Good News

College of Science, Engineering and Technology

Faculty and Staff Achievements

January 2016

Department of
Chemistry of Geology
Minnesota State University Mankato

Department of Chemistry and Geology

The Department of Chemistry and Geology hosted Michael T. Osterholm, PhD, MPH for the annual Ford Lectureship on November 9, 2015. Osterholm gave two talks, “Ebola Virus in Africa: A Harbinger of Things to Come” and “Infectious Diseases of the 21st Century: A New World Order.” Osterholm is a Regents Professor, McKnight Presidential Endowed Chair in Public Health, and the Director of the Center for Infectious Disease Research and Policy (CIDRAP) at the University of Minnesota.

Dr. Brian Groh received the Flies Fellowship award, which enables him to apply real-world research in cooperation with industry. Groh used the award to lead a research project with CHS Inc., a global agribusiness cooperative. Erin Vespestad, undergraduate research intern, worked with Groh and CHS researching more sustainable, or greener, methods to extract oil from seed.

Dr. Lyudmula (Ardanova) Stackpool’s work “Abstract Synthesis and Study of Solid Electrolytes Nd5-XLnXMo3O16 (Ln = Sm, Eu, Gd),” co- authored with K.A. Chebyshev and L.V. Pasechnik, has been included in the book of abstracts at the 20th International Conference on Solid State Ionics (SSI-20) in Keystone, Colorado on June 14 – 19 , 2015.

Publications

Denniston, Katherine J., Topping, Joseph J., **Quirk Dorr, Danae R.** (2016). *Student Study Guide/Solutions Manual to Accompany General, Organic & Biochemistry, 9th Edition*. New York: McGraw-Hill.

Denniston, Katherine, Topping, Joseph, **Quirk Dorr, Danae R.**, Caret, Robert L. (2016). *General, Organic & Biochemistry, 9th Edition*. New York: McGraw-Hill.

Kotapati, Shrinkanth, Wickramaratne, Susith, Esades, Amanda, Boldry, Emily J., **Quirk Dorr, Danae**, Pence, Matthew G., Pence, Guengerich, Peter F., Tretyakova, Natalia Y. (2015). “Polymerase bypass of N^{6-} deoxyadenosine adducts derived from epoxide metabolites of 1,3-Butadiene. *Chemical Research in Toxicology*, 28(7): 1496 – 1507.

Binder, B.P., Cornea, S., **Moen, R.J**., and Thomas, D.D. (2015). “High-resolution helix orientation in actin-bound myosin determined with a bifunctional spin label.” *Proceedings of the National Academy of Sciences*, 112(26): 7972 – 7977.

Chebychev, K.A, Get’man, E.I., Paschenik, L.V., **Stackpool (Ardanova), L.I.**, and Korotina, D.V. (2015) “Crystal structure and electrical conductivity of $Nd_{5-x}Sm_xMo_3O_{16}$ solid solutions.” *Inorganic Materials*, 51(10): 1033 – 1038.

Department of Computer and Information Sciences

Veltsos, Christophe. (2016). “Highlights from the World Economic Forum’s Global Risks Report 2016.” *SecurityIntelligence.com*. IBM.

Department of Electrical and Computer Engineering and Technology

Zhang, Q., Hayee, M.I., **Winstead, V**., Wu, X. Huang, D., Lian, J., Phadke, S., and Khaliq, M. (2015). “A local error method for SSSF simulation of signal propagation in dispersion compensated optical links.” *Proceedings of the 14th International Conference on Optical Communications and Networks*, paper Sa1D.6, Nanjing, China, July 2015.

Iron Range Engineering • Twin Cities Engineering
MINNESOTA STATE UNIVERSITY MANKATO

Integrated Engineering

Elizabeth Pluskwik is now Six Sigma Green Belt certified after passing the American Society for Quality certification exam in December, 2015.

Department of
Mathematics and Statistics

Department of Mathematics and Statistics

Dr. Namyong Lee organized and presented a talk at the NIMS Mathematical Biology Workshop, May 12-13, 2015, National Institute for Mathematical Sciences; presented on Big Data Analysis at the Computational Science and Engineering Colloquium on May 21, 2015 at Younsei University; presented "Patterns of Multiallelic Polymorphism Maintained by Migration and Selection," on May 19, 2015 at the Gwangju Institute of Science and Technology; presented "Undergraduate Research in Experimental Mathematics," at the Department of Mathematics Colloquium on October 14, 2015 at St. Cloud State University; presented "Big Data Analysis Through the TDA Looking Glass" at the Mathematical Association of America NCS Fall Meeting on October 23-24, 2015 at Bemidji State University.

Dr. Ruijun Zhao was awarded the Landahl Travel Award from the Society of Mathematical Biology to present his research, "An age-structured mathematical model studying the imperfect vaccine of malaria," at the 2015 annual meeting of the Society for Mathematical Biology in Atlanta on June 30 to July 3, 2015. He also presented "An age-structured mathematical model studying the imperfect vaccine of malaria, RTS, S," at the International Symposium on Application of Nonlinear Partial Equations in Life Science in Tianjin on August 4-7, 2015.

Francis Hannick presented a workshop on "Hands-On Activities for the Elementary Mathematics Curriculum," at the fall meeting of the South Carolina Council of Teachers of Mathematics in Greenville, South Carolina, on November 12, 2015.

Minnesota State University, Mankato's Math Club participated in the 19th Mathematical Association of America's NCS Math Team Competition on November 14, 2015, and ranked in the top 10 teams out of 82. The team was coached by Dr. Wook Kim.

Publications

An, Dayeong and **Rahman, Mezbahur**. (2015). "Maximum Likelihood Parameter Estimation or Beta Inverse Weibull Distribution." *Far East Journal of Mathematical Sciences (FJMS)*, 97(2): 131 – 137.

Jin, Jianliang and **Rahman, Mezbahur**. (2015). "Some analysis on estimators of the population total in finite population sampling." *Far East Journal of Probability Theory and Statistics*.

Patwary, Mohammad Shaha Alam and **Rahman, Mezbahur**. (2016). "Coherent Form of the Non-Central Distribution. *Far East Journal of Probability Theory and Statistics,* 1(1): 1 – 15.

Rahman, Mezbahur and Patwary, Mohammad Shaha Alam. (2015). "A Note on Unequal Probability Sampling in Bootstrap Sampling." *Advances and Applications in Statistics,* 44(3): 191 – 137.

Rahman, Mezbahur, An, Dayeong, and Patwary, Mohammad Shaha Alam. (2016). "Method of Product Spacings Parameter Estimation for Beta Inverse Weibull Distribution.

Rahman, Mezbahur and Zhang, Qichao. (2016). "Comparison among Pearson Correlation Coefficient Tests". *Far East Journal of Mathematical Sciences*, 99(2): 237 – 255.

Tsao, Y.L. (2015). "Mathematics perceptions of pre-service." *Elementary School Teachers, US-China Education Review B*, 5(5): 299 – 308.

Tsao, Y.L. (2016). “Preservice teachers’ knowledge of difficulties in decimal numeration.” *The Journal of Mathematics Learning and Research*. In Press.

Submissions for the Next Issue of “Good News”

Email achievements (conference presentations, grants, fellowships, publications, etc.) to the Communication Assistant, Claire Lundeby (claire.lundeby@mnsu.edu) to be included in the next issue of “Good News.”