 122, DOI 10.1007/s00477-010-0427-7. (SCI)
- Hung, W.C., Chen, Y.C., <u>Cheng, K.S.</u>, 2010. Comparing landcover patterns in Tokyo, Kyoto, and Taipei using ALOS multispectral images. *Landscape and Urban Planning*, 97: 132-145. (SCI)
- Cheng, K.S., Hou, J.C., Wu, Y.C., Liou, J.J., 2009. Assessing the impact of climate change on annual typhoon rainfall A stochastic simulation approach. Paddy and Water Environment, 7(4): 333 – 340, DOI 10.1007/s10333-009-0183-9. (SCI)
- Su, Y.F., Liou, J.J., Hou, J.C., Hung, W.C., Hsu, S.M., Lien, Y.T., Su, M.D., <u>Cheng, K.S.</u>, Wang, Y.F., 2008. A multivariate model for coastal water quality mapping using satellite remote sensing images. *Sensors*, 8, 6321-6339; DOI: 10.3390/s8106321. (SCI)
- Cheng, K.S., Lin, Y.C., Liou, J.J., 2008. Raingauge network evaluation and augmentation using geostatistics. *Hydrological Processes*, 22(14): 2554-2564.
 DOI: 10.1002/ hyp.6851. (SCI)
- 17. Teng, S.P., Chen, Y.K., <u>Cheng, K.S.</u>, Lo, H.C., 2008. Hypothesis-test- based landcover change detection using multi-temporal satellite images—A comparative study. *Advances in Space Research*, 41: 1744-1754. (SCI)
- Cheng, K.S., Su, Y.F., Kuo, F.T., Hung, W.C., Chiang, J.L., 2008. Assessing the effect of landcover on air temperature using remote sensing images - A pilot study in northern Taiwan. *Landscape and Urban Planning*, 85(2): 85-96. (SCI)

- Liou, J.J., Wu, Y.C., <u>Cheng, K.S.</u>, 2008. Establishing acceptance regions for L-moments-based goodness-of-fit test by stochastic simulation. *Journal of Hydrology*, Vol. 355, No.1-4, 49-62. (doi:10.1016/j.jhydrol.2008.02.023). (SCI)
- 20. <u>Cheng, K.S.</u>, Chiang, J.L., and Hsu, C.W., 2007. Simulation of probability distributions commonly used in hydrologic frequency analysis. *Hydrological Processes*, 21: 51 60. (SCI)
- 21. Wei, Chiang, Wei-Chun Hung and <u>Ke-Sheng Cheng</u>, 2006. A Multi-spectral spatial convolution approach of rainfall forecasting using weather satellite imagery. *Advances in Space Research*, 37: 747-753. (SCI)
- Cheng, K.S., C. Wei, and S.C. Chang, 2004. Locating landslides using multi-temporal satellite images. *Advances in Space Research*, 33(3): 296-301.
 (SCI)
- Cheng, K.S., C. Wei, Y.B. Cheng, and H.C. Yeh, 2003. Effect of Spatial Variation Characteristics on Contouring of Design Storm Depth. *Hydrological Processes*, 17(9):1755-1769. (SCI)
- 24. <u>Cheng, K.S.</u>, T.C. Lei, 2001. Reservoir trophic state evaluation using Landsat TM images. *Journal of the American Water Resources Association*, 37(5): 1321-1334. (SCI)
- Cheng, K.S., I. Hueter, E.C. Hsu, and H.C. Yeh, 2001. A Scale-Invariant Gauss-Markov Model for Design Storm Hyetographs. *Journal of the American Water Resources Association*, Vol. 37, No.3, pp.723-736 (SCI)
- 26. <u>Cheng, K.S.</u>, H.C. Yeh, and C.Y. Liou, 2000. Comparative study of drought prediction techniques for reservoir operation. *Journal of the American Water Resources Association*, Vol. 36, No. 3, pp. 511-521 (SCI)
- 27. Cheng, K.S., H.C. Yeh, and C.H. Tsai, 2000. An anisotropic spatial modeling approach for remote sensing image rectification. *Remote Sensing of Environment*, Vol. 73, No. 1, pp. 46-54 (SCI)
- 28. Hou, R.J., <u>K.S. Cheng</u>, 2003. Raingauge network evaluation using information entropy. Taiwan Water Conservancy, 51(2):10-21.

- 29. Liou, J.J. and <u>K.S. Cheng</u>, 2003. Application of kriging estimation to selection of GCPs and geometric correction for remote sensing images. Journal of the Chinese Society of Agricultural Engineers, 49(3):20-29.
- 30. Wei, C. and <u>K.S. Cheng</u>, 2002. Study on the effect of spatial and temporal scales on rainfall estimation using satellite imagery. Taiwan Water Conservancy, 50(2):36-45.
- 31. Wei, C. and K.S. Cheng, 2002. Application of GMS satellite imagery for rainfall estimation. Taiwan Water Conservancy, 50(3):35-48.
- 32. Cheng, K.S., W.T. Chen, and H.C. Yeh, 1999. Hydrologic design of detention pond in hillslope areas. Taiwan Water Conservancy, Vol. 47, No. 4, pp. 41-57.
- 33. Lei, T.C. and <u>K.S. Cheng</u>, 1999. A trophic state index for Te-Chi reservoir. Journal of the Chinese Society of Agricultural Engineers. Vol. 45, No. 4, pp. 61-72.
- 34. Cheng, K.S., E.C. Hsu, and H.C. Yeh, 1999. A fractal-based model for design storm hyetograph. Taiwan Water Conservancy, Vol. 47, No. 3, pp. 43-54.
- 35. <u>Cheng, K.S.</u>, Y.B. Cheng, and H.C. Yeh, 1999. On the study of random field simulation and its application. Taiwan Water Conservancy, Vol. 47, No. 2, pp. 1-13.
- 36. Yeh, H.C. and <u>K.S. Cheng</u>, 1999. Comparison of kriging estimation and multiple regression. Taiwan Water Conservancy, Vol. 47, No. 1, pp. 75-80.
- 37. Chiang, W. and <u>K.S. Cheng</u>, 1998. Technical study on application of remote sensing and geographic information system to watershed hydrological modeling. Journal of the Chinese Society of Agricultural Engineers, Vol. 44, No. 3, pp. 38-50.
- 38. Cheng, K.S., H.C. Yeh, and Y.B. Cheng, 1997. Developing design storm contours in Northern Taiwan. Taiwan Water Conservancy, Vol. 45, No. 3, pp. 42-54.
- 39. Cheng, K.S. and C.F. Hsu, 1997. Rainfall fractal analysis in Taiwan. Taiwan Water Conservancy, Vol. 45, No. 2, pp. 38-47.

- 40. <u>Cheng, K.S.</u>, M.F. Hsu, and H.C. Yeh, 1996. Raingauge network evaluation and design A geostatistical approach. Taiwan Water Conservancy, Vol. 44, No. 1, pp. 16-25.
- 41. Liou, C.Y. and <u>K.S. Cheng</u>, 1995. Prediction of drought lead time using geostatistics. Taiwan Water Conservancy, Vol. 43, No. 2, pp. 74-84.
- 42. Chen, S.K., <u>K.S. Cheng</u>, Y.C. Tan, 1993. Spatial variability of transmissivity in Touliou Aquifer. Taiwan Water Conservancy, Vol. 41, No. 4, pp. 56-74.
- 43. Cheng, K.S. and S.F. Shih, 1992. Rainfall area identification using GOES satellite data. Journal of Irrigation and Drainage Engineering, 118(1), 179-190 (SCI).
- 44. Shih, S.F. and <u>K.S. Cheng</u>, 1991. Evapotranspiration estimation for data-short environment. Journal of Irrigation and Drainage Engineering, 117(1), 107-122 (SCI).
- Cheng, K.S. and S.F. Shih, 1990. Potential application of GOES satellite data for rainfall estimation in Florida. Soil and Crop Science Society of Florida, Proceedings, Vol.49, 36-41 (SCI).
- 46. Shih, S.F. and <u>K.S. Cheng</u>, 1989. Generation of synthetic and missing climatic data for Puerto Rico. Water Resources Bulletin, 25(4), 829 836 (SCI).

Conference Papers (after 2006)

- Cheng, K.S., Su, M.D., Hsieh, H.I., 2014. Spatiotemporal stochastic modeling of multisite stream flows – with application to irrigation water management and risk assessment. Kyoto University – National Taiwan University Joint Symposium, September 1 – 2, 2014, Kyoto, Japan.
- Cheng, K.S. and Wu, Y.C., 2014. Hydrological perspective of climate change impact assessment. 2014 Annual Meeting, Asia Oceania Geosciences Society, July 28 – August 1, 2014, Sapporo, Hokkaido, Japan.
- Cheng, K.S. and Wu, Y.C., 2014. Revisiting statistical downscaling methods -Richardson WG & BCSD. 2014 Annual Meeting, Asia Oceania Geosciences Society, July 28 – August 1, 2014, Sapporo, Hokkaido, Japan.

- Hsieh, H.I., Su, M.D., Cheng, K.S., 2013. Spatiotemporal stochastic model for multi-site streamflow simulation – with an application for irrigation management. 12th Conference of International Society of Paddy and Water Environment Engineering, Oct. 30 – Nov. 1, 2013, Cheongju, South Korea.
- Pan, T.Y., Chang, T.J., Cheng, K.S., Lai, J.S., Chang, H.K., Wu, Y.C., Ho, H. W., 2013. Impacts of climate change on the population health associated with pluvial disaster. EGU General Assembly 2013, 7-12 April, 2013 in Vienna, Austria.
- Cheng, K.S., Wu, Y.C., Lin, G.F., Chen, M.J., Chang, K.C., Lee, Y.P., Juan, H.L., 2013. From Climate Projection to Hydrologic Extreme Projection Coupling GCM outputs and a stochastic storm rainfall simulation model. 2013 APEC Typhoon Symposium, Oct. 21 23, 2013, Taipei, Taiwan, ROC.
- Cheng, K.S., Wu, Y.C., Liou, J.J., Su, Y.F., 2013. Blending Dynamic and Statistical Downscaling Techniques for Projections of Hydrologic Extremes. Oct. 1 – 3, 2013, International Workshop on Downscaling 2013, Tsukuba, Japan.
- 8. Cheng, K.S., 2013. Communicating the effect of climate change on rainfall extremes. 11th AsiaFlux International Workshop, Aug. 21 24, 2013, Seoul National University, Seoul, Korea.
- Cheng, K.S., Lien, T.H., Su, G.M., 2013. Estimating the return period of region-wide catastrophic rainfalls. 10th Annual Meeting, Asia Oceania Geosciences Society, June 24 – 28, 2013, Brisbane, Australia.
- Hsiao, L.H., Cheng, K.S., 2013. Assessing Uncertainties in Accuracy of Landuse Classification Using Remote Sensing Images. 8th International Symposium on Spatial Data Quality (ISSDQ2013), May 30 – June 1, 2013, Hong Kong.
- Cheng, K.S., 2013. Invited speaker at the 2013 International Conference on Climate Change: Assessment of hydrologic projections under climate change.
 Jan. 15 – 17, Taipei, Taiwan, ROC.
- 12. Cheng, K.S., 2012. Invited speaker at the 2012 ACTS 2nd Workshop (Hydro-meteorological information in managing weather risks and

- Weather-Ready Café): Hydrological Perspective: Application of weather forecast information to Water Resources Management. APEC Research Center for Typhoon and Society (ACTS), Nov. 17-19, Teipei, Taiwan, R.O.C.
- 13. Ke-Sheng Cheng, Yii-Chen Wu, Yuan-Fong Su, Jun-Jih Liou, 2012. Coping with uncertainties in climate change by stochastic storm rainfall simulation. PAWEES 2012 International Conference on "Challenges of Water & Environmental Management in Monsoon Asia". Bangkok, Thailand, Nov. 27 29, 2012.
- 14. Ke-Sheng Cheng, Yii-Chen Wu, Yuan-Fong Su, 2012. Model Performance Evaluation for Real-time Hydrological Forecasting. 10th International Conference on Hydroinformatics, HIC 2012, Hamburg, Germany. July 14 – 18, 2012.
- Ke-Sheng Cheng, Tsong-Hsiun Lien, Yuan-Fong Su, Jun-Jih Liou, 2012.
 Regional frequency analysis with presence of catastrophic storm rainfall.
 2012 Annual Conference of the Asian Oceania Geosciences Society (AOGS),
 Singapore, Aug. 13 18, 2012.
- 16. Ke-Sheng Cheng, Cheng-I Hsieh, Ying-Syuan Chen, Yun-Chieh Wang, 2011.
 Monitoring paddy field carbon and evapotranspiration fluxes using field
 hyperspectral reflectance measurements An experimental study in Northern
 Taiwan. 2011 AsiaFlux Workshop, Nov. 9 11, Johor Baru, Malaysia.
- 17. Cheng, K.S., Hung, W.C., Chen, Y.C., 2011. Comparing landcover patterns in Tokyo, Kyoto, and Taipei using ALOS multispectral images. 2011 Asian Conference on Remote Sensing, Oct. 3-7, 2011, Taipei, Taiwan, ROC.
- 18. Wu, Y.C., Hou, J.C., Liou, J.C., Cheng, K.S., 2011. Assessing the impact of climate change on basin-average annual typhoon rainfalls with consideration of multisite correlation. AOGS 2011 Annual Conference, Aug. 8-12, 2011, Taipei, Taiwan, ROC.
- 19. Wu, YC, Hou, JC, Wu, MC, Chung, BC, Cheng, KS, Lin, GF, Chen, MJ, 2011. Assessing the impact of climate change on stormwater hydrology. International Conference on Climate Change Impact to Water Environment and Its Adaptation. Jan. 11 – 12, Taipei, Taiwan, ROC.

- 20. Cheng, K.S., Hung, W.C., Yeh, H.C., Chiang, J.L., 2010. Comparing landcover patterns in Tokyo, Kyoto, and Taipei using ALOS multispectral images. The 4th Joint PI Symposium of ALOS Data Nodes for ALOS Science Program, Nov. 15 -17, Tokyo, Japan.
- Cheng, K.S., Hou, J.C., Wu, Y.C., 2010. Stochastic risk assessment of the impact of climate change on annual typhoon rainfall under synthetic scenarios.
 2010 INWEPF-PAWEES Joint Symposium, Oct. 27 29, Jeju, Korea.
- 22. Cheng, K.S., Su, Y.F., 2010. Path radiance estimation using in-situ surface reflectance measurements. PORSEC 2010 Pan Ocean Remote Sensing Conference. October 18-23, 2010, Keelung, Taiwan, ROC.
- 23. Cheng, K.S., Lien, Y.T., 2010. Assessing Hydrological Model Performance Using Stochastic Simulation. The 9th International Conference on Hydroinformatics, September 7 -11, Tianjin, China.
- Cheng, K.S., Su, Y.F., 2010. Path radiance estimation using reflectance measurements in radiometric control areas. ISPRS Technical Commission VIII Symposium, Aug. 9 – 12, 2010, Kyoto, Japan.
- 25. Cheng, K.S., Hung, W.C., Chen, Y.C., 2010. Comparing landcover patterns in Tokyo, Kyoto, and Taipei using ALOS multispectral images. ISPRS Technical Commission VIII Symposium, Aug. 9 12, 2010, Kyoto, Japan.
- 26. Cheng, K.S., Su, Y.F., 2009. Assessing the Impact of Climate Change on Annual Typhoon Rainfall. AOGS 2009 Annual Conference, Aug. 11 15, Singapore.
- 27. Cheng, K.S., Su, Y.F., 2009. Coastal Water Quality Mapping Using Satellite Remote Sensing Images. World City Water Forum 2009, Aug. 18 21, Incheon, Korea.
- Cheng, K.S., Hou, J.C., 2009. Assessing the Effect of Climate Change on Design Storm Depth. World City Water Forum 2009, Aug. 18 – 21, Incheon, Korea.
- 29. Chen, Y.C., Torii, K, Mitsuno, T., Cheng, K.S., 2009. Comparative Study of the Cultural Heritages and Sociological Functions of Irrigation Ponds

- (Tameikes) in Taiwan and Japan. 22nd CIPA Symposium, Oct. 11 15, Kyoto, Japan.
- 30. Cheng, KS; Hsieh, CI, 2008. Assessing the effects of paddy field on ambient air cooling and carbon sequestration. International Workshop on Sustainable paddy farming and healthy environment. INWEPF & ICID WG-SDTA joint workshop, Changwon City, Korea, Oct. 29-30.
- 31. Cheng, KS; Hou, JC; Wu, YC, 2008. Assessing the impact of climate change on design storm depth using stochastic storm rainfall simulation. HydroChange 2008, Kyoto, Japan, Oct. 1-3.
- 32. Cheng, K.S., Su, Y.F., Su, M.D., 2008. Monitoring the effect of flow discharge on coastal water quality using remote sensing images. 2008 AOGS Annual Conference, Busan, Korea.
- 33. Cheng, K.S., 2008. Assessing Criteria for Model Performance Evaluation. 2008 AOGS Annual Conference, Busan, Korea.
- 34. Cheng, K.S., Hou, J.C., Liou, J.J., 2008. Stochastic simulation of bivariate gamma distribution for storm depth and duration. 2008 AOGS Annual Conference, Busan, Korea.
- 35. Liou, J.J., Su, Y.F., Chiang, J.L., Cheng, K.S., 2008. A covariance conversion approach of gamma random field simulation, Proceedings of The 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences. Shanghai, China.
- 36. Cheng, K.S., Lin, Y.J., 2007. Raingauge network evaluation and augmentation. 2007 AOGS Conference, Bangkok, Thailand.
- 37. Cheng, K.S., Tsai, M.H., Su, Y.F., Kuo, F.T., Hung, W.C., 2007. Assessment of landcover conversion pattern and its implication on sustainable development. INWEPF & ICID WG-SDTA joint workshop Seoul, Korea.
- 38. Cheng, K.S., Hung, W.C., 2007. Identifying prevalent landcover conversion patterns in regions of different major developments The First Joint PI Symposium of ALOS Data Nodes for ALOS Science Program. Kyoto, Japan, Nov. 19 – 23, 2007.

- 39. Teng, S. P., Chiang, J. L., Chen, Y. K., and Cheng, K. S., 2006.
 Hypothesis-test- based landcover change detection using multitemporal satellite images. 36th COSPAR Scientific Assembly, Beijing, China, 16-23
 July 2006.
- 40. Yii-Chen Wu, Jun-Jih Liou, and Ke-Sheng Cheng, 2006. Goodness-of-Fit Test Using Confidence Intervals of L-Moment Ratio Diagram. 2006 AOGS Conference, Singapore, July 10 July 14.
- 41. Ru-Jen Hou, Chun-Ting Lin and Ke-Sheng Cheng, 2006. Assessing the Effect of Climate Change on Design Storm Depth Using Storm Rainfall Simulation. 2006 AOGS Conference, Singapore, July 10 July 14.
- 42. Cheng, K.S. and E.C. Hsu, 2006. Scale-Invariant Hyetograph Model for Urban Drainage Design. 2006 AOGS Conference, Singapore, July 10 July 14.