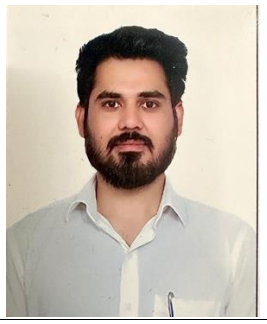
Dr. Lovedeep Sahota

Assistant Professor



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Academic Qualifications: M.Sc, Ph.D (I.I.T Delhi)

Teaching Experience (Year)	08 years	**Research Experience (Year)**	06 years
Area of Research	Renewable Energy Systems and Nanotechnology		

Publications

Journal publications

(a) International journal publications

1. **Sahota, L.,** Tiwari, G.N., (2016), Effect of Al_2O_3 nanoparticles on the performance of passive double slope solar still, **Solar Energy** 130, 260–272. **(Impact factor: 7.18)**
2. **Sahota, L.,** Tiwari, G.N., (2016), Effect of nanofluids on the performance of passive double slope solar still: A comparative study using characteristic curve, **Desalination** 388, 9–21. **(Impact factor: 11.21)**
3. Tiwari, G.N., **Sahota, L.,** (2017), Review on the energy and economic efficiencies of passive and active solar distillation systems, **Desalination** 401, 151–179. **(Impact factor: 11.21)**
4. **Sahota, L.,** Shyam, Tiwari, G.N., (2017), Analytical characteristic equation of nanofluid loaded active double slope solar still coupled with helically coiled heat exchanger, **Energy Conversion and Management** 135, 308-326. **(Impact factor: 11.53)**
5. **Sahota, L.,** Tiwari, G.N., (2017), Energy matrices, enviroeconomic and exergoeconomic analysis of passive double slope solar still with water based nanofluids, **Desalination** 409 (2017) 66–79. **(Impact factor: 11.21)**
6. **Sahota, L.,** Tiwari, G.N., (2017), Review on series connected photovoltaic thermal (PVT) systems: analytical and experimental studies, **Solar Energy** 150 (2017) 96–127. **(Impact factor: 7.18)**
7. **Sahota, L.,** Tiwari, G.N., (2017), Exergoeconomic and enviroeconomic analysis of hybrid double slope solar still loaded with nanofluids, **Energy Conversion and Management** 148 (2017) 413–430. **(Impact factor: 11.53).**
8. Kasaeian A., Moaleman, A., Aramesh, M., Mahian, O., **Sahota, L.,** Tiwari, G.N., (2017), Simulation of the performance of a solar concentrating photovoltaic-thermal collector, applied in a combined cooling heating and power generation system, **Energy Conversion and Management, 160 (2017) 191–208. (Impact factor: 11.53)**
9. **Sahota, L.,** V.S. Gupta, Tiwari, G.N., (2018), Analytical study of thermo-physical performance of nanofluid loaded hybrid double slope solar still, **Journal of Heat Transfer** 112404, 140 (2018) , **(Impact factor: 5.58). ISSN no. 00221481.**

10. **L. Sahota,** V. Saini, V.K. Jain, G.N. Tiwari **(2019),** Performance and cost analysis of a modified built-in-passive condenser and semitransparent photovoltaic module integrated passive solar distillation system, **Journal of Energy Storage ,100809, 24 (2019).** ISBN number 2352-152X **(Impact factor: 6.58).**

11. Swati Arora, Harendra Pal Singh, **Lovedeep Sahota**,, Manoj K. Arora, Ritik Arya, Sparsh Singh, Aayush Jain, Arvind Singh **(2020),** Performance and cost analysis of photovoltaic thermal (PVT)-compound parabolic concentrator (CPC) collector integrated solar still using CNT-water based nanofluids. **Desalination** 495, 114595 **(Impact factor: 11.21)**

12. Swati Arora, Harendra Pal Singh, **Lovedeep Sahota*,** Manoj Kumar Arora, Sparsh Singh, Ritik Arya, Abhinav Prashar, **(2022),** Energy metrices, enviro-economic and characteristic equation-based performance analysis of photovoltaic thermal compound parabolic concentrator (PVT -CPC) coupled solar still equipped with heat exchanger using SWCNTs and MWCNTs-water nanofluids, (**Accepted**: 222338459) **International Journal of Ambient Energy**, **(Impact factor: 2.4)**

(b) International/national conference publications

1. **Sahota, L.,** Tiwari, G.N., (2016), Effect of Al_2O_3, TiO_2, and CuO- water based nanofluids on heat heat transfer coefficients of passive double slope solar still, International Journal of energy environment and economics, Nova Science Publishers, Inc. Vol. 23, ISSN: 1054-853X.

2. **Sahota, L.,** Tiwari, G.N., (2016), Productivity enhancement of passive double slope solar still using Al_2O_3 and TiO_2- water based nanofluids, Poster presented in International Energy Conference 2016 (June 14-15), London, U.K.

3. **Sahota, L.,** Tiwari, G.N., Rajput, P., Performance of passive double slope solar still with different nanofluids, Poster presented in Open House, April 23, 2016, I.I.T Delhi.

4. **Sahota, L.,** Tiwari, G.N., Effect of Al_2O_3-water based nanofluid on the thermo-physical characteristics of active double slope solar still coupled with helically coiled heat exchanger, Renewable Energy Sources for Sustainable Climate, National Conference SOLARIS, Feb 07-09, 2017, I.I.T BHU, Varanasi, India.

5. **Sahota, L.,** Arora, L., Singh, H.P., Sahoo, G., (2020), "Thermo-physical characteristics of passive double slope solar still loaded with MWCNTs and Al2O3-water based nanofluid, Materials Today: Proceedings, Elsevier publisher, ISSN: 2214-7853.

6. Harendra Pal Singh, Swati Arora, **Lovedeep Sahota**, Manoj Kumar Arora, Aayush Jain, Arvind Singh, (2022), Evaluation of the performance parameters of a PVT system: Case study of composite environmental conditions for different Indian cities. Materials Today: Proceedings, Elsevier publisher, ISSN: 2214-7853.

7. Supreeti Das, **Lovedeep Sahota,** (2022). Heat transfer and cost analysis of circular heating source based tubular rods loaded with thermal oil-MWCNT nanofluid. Materials Today: Proceedings, Elsevier publisher, ISSN: 2214-7853**.**

(c) *Books*

1. Tiwari, G.N., **Sahota, L.,** (2017), Advanced Solar Distillation Systems: Thermal Modeling, Basic Principle and Its Applications. Springer (Nature) publications (ISBN 978-981-10-4671-1).

(d) *Book chapters*

1. Tiwari, G.N., **Sahota, L.,** (2017), "Exergy and Techno-Economic Analysis of Solar Thermal Desalination" in Sustainable Desalination Handbook: Process Design and Implementation Strategies, Elsevier publisher, ISBN- 9780128152447.

	(e) ***Projects*** 1. Co-PI of Faculty Research Program (FRP) Grant under Institute of Eminence, University of Delhi, Completed in **2021-2022**. (Ref. No./IoE/2021/12/FRP)