

HANEESH KESARI

Brown University
School of Engineering
Box D, Providence RI 02912
401 863-1418
Haneesh_Kesari@brown.edu

(a) Professional Preparation

Indian Institute of Technology
Guwahati
Stanford University
Stanford University

Mechanical Engineering
Mechanical Engineering
Mechanical Engineering

B.Tech. 2005
M.S. 2007
Ph.D. 2011

(b) Appointments

January 2013-present
May 2011-December 2012

Asst. Professor of Engineering, Brown University
Postdoctoral Research Associate, Brown University

(c) Products

Products Most Closely Related

1. Michael A. Monn, James C. Weaver, Tianyang Zhang, Joanna Aizenberg, and Haneesh Kesari, "New functional insights into the internal architecture of the laminated anchor spicules of *Euplectella aspergillum*," *Proceedings of the National Academy of Sciences*, 112(16) 4976–4981 (2015), DOI: 10.1073/pnas.1415502112
2. Haneesh Kesari and Adrian J. Lew, "Adhesive frictionless contact between an elastic isotropic halfspace and a rigid axi-symmetric punch," *Journal of Elasticity*, 106(2) 203–224 (2012), DOI: 10.1007/s10659-011-9323-8
3. Haneesh Kesari and Adrian J. Lew, "Effective macroscopic adhesive contact behavior induced by small surface roughness," *Journal of the Mechanics and Physics of Solids*, 59(12) 2488–2510 (2011), DOI: 10.1016/j.jmps.2011.07.009
4. Haneesh Kesari, Joseph C. Doll, Beth L. Pruitt, Wei Cai, and Adrian J. Lew, "Role of surface roughness in hysteresis during adhesive elastic contact," *Philosophical Magazine Letters*, 90(12) 891–902 (2010), DOI: 10.1080/09500839.2010.521204

Other Significant Products

1. Sohan Dharmaraja, Haneesh Kesari, Eric Darve, and Adrian J. Lew, "Time integrators based on approximate discontinuous hamiltonians," *International Journal for Numerical Methods in Engineering*, 89(1) 71–104 (2012), DOI: 10.1002/nme.3236
2. Lampros C. Kourtis, Haneesh Kesari, Dennis R. Carter, and Gary S. Beaupré, "Transverse and torsional shear stresses in prismatic bodies having inhomogeneous material properties using a new 2D stress function," *Journal of Mechanics of Materials and Structures*, 4(4) 659–674 (2009), DOI: 10.2140/jomms.2009.4.659
3. Lampros C. Kourtis, Dennis R. Carter, Haneesh Kesari, and Gary S. Beaupré, "A new software tool (VA-BATTS) to calculate bending, axial, torsional, and transverse shear stresses within bone cross sections having inhomogeneous material properties," *Computer Methods in Biomechanics and Biomedical Engineering*, 11(5) 463–476 (2008), DOI: 10.1080/10255840801930728

4. Suhas S. Mohite, Haneesh Kesari, Venkata R. Sonti, and Rudra Pratap, "Analytical solutions for the stiffness and damping coefficients of squeeze films in MEMS devices having perforated back plates," *Journal of Micromechanics and Microengineering*, 15(11) 2083–92 (2005), DOI: 10.1088/0960-1317/15/11/013

(d) Synergistic Activities

1. Journal article reviewer for
 - i. Journal of the Mechanics and Physics of Solids
 - ii. Thin Film Solid Films
 - iii. Journal of Biomechanics
 - iv. ACS Applied Materials & Interfaces
 - v. Scientific Reports
 - vi. Journal of Applied Mechanics
 - vii. Mechanics Research Communications
2. Judge of student papers in Society of Engineering Science, Annual Technical Conference, 2013
3. Instructor for Summer Institute for Middle School Teachers, Stanford, 2007, 2008
4. Instructor for National Hispanic University Workshop, Stanford, 2007

(e) Collaborators & Other Affiliations

Collaborators and Co-Editors (over the past 48 months)

Joanna Aizenberg (Harvard University), Gary S. Beaupré (VA Palo Alto Health Care System & Stanford University), Dennis R. Carter (Stanford University), Eric Darve (Stanford University), Sohan Dharmaraja (Neotenicity LLC), Joseph Doll (SiTime Corporation), Jae-Hyun Kim (KIMM, Korea), Kwan-Seop Kim (KIMM, Korea), Kristie Koski (Brown University), Beth Pruitt (Stanford University), James Weaver (Harvard University)

Graduate Advisors and Postdoctoral Sponsors (all, Total: 3)

Wei Cai (PhD advisor; Stanford University), Adrian Lew (PhD advisor; Stanford University), and Huajian Gao (Postdoctoral sponsor; Brown University)

Graduate Thesis Advisees (all, Total: 1)

Tianyang Zhang (M.S.; University of California, Los Angeles)