


## Brief CV

<b>Name</b>	Sunil Chamoli	中文名		
<b>Gender</b>	Male	<b>Title</b> (Pro./Dr.)	Dr.	
<b>Position</b> (President...)	Assistant Professor	<b>Country</b>	India	
University/Department	Department of Mechanical Engineering, DIT University, Dehradun, India			
Personal Web Sites				
Research Area	Heat transfer, optimization, CFD, heat storage			

### Brief introduction of your research experience:

Sunil Chamoli is an Assistant Professor in the Department of Mechanical Engineering, DIT University, Dehradun, India. He was granted a Ph.D. degree in 2014 in thermal system optimization from NIT Hamirpur, India. He worked on passive heat transfer enhancement technology used in heat exchangers, heat storage system for low and moderate temperatures, computational optimization of thermal systems and energy harvesting devices.

### Publications

#### Year – 2018

- **Sunil Chamoli**, Ruixin Lu, Jin Xie, Peng Yu. Numerical study on flow structure and heat transfer in a circular tube integrated with novel anchor shaped inserts. **Applied Thermal Engineering**, 135, 2018, 304-324. (Publisher Elsevier)
- Alok Kumar, Satyendra Singh, **Sunil Chamoli**, Manoj Kumar. Experimental Investigation on Thermo-Hydraulic Performance of Heat Exchanger Tube with Solid and Perforated Circular Disk Along with Twisted Tape Insert. **Heat Transfer Engineering**. doi/abs/10.1080/01457632.2018.1436618. (Publisher Taylor and Francis)
- Piyush Agrawal, Abhishek Gautam, Anshul Kunwar, Manoj Kumar, **Sunil Chamoli**. Performance assessment of heat transfer and friction characteristics of packed bed heat

storage system embedded with internal grooved cylinders. **Solar Energy**, 161, 2018, 148 - 158. (*Publisher Elsevier*)

- Amit Bartwal, Abhishek Gautam, Manoj Kumar, Chidanand K. Mangrulkar, **Sunil Chamoli**. Thermal performance intensification of a circular heat exchanger tube integrated with compound circular ring - metal wire net inserts. **Chemical Engineering and Processing: Process Intensification**, 124, 2018, 50-70. (*Publisher Elsevier*).

- **Sunil Chamoli**, Ruixin Lu, Dehao Xu, Peng Yu. Thermal performance improvement of a solar air heater fitted with winglet vortex generators. **Solar Energy**, 159, 2018, 966 – 983. (*Publisher Elsevier*).

- Sumit Kumar Singh, Manoj Kumar, Alok Kumar, Abhishek Gautam, **Sunil Chamoli**. Thermal and friction characteristics of a circular tube fitted with perforated hollow circular cylinder inserts. **Applied Thermal Engineering**, 130, 2018, 230 - 241. (*Publisher Elsevier*).

#### Year – 2017

- **Sunil Chamoli**, Peng Yu, Ruixin Lu. Thermal characteristic of a turbulent flow through a circular tube fitted with perforated vortex generator inserts. **Applied Thermal Engineering**, 121, 2017, 1117–1134. (*Publisher Elsevier*).

- Rajesh Maithani, Anshuman Silori, Jitesh Rana, **Sunil Chamoli**. Numerical analysis of heat transfer and fluid flow of a wavy delta winglets in a rectangular duct. **Thermal Science and Engineering Progress**, 2, 2017, 15 – 25. (*Publisher Elsevier*).

- **Sunil Chamoli**, Peng Yu, Shimin Yu, Multi-objective shape optimization of a heat exchanger tube fitted with compound inserts, **Applied Thermal Engineering**, 117, 2017, 708 – 724. (*Publisher Elsevier*).

- J.S. Sawhney, Rajesh Maithani, **Sunil Chamoli**, Experimental investigation of heat transfer and friction factor characteristics of solar air heater using wavy delta winglets, **Applied Thermal Engineering**, 117, 2017, 740 – 751. (*Publisher Elsevier*).

- Abhishek Gautam, **Sunil Chamoli**, Alok Kumar, Satyender Singh, A review on technical improvements, economic feasibility and world scenario of solar water heating system, **Renewable and Sustainable Energy Reviews**, 68, 2017, 541- 562. (*Publisher Elsevier*).

- Jitesh Rana, Anshuman Silori, Rajesh Maithani, **Sunil Chamoli**, CFD analysis of

a v-rib with gap roughened solar air heater, *Thermal Science - International Scientific Journal*, DOI <https://doi.org/10.2298/TSCI160831010R>.

Year – 2016

- Alok Kumar, **Sunil Chamoli**, Manoj Kumar, Satyender Singh, Experimental investigation on thermal performance and fluid flow characteristics in circular cylindrical tube with circular perforated ring Inserts, **Experimental Thermal and Fluid Science**, 79, 2016, 168- 174. (*Publisher Elsevier*).
- **Sunil Chamoli**, Peng Yu, Alok Kumar, Multi-response optimization of geometric and flow parameters in a heat exchanger tube with perforated disk inserts by Taguchi grey relational analysis, **Applied Thermal Engineering**, 103, 2016, 1339- 1350. (*Publisher Elsevier*).
- Alok Kumar, **Sunil Chamoli**, Manoj Kumar, *Comparitive study for thermal hydraulic performance of circular tube with inserts*, **Alexendria Engineering Journal**, 55, 2016, 343-349. (*Publisher Elsevier*).
- Vijaypal Singh, **Sunil Chamoli**, Manoj Kumar, Alok Kumar, Heat transfer and fluid flow characteristics of heat exchanger tube with multiple twisted tapes and solid rings inserts, **Chemical Engineering and Processing: Process Intensification**, 102, 2016, 156-168. (*Publisher Elsevier*).
- Alok Kumar, **Sunil Chamoli**, Manoj Kumar, Experimental investigation on thermal performance and fluid flow characteristics in heat exchanger tube with solid hollow circular disk inserts, **Applied Thermal Engineering**, 100, 2016, 227-236. (*Publisher Elsevier*).
- Vipin B. Gawande, A. S. Dhoble, D. B. Zodpe, **Sunil Chamoli**, A review of CFD methodology used in literature for predicting thermohydraulic performance of a roughened solar air heater, **Renewable and Sustainable Energy Reviews**, 54, 2016, 550- 605. (*Publisher Elsevier*).
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**Solar Energy**, 131, 2016, 275-295. (*Publisher Elsevier*).

- Prashant Kumar, Alok Kumar, **Sunil Chamoli**, Manoj Kumar, *Experimental Investigation of Heat Transfer Enhancement and Fluid Flow Characteristics in a Protruded Surface Heat Exchanger Tube*, **Experimental Thermal and Fluid Science**, 71, 2016, 42-51. (*Publisher Elsevier*).

- Vipin B. Gawande, A. S. Dhoble, D. B. Zodpe, **Sunil Chamoli**, Experimental and CFD-based thermal performance prediction of solar air heater provided with chamfered square rib as artificial roughness, **Journal of Brazilian Society of Mechanical Science and Engineering**, 38, 2016, 643 – 663. (*Publisher Springer*).

- Vipin B. Gawande, A. S. Dhoble, D. B. Zodpe, **Sunil Chamoli**, Experimental and CFD-based thermal performance prediction of solar air heater provided with right-angle triangular rib as artificial roughness, **Journal of Brazilian Society of Mechanical Science and Engineering**, 38, 2016, 551- 579. (*Publisher Springer*).

#### Year- 2015

- **Sunil Chamoli**, Preference selection index approach for optimization of V down perforated baffled roughened rectangular channel, **Energy**, 93, Part-2, 2015, 1418- 1425. (*Publisher Elsevier*).

- **Sunil Chamoli**, N.S Thakur, Thermal behavior in rectangular channel duct fitted with V shaped perforated baffles, **Heat Transfer Engineering**, 36, 2015, 471- 479. (*Publisher Taylor and Francis*).

- **Sunil Chamoli**, A Taguchi approach for optimization of flow and geometrical parameters in a rectangular channel roughened with V down perforated baffles, **Case Studies in Thermal Engineering**, 5, (2015), 59- 69. (*Publisher Elsevier*)

- **Sunil Chamoli**, Hybrid FAHP-FTOPSIS approach for performance evaluation of the V down perforated baffle roughened rectangular channel, **Energy**, 84, 2015, 432- 442. (*Publisher Elsevier*)

- **Sunil Chamoli**, ANN and RSM approach for modeling and optimization of designing parameters for a V down perforated baffle roughened rectangular channel, **Alexandria Engineering Journal**, 54, 2015, 429-446. (*Publisher Elsevier*)

#### Year- 2014

- **Sunil Chamoli**, N.S Thakur, Exergetic performance evaluation of V down roughened solar air heater duct, **Journal of Thermal Analysis and Calorimetry**, 117, 2014, 909- 923. (*Publisher Springer*).
- **Sunil Chamoli**, N.S Thakur, Numerical based heat transfer and friction factor correlations of rectangular ducts roughened with transverse perforated baffles, **Walalaik Journal of Science and Technology**, 11, 2014, 107-127.
- **Sunil Chamoli**, N.S Thakur, Correlations for solar air heater duct with V- shaped perforated baffles as roughness elements on absorber plate, **International Journal of Sustainable Energy**, Vol. 35, No. 1, 1–20, 2016. (*Publisher Taylor and Francis*).
- **Sunil Chamoli**, N.S Thakur, Effect of Roughness Height Ratio in V down Perforated Baffle Roughness on Thermo hydraulic Performance of Solar Air Heater: An Experimental Study, **International Journal of Ambient Energy**, 36, 2015, 242 - 247. (*Publisher Taylor and Francis*).
- **Sunil Chamoli**, N.S Thakur, Performance study of solar air heater duct having absorber plate with V down perforated baffles, **Songklanakarin Journal of Science and Technology**, 36, 2014, 201-208. (*Publisher Prince of Songkla University*).

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- **Sunil Chamoli**, N.S Thakur, Heat transfer enhancement in solar air heater with V-shaped perforated baffles, **Journal of Renewable and Sustainable Energy**, 5, 023122 (2013). (*Publisher AIP*).
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- **Sunil Chamoli**, Ranchan Chauhan, N.S Thakur, J.S Saini, A review of the

performance of double pass solar air heater, **Renewable and Sustainable Energy Reviews**, 16, 2012, 481-492. (*Publisher Elsevier*).

- **Sunil Chamoli**, N.S Thakur, J.S Saini, A review of the turbulence promoters used in solar thermal systems, **Renewable and Sustainable Energy Reviews**, 16, 2012, 3154- 3175. (*Publisher Elsevier*).

**\*\*\*\*\*All the columns need to be filled in.**