

Prof. Vikram Sudhir Deshpande

Personal Details

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Education

Cambridge University	1995 – 1998	Ph.D. in Engineering
Cambridge University	1994 – 1995	M.Phil. in Engineering
Indian Institute of Technology	1990 – 1994	B.Tech. in Mechanical Engineering

Employment History

<i>Oct. 2010 – present</i>	Professor, Dept. of Engineering, University of Cambridge.
<i>May 2017 – July 2017</i>	Visiting Professor, Università Campus Bio-Medico, Rome, Italy.
<i>Jan. 2009 – Jan. 2017</i>	Visiting Professor, Dept. of Mechanical Engineering, Technical University of Eindhoven, The Netherlands
<i>Oct. 2008 – Oct. 2010</i>	Reader, Dept. of Engineering, University of Cambridge.
<i>Apr. 2007 – Apr. 2008</i>	Associate Professor, Mechanical Engineering, University of California, Santa Barbara, USA.
<i>Oct. 2004 – Oct. 2008</i>	Senior Lecturer, Dept. of Engineering, University of Cambridge
<i>Jan. 2003 – Oct. 2004</i>	Lecturer, Dept. of Engineering, University of Cambridge
<i>Jun. 2002 – Oct. 2006</i>	Visiting Professor, Brown University, USA
<i>Sep. 2000 – Sep. 2001</i>	Visiting Professor, Brown University, USA and Lindemann Fellow
<i>Apr. 2000 – Jan. 2003</i>	Assistant Lecturer, Dept. of Engineering, University of Cambridge
<i>Oct. 1999 – Apr. 2000</i>	Maudslay Research Fellow, Pembroke College, Cambridge
<i>Nov. 1997 – Oct. 1999</i>	Research Associate, Dept. of Engineering, University of Cambridge

Research/Scholarship

- 270 International refereed journal articles
- 21 refereed conference papers and book chapters
- h-index: 73; Total citations: ~20,900 (source: Google Scholar)

Editorial duties

- *Associate Editor* for Experimental Mechanics (Jun. '06 – Jun. '09)
- *Associate Editor* for the ASME Journal of Applied Mechanics (Oct. '08 – Apr. '13)
- *Associate Editor* for the European Journal of Mechanics A:/Solids (Oct. '08 – Oct. '12)
- *Guest Editor* for special issue on “Advances in computational methods for impact engineering” for the Journal of the Mechanics of Materials and Structures.
- *Guest Editor* for special issue on “Advances in impact engineering” for the ASME Journal of Applied Mechanics
- *Guest Editor* for special issue on “Advances in impact engineering in honour of Prof. S.R Reid” for the International Journal of Impact Engineering
- *Guest Editor* for special issue on “Alan Needleman Symposium: New Frontiers in the Mechanics of Materials” in the ASME Journal of Applied Mechanics

- *Guest Editor* for special issue on “Micro-architected materials” in Extreme Mechanics Letters
- *Guest Editor* for special issue on “Mechanobiology” in Extreme Mechanics Letters
- *Invited Editor* for article in the Proceedings of the National Academy of Sciences, USA.
- *Guest Editor* for special issue “In honour of the 60th birthday of Norman Fleck” for the Journal of the Mechanics and Physics of Solids
- *Guest Editor* MRS Bulletin on “Three-dimensional Architected Materials and Structures”, 2019.

Journal editorial board appointments

- Modelling and Simulation in Materials Science and Engineering, (Jun. '03 to present)
- Molecular and Cellular Biomechanics (Mar. '10 to present)
- International Journal of Mechanical Sciences (May '11 to present)
- Journal of the Mechanics and Physics of Solids (Jul. '13 to present)
- Acta Mechanica Sinica (Jul. '13 to present)
- International Journal of Impact Engineering (Aug. '14 to present)
- Proceedings of the Royal Society A, London (Jan. '17 to present)
- Computers, Materials and Continua (Mar. '18 to present)
- Mechanics of Materials (Jan. '20 to present)

Other Appointments

- *Member* of the Applied Mechanics Division of ASME (USA) Technical Committee on Mechanics in Biology and Medicine (Mar. '07- Mar. '11).
- *Regular reviewer* for the following Journals:
Journal of the Mechanics and Physics of Solids, Acta Materialia, Journal of Applied Mechanics, International Journal of Solids and Structures, International Journal of Mechanical Sciences, International Journal of Impact Engineering, Journal of Engineering Mechanics, Philosophical Magazine, European Journal of Mechanics A/Solids, Proceedings of the Royal Society A, Journal of the Royal Society Interface.
- *Member of scientific advisory board* of several international institutions and research centres including currently serving on the boards of the “3D Matter made to order” cluster of excellence funded by the German Excellence Strategy; the Institut Polytechnique de Paris (formerly Ecole Polytechnique) and the Technical Innovation Institute in Abu Dhabi.

Awards and Fellowships

- Gili Agostinelli Prize for pure or applied mechanics or classical mathematical physics awarded by Accademia delle Scienze, Torino, Italy (2021).
- Distinguished Alumnus Award, Indian Institute of Technology, Bombay (IITB) (2021).
- Fellow, Royal Society of London (2020). This is the Science Academy of the United Kingdom and more broadly the British Commonwealth including Australia, New Zealand, Canada, South Africa, Singapore, and India. No more than 48 fellows are elected every year across all physical, biological, and mathematical sciences.
- Rodney Hill Prize in Solid Mechanics (2020). Awarded once every 4 years by the International Union of Theoretical and Applied Mechanics to a single researcher.
- Fellow, Institute of Materials, Minerals and Mining (2020).
- Sir William Hopkins Prize in Mathematical and Physical Sciences (2018). Awarded by the Cambridge Philosophical Society for being a “leading light of this generation in solid mechanics”.
- Werner Koester Award (2017). Presented by the German Society of Materials Science (DGM) for the best paper published in the International Journal of Materials Research.

- Philip Leverhulme Prize (2003). Awarded by the Leverhulme Trust to researchers whose work has had an international impact at an early stage of their careers
- Lindemann Research Fellowship (2000 – 2001). Awarded by the English-Speaking Union to conduct research at Brown University, USA.
- Maudslay Research Fellowship: Pembroke College, Cambridge (1999-2000)
- Cambridge Commonwealth Trust Scholarship (1995 - 1997)
- Overseas Research Studentship (1995-1997)
- W.G. Collins Fund Scholarship: Cambridge University (1995 - 1997)
- External Research Studentship: Emmanuel College (1995 - 1997)
- Oxford and Cambridge Society of India Scholarship (1994 - 1995)

Selected plenary/keynote/invited lectures (2014 - 2021)

- 5th International Conference on Computational Methods, Cambridge UK, 2014 (Plenary)
- 14th European Mechanics of Materials Conference, Gothenburg, Sweden, 2014 (Plenary)
- 3rd International workshop on Physics based material models and experimental observations, Izmir, Turkey, 2014 (Keynote)
- IUTAM symposium on Micromechanics of defects in Solids, Seville, Spain, 2014 (Invited)
- Lecture to the Defence Science Research Council, Washington DC, USA, 2014 (Invited)
- Max-Planck Workshop on Hydrogen Embrittlement in Steels, Dusseldorf, Germany, 2014 (Keynote)
- PIRE workshop: atomistic and multi-scale models of materials, Warwick, UK, 2014 (Invited)
- Pan-American Congress of Applied Mechanics, Urbana Champaign, USA, 2015 (Keynote)
- Materials research society autumn meeting, Boston, 2015 (Keynote)
- Royal Society Symposium on Mechanobiology, Chicheley Hall, UK, 2015 (Invited)
- US National academies symposium on: Emerging and timely capabilities in ultra-strong molecules, Washington, USA, 2016 (Invited)
- ASME conference on Nano Engineering for Medicine and Biology, Houston, USA, 2016 (Keynote).
- IUTAM symposium on Dynamic instabilities in solids, Madrid, Spain, 2016 (Invited).
- Workshop on coupled phenomena in corrosion, College Station, USA, 2016 (Invited).
- XXI Italian Conference on Computational Mechanics, Lucca, Italy, 2016 (Plenary).
- 24th International conference of theoretical and applied mechanics, Montreal, Canada, 2016 (Invited).
- 11th International conference on plasticity and impact Mechanics, New Delhi, India, 2016 (Plenary).
- Machconference, Annapolis, USA, 2017 (Plenary)
- Cermodel 2017, Trento, Italy, 2017 (Plenary)
- International Conference on Bio-Medical Technology, 2017, Hannover, Germany (Keynote)
- Distinguished lecture at the Office of Naval Research, USA, 2018
- James Knowles Lecture, Caltech, USA, 2018
- Euromech symposium on Micromechanics of defects in Solids, Seville, Spain, 2018 (Invited)
- Invited Lecture, Thomas Young Centre, Kings College, London, 2018
- CECAM workshop on Emergence of surface and interface structure from friction, fracture and deformation, EPFL, Lausanne, Switzerland, 2018 (Invited)
- 3rd Schöntal symposium on Dislocation based plasticity, Schöntal, Germany, 2018 (Invited)
- Lecture at IUTAM symposium on Architected Material Mechanics, Chicago, USA, 2018 (Plenary)
- Lecturer at CISM advanced school on Cell mechanobiology: theory and experiments on the mechanics of life, Udine, Italy, 2018

- GI Taylor lecture of the Cambridge Philosophical Society (2019)
- Euromech symposium on Damage and failure of engineering materials under extreme loading conditions, Madrid, Spain, 2019 (Invited)
- ECCOMAS Thematic Conference on “Computational modelling of complex materials across the scales”, Glasgow, 2019 (Keynote)
- Online Conference ICRACTEM 2020 (Keynote)
- Online Solid Mechanics keynote seminar at KTH Stockholm, 2020
- Extreme Mechanics Webinar (2020)
- 44th Adhesion Society Meeting, 2021 (Keynote)
- Machconference, Annapolis, USA, 2021 (Keynote)
- Materials Research Society Spring meeting, 2021 (Keynote)
- Rodney Hill Prize lecture, ICTAM, 2021