

Raja Sengupta, PhD

Assistant Professor, Department of Geography & McGill School of Environment,
McGill University, 805 Sherbrooke St. W., Montreal QC H3A 2K6 Canada. Phone: 514-
398-6316; Fax 514-398-7437; Email: sengupta@geog.mcgill.ca.

Education:

- Ph.D. (2000) Southern Illinois University at Carbondale (Geography: GISci)
- M.S. (1995) Southern Illinois University at Carbondale (Geology: Fluvial Sedimentology)
- M.Sc. (1993) Indian Institute of Technology, Mumbai, India (Applied Geology)
- B.Sc. (1991) St. Xaviers College, University of Bombay, Mumbai, India (Geology)

Academic Appointments:

2003-Present Assistant Professor, Dept. of Geography and McGill School of Environment, McGill University.
2000-2003 Assistant Professor, Dept. of Geography, Southern Illinois University-Carbondale.
1999-2000 Visiting Instructor/Assistant Professor, Dept. of Geography, University of Iowa.

Professional Positions and Service:

2006- Editor, *Water International* (Journal of the International Water Resources Association); Book Review Editor, 2003-2006.
2004 Invited Reviewer, Millennium Ecosystem Assessment (Scenarios 09. Ecosystem Services Across Scenarios)
2003-2005 AAG Representative to the Universities Consortium on Geographic Information Science (UCGIS)
2000-2003 Director, Universities Water Information Network.
Journal Reviews: *Applied Geography* (2004), *Cartography and GIScience* (2002), *Computers and Geosciences* (2005), *IEEE Transactions on Knowledge and Data Engineering* (2000), *International Journal of Geographical Information Science* (2003, 2005, 2006), *Journal of the American Water Resources Association* (2000, 2001), *Journal of Hydrology* (2002), *Photogrammetric Engineering and Remote Sensing* (2007), *Water International* (2001, 2002), *Water Resources Management* (2005)

Recent Journal Articles and Book Chapters:

Sengupta, R., and Sieber, S., *In Press* (2007), Geospatial Agents, Agents everywhere....*Transactions in GIS*.

Sengupta, R., 2006. Simulation Modelling within Collaborative Spatial Decision Support Systems using cause-effect models and Software Agents in *Collaborative GIS* (S. Dragicevic and S. Balram, Eds.): Idea Group Publishing, Hershey, PA, USA.

Sengupta, R., Lant, C., Kraft, S., Beaulieu, J., Peterson, W., and Loftus, T., 2005, Modeling CRP Enrolment using Agents within Spatial Decision Support Systems:

- An Example from Southern Illinois. *Environment and Planning B*, 32(6): 821-834.
- Most, M., **Sengupta, R.**, and Burgener, M., 2004, Spatial Scale and Population Assignment Choices in Environmental Justice Analyses. *The Professional Geographer* 56(4): 574-586.
- Heine, R., Lant, C., and **Sengupta, R.**, 2004, Development and Comparison of Approaches for Automated Extraction of Stream Channel Networks. *Annals of the Association of American Geographers*, 94(3): 447-490.
- Sengupta, R.**, and Chen, Y., 2004, Hybrid Spatio-Temporal Data Model and Structure (HST-DMS) for Efficient Storage and Retrieval of Land Use Information. *Transactions in GIS*, 8(3): 351-366.
- Larson, B., and **Sengupta, R.**, 2004. A Spatial Decision Support System to Identify Species-Specific Critical Habitats Based on Size and Accessibility using US GAP Data. *Environmental Modelling and Software*, 19(1): 7-18.
- Sengupta, R.**, and Bennett, D. A., 2003. Agent-based Modeling Environment for Spatial Decision Support. *International Journal of Geographical Information Science*, 17 (2): 157-180.

Selected Research Grants

- Sengupta, R.** (PI), A decision-support tool to evaluate the co-production of ecosystem services in agricultural landscapes using agents and physical process models. Natural Sciences and Engineering Research Council of Canada (Discovery Grants), C\$100,000 (2005-2010).
- Scott, C. (PI), Brown, P., Costopoulos, A., Fyles, J., Humphries, M., Mikkelson, G., Mulrennan, M., **Sengupta, R.**, Sieber, R., 2004, Building Knowledge based partnerships for environmental protection, Cree cultural survival and community education at Wemindji, James Bay, Quebec. Social Science and Humanities Research Council of Canada (Aboriginal Research Program), C\$240,000 (2005-2008).
- Scott, C. (PI), Berkes, F., Brown, P., Costopoulos, A., Fyles, J., Humphries, M., Ingram, R., Mikkelson, G., Mulrennan, M., **Sengupta, R.**, Sieber, R., 2004, Protected area creation, culture and development at the Cree community of Wemindji, James Bay, Quebec. Social Science and Humanities Research Council of Canada (Community-University Research Alliance CURA), C\$998,636 (2005-2010).
- Lant, C. (PI), Beaulieu, J., Kraft, S., Malanson, G., Nicklow, J., **Sengupta, R.**, 2004, Virtual Watershed: Agricultural Landscape Evolution in an Adaptive Management Framework. U.S. National Science Foundation: Biocomplexity in the Environment (Coupled Natural-Human Systems), US\$450,000 (2004-2007).
- Graduate Students:** Supervised 6 M.S. thesis at Southern Illinois University (2000-2003); currently supervising 3 M.S. students and 1 PhD student.