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Personal Details

Date of Birth: 10th March, 1979
Marital Status: Married
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Education

- Ph.D. in Civil Engineering (2010), IIT Kharagpur, West Bengal, India, *Specialization*: Hydraulic and Water Resources Engineering.

Positions held

- 2017–till date: Assistant Professor, Physics and Applied Mathematics Unit, Indian Statistical Institute, Kolkata, India 700108.
- 2014– 2017: Visiting Assistant Professor, Physics and Applied Mathematics Unit, Indian Statistical Institute, Kolkata, India 700108.
- 2011– 2014: Associate Professor, Department of Civil Engineering, Sikkim Manipal Institute of Technology, Majitar, East Sikkim, India 737136.
- 2010–2011: Assistant Professor, Department of Civil Engineering, Sikkim Manipal Institute of Technology, Majitar, East Sikkim, India 737136.

Research interests

- Turbulence in Open Channel
- Fluvial Hydraulics
- Image-based sediment transport

Publications

Articles in Journals:

[J.01] Dey, S., Lodh, R., **Sarkar, S.** (2018): ""Turbulence characteristics in wall-wake flows downstream of wall-mounted and near-wall horizontal cylinders." *Environmental Fluid Mechanics* (Accepted).

[J.02] Dey, S., Swargiary, D., **Sarkar, S.**, Fang, H., and Gaudio, R. (2018): "Self-similarity in turbulent wall-wake flow downstream of a wall-mounted vertical cylinder." *Journal of Hydraulic Engineering*, ASCE (in press).

[J.03] Radice, A, **Sarkar**, S., and Ballio, F. (2017): "Image-based Lagrangian particle tracking in bed-load experiments." *Journal of Visualized Experiments*, 125, e55874.

[J.04] **Sarkar S** (2016): "Measurement of turbulent flow in a narrow open channel." *Journal of Hydrology and Hydromechanics*, 64, 2016, 3, pp. 273–280.

[J.05] **Sarkar S**, Papanicolaou, A. Thanos N and Dey, S (2016): Turbulence in a gravel-bed stream with an array of large gravel obstacles. *Journal of Hydraulic Engineering*, American Society of Civil Engineers (ASCE), pp. 04016052-1 – 04016052-16.

[J.06] **Sarkar S** (2016): Time-averaged turbulent flow characteristics over a highly spatially heterogeneous gravel-bed. *Acta Geophysica*, DOI: 10.1515/acgeo-2016-0070.

[J.07] **Sarkar S** and Dey S (2015): Turbulence anisotropy in flow at an entrainment threshold of sediment. *Journal of Hydraulic Engineering*, American Society of Civil Engineers (ASCE), Vol. 141, No. 7, pp. 06015007.

[J.08] **Sarkar S** and Dey S (2015): Turbulent length scales and anisotropy downstream of a wall mounted sphere. *Journal of Hydraulic Research*, International Association for Hydraulic Research, Vol. 53, No. 5, pp. 649-658.

[J.09] **Sarkar S** and Dey S (2010): Double-averaging turbulence characteristics in flows over a gravel-bed. *Journal of Hydraulic Research*, International Association for Hydraulic Research (IAHR), Vol. 48, No. 6, pp. 801-809.

[J.10] Dey S, **Sarkar S** and Solari L (2011): Near-bed turbulence characteristics at the entrainment threshold of sediment beds. *Journal of Hydraulic Engineering*, American Society of Civil Engineers (ASCE), Vol. 137, No. 9, pp. 945-958.

[J.11] Dey S, **Sarkar S** and Ballio F (2011): Double-averaging turbulence characteristics in seeping rough-bed streams. *Journal of Geophysical Research, Earth Surface*, American Geophysical Union, Vol. 116, pp. F03020, doi: 10.1029/2010JF001832.

[J.12] Dey S, **Sarkar S**, Bose S K, Tait S and Castro-Orgaz O (2011): Wall-wake flows downstream of a sphere placed on a plane rough-wall. *Journal of Hydraulic Engineering*, American Society of Civil Engineers (ASCE), Vol. 137, No. 10, pp. 1173-1189.

Book Chapter:

[B.01] **Sarkar S** (2016): "Sedimentation of floodplains, lakes and reservoirs." In: *Handbook of Applied Hydrology*, Second Edition, Edited by Vijay P. Singh, McGraw-Hill Education, pp. 66-1 – 66-10 (in press).

Articles in Conference Proceedings:

[C.01] Radice A, Aleixo R, Hosseini Sadabadi S A, and **Sarkar S** (2017): "On image grabbing and processing for measurement of geophysical flows." *HydroSenSoft, International Symposium and Exhibition on Hydro-Environment Sensors and Software*, 1-3 March 2017, Madrid, Spain.

[C.02] **Sarkar S** (2015): "Turbulent flow in open channel with different Froude numbers." *The 5th International Conference on Applied Mechanics and Civil Engineering (AMCE 2015)*, Hong Kong, 25-26 September 2015.

[C.03] **Sarkar S** (2015): "Despiking of Vectrino data in Python." *IEEE* (*EDS*.) *4th International Conference on Computing, Communication and Sensor Network, 24th & 25th December, Kolkata, India.*

[C.04] Dey S, **Sarkar S**, Bose S K, Tait S and Castro-Orgaz O (2013): "Wall-Wake Flows Downstream of a spherical particle placed on a gravel bed." *Proceedings of 2013 IAHR Congress* © 2013 Tsinghua University Press, Beijing, September 8-13, 2013.