Indian Scientist to Visit National Great Rivers Research and Education Center August 24th

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Alton, Ill. – Professor Bijoy Mazumder from the Indian Statistical Institute in Kolkata, India will tour the Jerry F. Costello Confluence Field Station and visit with scientists from the National Great Rivers Research and Education Center (NGRREC) beginning at noon on Wednesday, Aug.
24.

His visit has been arranged by NGRREC scientist Richard Sparks and Nani Bhowmik, principal scientist emeritus, Illinois State Water Survey, University of Illinois at Urbana–Champaign. They plan to discuss potential joint work in India and the United States on river flooding, erosion,
sedimentation and river health.

“These topics were identified as major problems in rivers in the U.S. and India at a joint Indo-U.S. workshop held last fall at the Indian Statistical Institute,” Sparks said. “Several steps have been taken to advance cooperative work on these shared problems.”

NGRREC’s first international intern, Anindita Chatterjee came from the Indian Statistical Institute to conduct a research project this summer at a floodplain restoration site on the Illinois River. Her summer work included sampling and assessment of aquatic plants at the restoration site.

“Aquatic plants provide habitat for fish and wildlife and for the snails, insects and worms that the fish and water birds feed upon,” Sparks said. “The plants also absorb excess nutrients and stabilize the bottoms and shorelines of floodplain lakes against waves that can cause erosion and resuspension of sediments.”

Bhowmik and Mazumder have submitted proposals to fund additional exchanges between scientists in India and the U.S. Mazumder is in the Physics and Applied Mathematics unit at the Indian Statistical Institute. He directs the River Mechanics Laboratory, where processes of erosion and sedimentation can be observed and measured in instrumented flumes with glass sides. Results can be used to make better predictions about the effects of man-made structures (such as bridges, dams, and levees) on bed and bank erosion and sedimentation in rivers.

“We are looking forward to hosting this valuable information exchange with Dr. Mazumder and Dr. Bhowmik,” Sparks said. “We hope to have many exchanges with representatives from the Indian Statistical Institute as we work jointly to solve the river issues that plague both countries.”

Following a working lunch upon their arrival, the group will begin touring the field station at 1:30 p.m. and then will meet with other NGRREC scientists throughout the afternoon.