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## Employment

### Assistant Professor

Surface Technology and Tribology  
University of Twente  
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## Research outputs

### Evolution of real area of contact due to combined normal load and sub-surface straining in sheet metal

Shisode, M., Hazrati, J., Mishra, T., de Rooij, M. & van den Boogaard, T., 18 Aug 2021, In: Friction. 9, p. 840-855 16 p.

### Mixed lubrication friction model including surface texture effects for sheet metal forming

Shisode, M. P., Hazrati Marangalou, J., Mishra, T., de Rooij, M. & van den Boogaard, T., 1 May 2021, In: Journal of materials processing technology. 291, 16 p., 117035.

### Study of wear particles formation at single asperity contact: An experimental and numerical approach

Mekicha, M. A., Rooij, M. B. D., Mishra, T., Matthews, D. T. A., Jacobs, L. & Schipper, D. J., 15 Apr 2021, In: Wear. 470-471, 203644.

### The effect of asperity geometry on the wear behaviour in sliding of an elliptical asperity

Mishra, T., de Rooij, M. & Schipper, D. J., 15 Apr 2021, In: Wear. 470-471, 203615.

### Modeling boundary friction of coated sheets in sheet metal forming

Shisode, M., Hazrati, J., Mishra, T., de Rooij, M., ten Horn, C., van Beeck, J. & van den Boogaard, T., Jan 2021, In: Tribology international. 153, 106554.

### Semi-analytical contact model to determine the flattening behavior of coated sheets under normal load

Shisode, M. P., Hazrati, J., Mishra, T., de Rooij, M. B. & van den Boogaard, A. H., Jun 2020, In: Tribology international. 146, 12 p., 106182.

### Analytical, numerical and experimental studies on ploughing behaviour in soft metallic coatings

Mishra, T., de Rooij, M., Shisode, M., Hazrati Marangalou, J. & Schipper, D. J., 15 May 2020, In: Wear. 448-449, 203219.

### A material point method based ploughing model to study the effect of asperity geometry on the ploughing behaviour of an elliptical asperity

Mishra, T., de Rooij, M., Shisode, M., Hazrati, J. & Schipper, D. J., 1 Feb 2020, In: Tribology international. 142, 106017.

### Characterization of yield criteria for zinc coated steel sheets using nano-indentation with knoop indenter

Mishra, T., de Rooij, M., Shisode, M., Hazrati, J. & Schipper, D. J., 15 Jan 2020, In: Surface and coatings technology. 381, 125110.

### Modeling mixed lubrication friction for sheet metal forming applications

Shisode, M. P., Hazrati, J., Mishra, T., de Rooij, M. & van den Boogaard, T., 1 Jan 2020, In: Procedia manufacturing. 47, p. 586-590 5 p.

### Modelling ploughing by an elliptical asperity through a zinc coated steel sheet: with application to modelling friction in deep-drawing

Mishra, T., 4 Dec 2019, Enschede: University of Twente. 341 p.

**Characterization of interfacial shear strength and its effect on ploughing behaviour in single-asperity sliding**

Mishra, T., de Rooij, M., Shisode, M., Hazrati, J. & Schipper, D. J., 15 Oct 2019, In: *Wear*. 436-437, 203042.

**An analytical model to study the effect of asperity geometry on forces in ploughing by an elliptical asperity**

Mishra, T., de Rooij, M., Shisode, M., Hazrati, J. & Schipper, D. J., 1 Sept 2019, In: *Tribology international*. 137, p. 405-419 15 p.

The effects of contact configuration and coating morphology on the tribological behaviour of tetrahedral amorphous diamond-like carbon (ta-C DLC) coatings under boundary lubrication

Mishra, T., Nordin, B., Svanbäck, D., Tervakangas, S. & Prakash, B., 3 Apr 2019, In: *Tribology - Materials, Surfaces and Interfaces*. 13, 2, p. 120-129 10 p.

**Modelling of ploughing in a single-asperity sliding contact using material point method**

Mishra, T. (Corresponding Author), Ganzenmüller, G. C., de Rooij, M., Shisode, M., Hazrati, J. & Schipper, D. J., 15 Jan 2019, In: *Wear*. 418-419, p. 180-190 11 p.

**Characterization of Anisotropic Yield Criteria Using an Indentation Based Technique for Steel Sheets**

Mishra, T., de Rooij, M., Shisode, M., Hazrati, J. & Schipper, D., 2019.

**Multi-scale Friction Modeling of Coated Steels for Sheet Metal Forming Applications**

Shisode, M., Hazrati, J., Mishra, T., de Rooij, M. & van den Boogaard, T., 2019.

**Multi-scale contact modeling of coated steels for sheet metal forming applications**

Shisode, M., Hazrati Marangalou, J., Mishra, T., De Rooij, M. & Van Den Boogaard, T., 2018, *Tribology in Manufacturing Processes and Joining by Plastic Deformation II*. Bay, N. & Nielsen, C. V. (eds.). Trans Tech Publications Ltd, p. 223-231 9 p. (Key Engineering Materials; vol. 767).