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*Desert Research Institute*  
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**EDUCATION**

Saitama University, Japan, Biology and Environmental Science, Ph.D.	1999
Bradley University, IL, Civil & Environmental Engineering, M.S.	1995
Nagpur University, India, Civil Engineering, B.S.	1991

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**APPOINTMENTS**

<b>Interim Vice President</b> Desert Research Institute	02/19 - present
<b>Executive Director</b> Division of Hydrologic Sciences, Desert Research Institute	07/17 - present
<b>Chief Technology Advisor</b> WaterStart, Desert Research Institute	07/14 - 06/17
<b>Research Professor</b> Ecological Engineering, Division of Hydrologic Sciences, Desert Research Institute	07/12 - present
<b>Senior Director</b> Center for Environmental Remediation & Monitoring, Desert Research Institute	04/11 – 06/14
<b>Deputy Director</b> Division of Hydrologic Sciences, Desert Research Institute	09/10 - 06/11
<b>Assistant &amp; Associate Research Professor</b> Ecological Engineering, Division of Hydrologic Sciences, Desert Research Institute	02/06 - 06/12
<b>Wallace Research Fellow</b> Center for Environmental Research, Dept of Biology University of Louisville, Louisville, KY	02/04 - 01/06
<b>Postdoc Researcher</b> School of Life Sciences, Arizona State University, Tempe, AZ	01/01 - 01/04

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**OTHER AFFILIATIONS**

**Visiting Professor** – Hohai University, Nanjing, China  
**Associate Faculty Member**  
– Water Resources Management, College of Sciences, Univ of Nevada, Las Vegas  
– Graduate Program of Hydrologic Sciences, Univ of Nevada, Reno

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**ACADEMIC AWARDS**

Wallace Research Fellowship, University of Louisville, KY	2004-2006
Monbusho Scholarship, Japan	1996-1999
Bradley University GRA, IL	1994-1995
Colombo Plan Scholarship, India	1986-1991

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## GRANTS & CONTRACTS

**Raised over \$18 M** in 14 years as a DRI faculty from agencies such as EPA, NSF, DOD, Governor's office of Economic Development Private Foundations, Utilities, Bureau of Land Management, US Bureau of Reclamation, National Park Service, State agencies and International agencies.

**(Detail list available upon request)**

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## POSTDOCS AND STUDENTS SUPERVISED

### Eight Postdocs

Xuelian Bai, Sachiko Sueki, Shogo Imada, Ni Lixiao, Mahesh Gautam, Ben Conrad, Yiping Li, Jarai Mon

### Eight PhD Students

Harshad Oswal, Aili Sun, Lili Zhao, Chunyan Tang, Binqun Li, Mahesh Bhattarai, Knut Mehler, Achyut Adhikari

### Nine MS Students

Crystal DuBose, Sachiko Sueki, YuZhen Feng, Emma Ruhmann, Xiaolu Wei, Melissa Thaw, Lynn Schwaebe, Amina Lodhi, Carolyn Link

### Seven Technical Staffs, Summer Interns and Lab Assistants

Michael Zhou, William Forsee, Kristina Hsu, Trea LaCroix, Syed Ahmed, Diane Momberg, Candi Schulman

### Five NSF REU Students

Elle Law, Mary DeVita, Trea LaCroix, Christine Simmons, Susan O'Neill

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## PROFESSIONAL SOCIETIES

Water Resources Research (WRR) – *Associate Editor (current)*

Journal of American Water Resources Association (JAWRA) – *Associate Editor (2013-2016)*

American Geophysical Union (AGU)

Association for the Sciences of Limnology and Oceanography (ASLO)

Environmental and Water Resources Institute of ASCE (EWRI)

International Association of Hydraulic Research (IAHR)

Nevada Water Research Institute (NWRA)

International Water Association (IWA)

North American Lake Management Society (NLMS)

Global Lake Ecological Observatory Network (GLEON)

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## JOURNAL PUBLICATIONS (LAST 10 YEARS)

*SUPERVISED STUDENTS AND POSTDOCS WORK DENOTED BY \*.*

Semreen, M.H., Shanableh, A., Semerjian, L., Alniss, H., Mousa, M., Bai, X., *Acharya, K.* (2019) Simultaneous determination of pharmaceuticals by solid-phase extraction and liquid chromatography-tandem mass spectrometry: a case study from Sharjah Sewage treatment plant. *Molecules* 24(3): 633. doi:10.3390/molecules24030633.

Jiang, P., Yu, Z., *Acharya, K.* (2019) Drought in the Western United States: its connections with large-scale oceanic oscillations. *Atmosphere* 10(2): 82. doi:10.3390/atmos10020082.

- Tang, C., Li, Y., Acharya, K., Du, W., Gao, X., Luo, L., Yu, Z. (2019) Impact of intermittent turbulent bursts on sediment resuspension and internal nutrient release in Lake Taihu, China. *Environmental Science and Pollution Research* 26(16): 16519-16528.
- \*Bai, X., Acharya, K. (2019) Removal of seven endocrine disrupting chemicals (EDCs) from municipal wastewater effluents by a freshwater green alga. *Environmental Pollution* 247: 534-540. doi:10.1016/j.envpol.2019.01.075.
- Jiang, P., Yu, Z., Yuan, F., Acharya, K. (2019) The Multi-Scale Temporal Variability of Extreme Precipitation in the Source Region of the Yellow River. *Water* 11(1), 92. doi:10.3390/w11010092.
- \*Bai, X., Acharya, K. (2019) Uptake of endocrine-disrupting chemicals by quagga mussels (*Dreissena bugensis*) in an urban-impacted aquatic ecosystem. *Environmental Science and Pollution Research* 26(1): 250-258.
- Jalil, A., Li, Y., Zhang, K., Gao, X., Wang, W., Khan, H.O.S., Pan, B., Ali, S., Acharya, K. (2019) Wind-induced hydrodynamic changes impact on sediment resuspension for large, shallow Lake Taihu, China. *International Journal of Sediment Research* 34(3): 205-215. doi:10.1016/j.ijsrc.2018.11.003.
- Huang, B., Tu, J., Acharya, K., Yan, D. (2018) Effects of water stress and rewatering on growth and photosynthetic parameters of *Typha orientalis* Presl in coexistence conditions. *Desalination and Water Treatment* 122: 78-84.
- Nwankwegu, A.S., Li, Y., Jiang, L., Lai, Q., Shenglin, W., Jin, W., Acharya, K. (2018) Kinetic modelling of total petroleum hydrocarbon in spent lubricating petroleum oil impacted soil under different treatments. *Environmental Technology*. doi:10.1080/09593330.2018.1498543.
- Jalil, A., Li, Y., Du, W., Wang, W., Wang, J., Gao, X., Khan, H.O.S., Pan, B., Acharya, K. (2018) The role of wind field induced flow velocities in destratification and hypoxia reduction at Meiling Bay of large shallow Lake Taihu, China. *Environmental Pollution* 232: 591-602.
- \*Feng, Y., Sueki, S., Devitt, D., Acharya, K. (2018) How much water can we save by achieving renewable portfolio standards in the Southwest United States? *Water*. doi:10.3390/w10030308.
- Weng, S., Li, Y., Wei, J., Du, W., Gao, X., Wang, W., Wang, J., Acharya, K., Luo, L. (2018) Study on turbulence characteristics and sensitivity of quadrant analysis to threshold level in Lake Taihu. *Environmental Science and Pollution Research*. doi:10.1007/s11356-018-1506-4.
- Ni, L., Li, D., Rong, S., Su, L., Zhou, W., Wang, P., Wang, C., Li, S., Acharya, K. (2017) Characterization of extracellular polymeric substance (EPS) fractions produced by *Microcystis aeruginosa* under the stress of linoleic acid sustained-release microspheres. *Environmental Science and Pollution Research* 24(26): 21091-21102.
- Li, B., Liang, Z., He, Y., Hu, L., Zhao, W., Acharya, K. (2017) Comparison of parameter uncertainty analysis techniques for a TOPMODEL application. *Stochastic Environmental Research and Risk Assessment* 31(5): 1045-1059. doi:10.1007/s00477-016-1319-2.
- Jalil, A., Li, Y., Du, W., Wang, J., Gao, X., Wang, W., Acharya, K. (2017) Wind-induced flow velocity effects on nutrient concentrations at Eastern Bay of Lake Taihu, China. *Environmental Science and Pollution Research* 24(21): 17900-17911.
- Li, Y., Jalil, A., Du, W., Gao, X., Wang, J., Luo, L., Li, H., Dai, S., Hashim, S., Yu, Z., Acharya, K. (2017) Wind induced reverse flow and vertical profile characteristics in a semi-enclosed bay of large shallow Lake Taihu, China. *Ecological Engineering* 102: 224-233. doi:10.1016/j.ecoleng.2017.02.022
- Li, B., Zhang, J., Yu, Z., Liang, Z., Chen, L., Acharya, K. (2017) Climate change driven water budget dynamics of a Tibetan inland lake. *Global and Planetary Change* 150: 70-80.
- \*Bai, X., Acharya, K. (2017) Algae-mediated removal of selected pharmaceutical and personal care products (PPCPs) from Lake Mead water. *Science of the Total Environment* 581-582: 734-740.
- Gao, X., Li, Y., Tang, C., Acharya, K., Du, W., Wang, J., Luo, L., Li, H., Dai, S., Yu, Z., Abdul, J., Yu, W., Zhang, S., Bofah-Buoh, R., Jepkirui, M., Lu, X., Pan, B. (2017) Using ADV for suspended sediment concentration and settling velocity measurements in large shallow lakes. *Environmental Science and Pollution Research* 24(3): 2675-2684. doi:10.1007/s11356-016-8006-1.

- Li, Y., Tang, C., Wang, J., Acharya, K., Du, W., Gao, X., Luo, L., Li, H., Dai, S., Mercy, J., Yu, Z., Pan, B. (2016) Effect of wave-current interactions on sediment resuspension in large shallow lakes. *Environmental Science and Pollution Research* 24(4): 4029-4039. doi:10.1007/s11356-016-8165-0.
- \*Jiang, P., Yu, Z., Gautam, M. R., Acharya, K. (2016) The Spatiotemporal characteristics of extreme precipitation events in the Western United States. *Water Resource Management* 30(13): 4807-4821. doi:10.1007/s11269-016-1454-z.
- Tang, C., Li, Y., Acharya, K. (2016) Modeling the effects of external nutrient reductions on algal blooms in hyper-eutrophic Lake Taihu, China. *Ecological Engineering* 94: 164-173.
- \*Bai, X., Acharya, K. (2016) Removal of trimethoprim, sulfamethoxazole, and triclosan by the green alga *Nannochloris* sp. *Journal of Hazardous Materials* 315: 70-75.
- Du, W., Li, Y., Hua, L., Wang, C., Wang, P., Wang, J., Wang, Y., Chen, L., Buoh, R. B., Jepkirui, M., Pan, B., Jiang, Y., Acharya, K. (2016) Water Age Responses to Weather Conditions in a Hyper-Eutrophic Channel Reservoir in Southern China. *Water* 8: 372, doi:10.3390/w8090372
- \*Jiang, P., Yu, Z., Gautam, M.R., Yuan, F., Achary, K. (2016) Changes of storm properties in the United States: Observations and multimodel ensemble projections. *Global and Planetary Change* 142: 41-52.
- Cai, Y., Xue, A., Xu, J., Zhang, L., Gong, Z., Acharya, K. (2016) Widespread natural intraspecific variation in tissue stoichiometry of two freshwater molluscs: Effect of nutrient enrichment. *Ecological Indicators* 66: 583-591.
- Ni, L., Li, D., Su, L., Xu, J., Li, S., Ye, X., Geng, H., Wang, P., Li, Y., Li, Y., Acharya, K. (2016) Effects of algae growth on cadmium remobilization and ecological risk in sediments of Taihu Lake. *Chemosphere* 151: 37-44.
- Saito, T., Yasuda, H., Sakurai, M., Acharya, K., Sueki, S., Inosako, K., Yoda, K., Fujimaki, H., Abd Elbasit, M.A.M., Eldoma, A.M., Nawata, H. (2016). Monitoring of stem water content of native and invasive trees in arid environments using GS3 soil moisture sensors. *Vadose Zone Journal*, doi:10.2136/vzj2015.04.0061.
- Liebert, R., Huntington, J., Morton, C., Sueki, S., Acharya, K. (2016) Reduced evapotranspiration from leaf beetle induced tamarisk defoliation in the Lower Virgin River using satellite-based energy balance. *Ecohydrology*. doi:10.1002/eco.1623.
- Ni, L., Li, D., Hu, S., Wang, P., Li, S., Li, Y., Li, Y., Acharya, K. (2015) Effects of artemisinin sustained-release granules on mixed alga growth and microcystins production and release. *Environmental Science and Pollution Research* 22: 18637-18644.
- Li, B., Zhou, W., Zhao, Y., Ju, Q., Yu, Z., Lian, Z., Acharya, K. (2015) Using the SPEI to access recent climate change in the Yarlung Zangbo River Basin, South Tibet. *Water* 7: 5474-5486.
- Davis, C.J., Ruhmann, E.K., Acharya, K., Chandra, S., Jerde, C.L. (2015) Successful survival, growth, and reproductive potential of quagga mussels in low calcium lake water: Is there uncertainty of establishment risk? *PeerJ* 3:e1276, doi:10.7717/peerj.1276.
- Li, Y., Anim, D.O., Wang, Y., Tang, C., Du, W., Ni, L., Yu, Z., Acharya, K., and Chen, L. (2015) Laboratory simulations of wave attenuation by an emergent vegetation of artificial *Phragmites australis*: an experimental study of an open-channel wave flume. *Journal of Environmental Engineering and Landscape Management* 23: 251-266.
- \*Taniguchi, T., Imada, S., Acharya, K., Iwanaga, F., Yamanaka, N. (2015) Effect of soil salinity and nutrient levels on the community structure of the root-associated bacteria of the facultative halophyte, *Tamarix ramosissima*, in southwestern United States. *Journal of General and Applied Microbiology* 61: 193-202.
- \*Mehler, K., Acharya, K., Sada, D. (2015) Spatial and temporal pattern in length-mass regressions of freshwater gastropods in Nevada spring ecosystems. *Malacologia* 58(1-2): 167-177.
- Yu, Z., Jiang, P., Gautam, M., Zhang, Y., Acharya, K. (2015) Changes of seasonal storm properties in California and Nevada from an ensemble of climate projections. *Journal of Geophysical Research: Atmospheres*. doi:10.1002/2014JD022414.

- Li, Y., Tang, C., Zhu, J., Anim, D.O., Acharya, K. (2015) Parametric uncertainty and sensitivity analysis of hydrodynamic processes for a large shallow freshwater lake. *Hydrological Sciences Journal* 60(6): 1078-1095. doi:10.1080/02626667.2014.948444.
- \*Sueki, S., Acharya, K., Huntington, J., Liebert, R., Healey, J., Jasoni, R., Young, M. (2015) Defoliation effects of *Diorhabda carinulata* on tamarisk evapotranspiration and groundwater levels. *Ecohydrology*. doi:10.1002/eco.1604.
- Li, B., Acharya, K., Yu, Z., Liang, Z., Su, F. (2015) The mass and energy exchange of a Tibetan glacier: distributed modeling and climate sensitivity. *Journal of American Water Resource Association* 1-13. doi:10.1111/jawr.12286.
- \*Tang, C., Li, Y., Jiang, P., Yu, Z., Acharya, K. (2015) A coupled modelling approach to predict water quality in Lake Taihu, China: linkage to climate change projections. *Journal of Freshwater Ecology*. doi:10.1080/02705060.2014.999360.
- \*Imada, S., Matsuo, N., Acharya, K., Yamanaka, N. (2015) Effects of salinity on fine root distribution and whole plant biomass of *Tamarix ramosissima* cuttings. *Journal of Arid Environments* 114: 84-90.
- Ni, L., Jie, X., Wang, P., Li, S., Wang, G., Li, Y., Li, Y., Acharya, K. (2015) Effect of linoleic acid sustained-release microspheres on *Microcystis aeruginosa* antioxidant enzymes activity and microcystins production and release. *Chemosphere* 121: 110-116. doi:10.1016/j.chemosphere.2014.11.056.
- Ni, L., Jie, Z., Wang, P., Li, S., Hu, S., Li, Y., Li, Y., Acharya, K. (2015) Characterization of unsaturated fatty acid sustained-release microspheres for long-term algal inhibition. *Chemosphere* 120: 383-390. doi:10.1016/j.chemosphere.2014.07.098.
- Li, Y., Du, W., Yu, Z., Tang, C., Wang, Y., Anim, D.O., Ni, L., Lau, J., Chew, S.A., Acharya, K. (2015) Impact of flexible emergent vegetation on the flow turbulence and kinetic energy characteristics in a flume experiment. *Journal of Hydro-environment Research* 9: 354-367. doi:10.1016/j.jher.2014.01.006.
- Caldwell, T. J., Rosen, M. R., Chandra, S., Acharya, K., Caires, A. M., Davis, C. J., Thaw, M., Webster, D. (2015) Temporal and basin-specific population trends of quagga mussels on soft sediment of a multibasin reservoir. In Wong, W. H. and Gerstenberger, S. L. (Eds.), *Biology and Management of Invasive Quagga and Zebra Mussels in the Western United States*, 33-52. New York, NY: CRC Press.
- \*Mehler, K., Acharya, K., Sada, D., Yu, Z. (2015) Factors affecting spatiotemporal benthic macroinvertebrate diversity and secondary production in a semi-arid watershed. *Journal of Freshwater Ecology* 30: 197-214. doi:10.1080/02705060.2014.974225.
- \*Mehler, K., Acharya, K. (2015) Size distribution and nutrient excretion of *Melanoides tuberculata* in a southern Nevada spring ecosystem. *Western North American Naturalist* 74(4): 386-395.
- \*Iwanaga, F., Acharya, K., Imada, S., Taniguchi, T., Kawamura, Y., Tanaka, K., Mori, N., Yamamoto, F., Yamanaka, N. (2015) Osmolyte accumulation in leaves of *Tamarix ramosissima* growing under various soil conditions in the Colorado River basin. *Landscape Ecological Engineering* 11: 199-207. doi:10.1007/s11355-014-0265-8.
- \*Taniguchi, T., Acharya, K., Imada, S., Iwanaga, F., Yamanaka, N. (2015) Arbuscular mycorrhizal colonization of *Tamarix ramosissima* along a salinity gradient in the southwestern United States. *Landscape and Ecological Engineering* 11: 221-225. doi:10.1007/s11355-014-0259-6.
- \*Thaw, M., Nicholl, M.J., Acharya, K. (2014) Sensitivity of post-settlement *Dreissena rostriformis bugensis* to UVB radiation at Earth surface intensity levels. *Journal of Great Lakes Research* 40: 934-939.
- Chen, L., Acharya, K., Stone, M. (2014) Using a mechanical approach to quantify flow resistance by submerged, flexible vegetation - a revisit of Kouwen's approach. *Advances in Water Resources* 73: 198-202. doi:10.1016/j.advwaters.2014.08.014.

- Li, Y., Wang, Y., Tang, C., Anim, D.O., Ni, L., Yu, Z., Acharya, K. (2014) Measurements of erosion rate of undisturbed sediment under different hydrodynamic conditions in Lake Taihu, China. *Polish Journal of Environmental Studies* 24: 1235-1244.
- \*Gautam, M., Acharya, K., Shanahan, S.A. (2014) Ongoing restoration and management of Las Vegas Wash: an evaluation of success criteria. *Water Policy* 16: 720-738. doi:10.2166/wp.2014.035.
- Li, B., Yu, Z., Liang, Z., Acharya, K. (2014) Hydrologic response of a high altitude glacierized basin in the central Tibetan Plateau. *Global and Planetary Change* 118: 69-84.
- Li, B., Liang, Z., Yu, Z., Acharya, K. (2014) Evaluation of drought and wetness episodes in a cold region (Northeast China) since 1898 with different drought indices. *Natural Hazards* 71: 2063-2085. doi:10.1007/s11069-013-0999-x.
- Li, Y., Anim, D.O., Wang, Y., Tang, C., Du, W., Yu, Z., Acharya, K. (2014) An open-channel flume study of flow characteristics through a combined layer of submerged and emerged flexible vegetation. *Ecohydrology* 7: 633-647. doi:10.1002/eco.1384.
- Li, Y., Tang, C., Yu, Z., Acharya, K. (2014) Correlations between algae and water quality: factors driving eutrophication in Lake Taihu, China. *International Journal of Environmental Science and Technology* 11:169-182.
- \*Lodhi, A. R., Acharya, K. (2014) Detention basins as best management practices for water quality control in an arid region. *Water Science and Engineering* 7: 155-167.
- Saito, T., Tsukumo, M., Elbasit, M. A., Yasuda, H., Kawai, T., Matsuo, N., Inosako, K., Acharya, K., Babiker, A., E., Hamd, A. A., and Nawata, H. (2014) Estimation of water sources of invasive tree species in arid environments. *Journal of Arid Land Studies* 24: 29-32.
- Li, Y., Wang, Y., Tang, C., Du, W., Anim, D.O., Yu, Z., Acharya, K. (2014) Flow characteristics in different densities of submerged flexible vegetation from an open-channel flume study of artificial plants. *Geomorphology* 204: 314-324.
- Li, B., Yu, Z., Liang, Z., Song, K., Li, H., Wang, Y., Zhang, W., Acharya, K. (2013) Effects of climate variations and human activities on runoff in the Zoige Alpine wetland in the eastern edge of the Tibetan plateau. *Journal of Hydrologic Engineering* 19: 1026-1035. doi:10.1061/(ASCE)HE.1943-5584.0000868.
- \*Mehler, K., Acharya, K., Sada, D., Yu, Z. (2013) Elemental stoichiometry of basal resources and benthic macroinvertebrates along a land use gradient in a Great Basin watershed. *Hydrobiologia* 716(1): 115-129.
- \*Imada, S., Acharya, K., Li, Y., Taniguchi, T., Iwanaga, F., Yamamoto, F., Yamanaka, N. (2013) Salt dynamics in *Tamarix ramosissima* in the lower Virgin River floodplain, Nevada. *Trees* 27: 949-958.
- \*O'Neill, S., Adhikari, A.R., Gautam, M.R., Acharya, K. (2013) Bacterial contamination due to point and nonpoint source pollution in a rapidly growing urban center in an arid region. *Urban Water Journal* 10(6): 411-421.
- \*Gautam, M.R., Timilsina, G.R., Acharya, K. (2013) Climate change in the Himalayas: Current state of knowledge. *Policy Research Working Paper* 6516, The World Bank Development Research Group, Environment and Energy Team.
- \*Imada, S., Taniguchi, T., Acharya, K., Yamanaka, N. (2013) Vertical distribution of fine roots of *Tamarix ramosissima* in an arid region of southern Nevada. *Journal of Arid Environments* 92: 46-52.
- Acharya, K., Sueki, S., Conrad, B., Dudley, T.L., Bean, D.W., Osterberg, J.C. (2013) Life history characteristics of *Diorhabda carinulata* under Various Temperatures. *Environmental Entomology* 42: 546-571.
- \*Conrad, B., Acharya, K., Dudley, T., Bean, D. (2013) Impact of episodic herbivory by the tamarisk beetle in *Tamarix ramosissima* increases leaf litter nitrogen and stem starch content: a short communication. *Journal of Arid Environments* 94: 76-79.
- Shi, P., Yang, T., Chen, X., Yu, Z., Acharya, K., Xu, C. (2013) Urban water consumption in a rapidly developing flagship megacity of South China: prospective scenarios and implications. *Stochastic Environmental Research and Risk Assessment* 27: 1359-1370. doi:10.1007/s00477-012-0672-z.

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- Li, Y., Tang, C., Wang, C., Tian, W., Pan, B., Hua, L., Lau, J., Yu, Z., Acharya, K. (2013) Assessing and modeling impacts of different inter-basin water transfer routes on Lake Taihu and the Yangtze River, China. *Ecological Engineering* 60: 399-413. doi:10.1016/j.ecoleng.2013.09.067.
- \*Schwaebe, L., Acharya, K., Nicholl, M. (2013) Comparative efficacy of *Dreissena rostriformis bugensis* (Bivalvia: Dreissenidae) spawning techniques. *Aquatic Invasions* 8: 45-52.
- \*Ni, L., Acharya, K., Hao, X.Y., Li, S.Y. (2013) Antioxidant and metabolism responses to polyphenol stress in cyanobacterium *Microcystis aeruginosa*. *Journal of Environmental Science and Health, Part B* 48: 153-161.
- Li, Y., Tang, C., Wang, C., Anim, D.O., Yu, Z., Acharya, K. (2013). Improved Yangtze River Diversions: Are they helping to solve algal bloom problems in Lake Taihu, China? *Ecological Engineering* 51: 104-116.
- \*Adhikari, A.R., Gautam, M.R., Yu, Z., Imada, S., Acharya, K. (2013). Estimation of root cohesion for desert shrub species in the Lower Colorado riparian ecosystem and its potential for streambank stabilization. *Ecological Engineering* 51: 33-44.
- Stone, M. C., Chen, L., McKay, S. K., Goreham, J., Acharya, K., Fischenich, C., Stone, A. B. (2013). Bending of submerged woody riparian vegetation as a function of hydraulic flow conditions. *River Research and Applications* 29: 195-205. doi:10.1002/rra.1592.
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- Hao, W., Tang, C., Hua, L., Acharya, K. (2012) Effects of water diversion from Yangtze River to Taihu Lake on hydrodynamic regulation of Taihu Lake. *Journal of Hohai University: Natural Sciences* 40: 129-133.
- Li, Y., Tang, C., Yu, Z., Acharya, K. (2012). Uncertainty and sensitivity analysis of large shallow lake hydrodynamic models. *Advances in Water Science* 23: 271-277.
- \*Ni, L., Acharya, K., Hao, X., Li, S. (2012). Isolation and identification of an anti-algal compound from *Artemisia annua* and mechanisms of inhibitory effect on algae. *Chemosphere* 88: 1051-1057.
- Acharya, K., Gautam, M. (2012). Evaluation of bendway weir bank stabilization techniques for stream restoration. *International Journal of River Basin Management* 10: 171-176.
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- \*Gautam, M. R., Acharya, K. (2012). Streamflow trends in Nepal. *Hydrological Sciences Journal* 57: 344-357.
- Wang, X., Yang, T., Shao, Q., Acharya, K., Wang, W., Yu, Z. (2012). Statistical downscaling of extremes of precipitation and temperature and construction of their future scenarios in an elevated and cold zone. *Stochastic Environmental Research and Risk Assessment* 26: 405-418, doi:10.1007/s00477-011-0535-z.
- Chen, L., Stone, M.C., Acharya, K., Steinhaus, K. (2011). Mechanical analysis for emergent vegetation in flowing fluids. *Journal of Hydraulic Research* 49: 766-774.
- \*Li, Y., Acharya, K., Stone, M. C., Yu, Z., Young, M. H., Shafer, D., Zhu, J., Gray, K., Stone, A., Li, G., Warwick, J. W. (2011). Spatiotemporal patterns in nutrient loads, nutrient concentrations, and algal biomass in Lake Taihu, China. *Lake and Reservoir Management* 27: 298-309.
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- Carroll, R. W. H., Memmott, J., Warwick, J. W., Fritsen, C. H., Bonzongo, J. J., Acharya, K. (2011). Seasonal variation of mercury associated with different phytoplankton size fractions in Lahontan reservoir, Nevada. *Water, Air and Soil Pollution* 217: 221-232.

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