# **Curriculum Vitae**

#### Ke-Sheng CHENG, Ph.D., Professor

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# **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

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

# **PROFESSIONAL EXPERIENCE**

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)
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# 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)
- 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)
- 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)
- 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)
- <u>Cheng, K.S.</u>, 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., <u>Cheng, K.S.</u>, 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)
- <u>Cheng, K.S.</u>, 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)
- <u>Cheng, K.S.</u>, 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)
- <u>Cheng, K.S.</u>, 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)
- 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)
- <u>Cheng, K.S.</u>, 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)
- <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)
- 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)
- <u>Cheng, K.S.</u>, C. Wei, and S.C. Chang, 2004. Locating landslides using multi-temporal satellite images. *Advances in Space Research*, 33(3): 296-301. (SCI)
- <u>Cheng, K.S.</u>, 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)
- <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)
- <u>Cheng, K.S.</u>, 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)
- <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)
- <u>Cheng, K.S.</u>, 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)
- Hou, R.J., <u>K.S. Cheng</u>, 2003. Raingauge network evaluation using information entropy. Taiwan Water Conservancy, 51(2):10-21.

- 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.
- 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.
- Wei, C. and <u>K.S. Cheng</u>, 2002. Application of GMS satellite imagery for rainfall estimation. Taiwan Water Conservancy, 50(3):35-48.
- <u>Cheng, K.S.</u>, 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.
- 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.
- <u>Cheng, K.S.</u>, 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.
- <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.
- 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.
- 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.
- <u>Cheng, K.S.</u>, 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.
- <u>Cheng, K.S.</u> and C.F. Hsu, 1997. Rainfall fractal analysis in Taiwan. Taiwan Water Conservancy, Vol. 45, No. 2, pp. 38-47.

- <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.
- <u>Cheng, K.S.</u> and S.F. Shih, 1992. Rainfall area identification using GOES satellite data. Journal of Irrigation and Drainage Engineering, 118(1), 179-190 (SCI).
- 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).
- <u>Cheng, K.S.</u> 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).
- 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 Enviroment 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.
- 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.

- 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.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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.
- Cheng, K.S., 2008. Assessing Criteria for Model Performance Evaluation.
  2008 AOGS Annual Conference, Busan, Korea.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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.