

Lance D. Yarbrough  
Department of Geology and Geological Engineering  
The University of North Dakota  
Grand Forks, ND 58202

### Professional Preparation

<u>Institution</u>	<u>Degree</u>	<u>Year</u>	<u>Field</u>
University of Mississippi	Ph.D.	2006	Engineering Science
University of Mississippi	M.S.	2000	Engineering Science
University of Missouri-Rolla	B.S.	1995	Geological Engineering

### Appointments

- Assistant Professor, Department of Geology and Geological Engineering, The University of North Dakota (August 2008–Present)
- Visiting Assistant Professor, Department of Geology and Geological Engineering, The University of Mississippi (July 2005–August 2008)
- Graduate Research Assistant/Graduate Instructor, Department of Geology and Geological Engineering, The University of Mississippi (January 1998–June 2005)
- Hydrologic Technician (GS-04), United States Department of Agriculture, National Sedimentation Laboratory, Oxford, Mississippi (February 1998–April 1999)
- Project Manager/Project Engineer, Environmental Monitor Systems Corp.-Environmental Construction Division, Indianapolis, Indiana, (March 1997–January 1998)
- Geological Engineer/Site Superintendent, Sverdrup Environmental, Inc., St. Louis, Missouri (May 1995–February 1997)

### Five most relevant publications (as of February 2009)

- Rahman, S., A. C. Bagtzolou, F. Hossain, L. Tang, L. D. Yarbrough, and G. Easson, *in press*. Investigating Spatial Downscaling of Satellite Rainfall Data for Stream Flow Simulation in a Medium-sized Basin, *Journal of Hydrometeorology*.
- Harris, A. , S. Rahman, F. Hossain, L. D. Yarbrough, A. C. Bagtzolou and G. Easson, 2007. Satellite-based Flood Modeling using TRMM-based rainfall products and Statistical Downscaling, *Sensors*, **7**, pp. 3416–3427.
- Rahman, S., A.C. Bagtzoglou, L.D. Yarbrough, and F. Hossain, 2007, Investigating Satellite Rainfall Based Flood Modeling in Anticipation of GPM: Understanding the Worth of Spatial Downscaling and Satellite Rainfall Uncertainty. *Eos Trans. AGU, Fall Meeting Supplement*, Abstract IN43B-1176.
- Yarbrough, L.D., G. Easson, and J.S. Kuzmaul, 2005. Using At-Sensor Radiance and Reflectance Tasseled Cap Transforms Applied to Change Detection for the ASTER Sensor, *presented at IEEE Third International Workshop on the Analysis of Multi-temporal Remote Sensing Images*, 16–18 May 2005, Beau Rivage, Biloxi, Mississippi, USA, 5 pages, *CD-ROM*.
- Yarbrough, L.D., G.L. Easson, 2003. Comparison of Techniques for Deriving Bathymetry of Remotely Sensed Data, *Oceanology International and Alliance of Marine Remote Sensors*, New Orleans, Louisiana.

### Other significant publications (as of February 2009)

- Easson, G.L., F. Faruque and L.D. Yarbrough, 2005, Rating the Shrink/Swell Behavior of the Porters Creek Formation, *Environmental & Engineering Geoscience*, **11** (2), pp. 171–176.
- Aten, M.L., L.D. Yarbrough and G.L. Easson, 2004. Stable Band Set Selection for the Preprocessing of AVIRIS and Hyperion Hyperspectral Data. *Sensors, Systems, and Next-Generation Satellites VIII—Proceedings of SPIE*, Gran Canaria, Spain, 13–15 September, **5570**, pp. 589–594.

### Synergistic Activities

- Recently was a PI for a NASA Rapid Prototyping Capability Experiment using the HEC-HMS and simulated next-generation EOS data for the Global Precipitation Measurement, anticipated launch 2012. This experiment sought to integrate downscaled satellite precipitation data with commonly used hydrologic modeling software and analyze scaling issues.
- Reviewer of *Remote Sensing of Environment* and *Photogrammetric Engineering and Remote Sensing (PE&RS)* journals.

### Collaborators and other affiliations

<b>Name</b>	<b>Organization</b>	<b>Type</b>
Adler, Robert	NASA Goddard SFC	collaborator
Aughenbaugh, N.	University of Mississippi	collaborator
Aten, Michelle	University of Mississippi	collaborator, co-author
Bagtzolgou, A. C.	University of Connecticut	co-author
Cherrington, E.	CATHALAC, Panama	co-author
DeLozier, S. A.	Homeland Security contractor	co-author
Easson, Greg	University of Mississippi	collaborator, co-author, advisor
Faruque, Farque	Univ. of Mississippi Medical Cntr.	co-author
Harris, Amanda	Tennessee Technological University	co-author
Holt, Robert M.	University of Mississippi	collaborator, co-author
Hossain, Faisal	Tennessee Technological University	collaborator, co-author
Huffman, George	NASA Goddard SFC	collaborator, co-author
Irwin, D.	NASA NSSTC	collaborator, co-author
Korom, Scott	University of North Dakota	collaborator
Kuzmaul, Joel S.	University of Mississippi	collaborator, co-author, advisor
McDaniel, Michael	De Soto County Water Dept.	advisee
Rahman, S.	University of Connecticut	co-author
Rundquist, Brad	University of North Dakota	collaborator