

Amir Naghdi
Associate Faculty of Mechanical Engineering (Professor Emeritus)

Education

- 1964, Ph.D., Engineering Sciences, Purdue University, West Lafayette, Indiana.
- 1958, M.S., Mechanical Engineering, University of Illinois, Urbana, Illinois.
- 1951, B.S., Mechanical Engineering, University of Tehran (Iran).

Positions and Ranks Held at IUPUI

- 1997 – Present, Associate Faculty, Department of Mechanical Engineering.
- 1994 – Present, Emeritus Faculty, Department of Mechanical Engineering.
- 1975 – 1994, Professor of Mechanical Engineering and Mathematical Sciences.
- 1969 – 1975, Associate Professor of Aeronautics, Astronautics and Engineering Sciences.
- 1966 – 1969, Assistant Professor of Aeronautical Engineering and Engineering Sciences.

Other Related Experience

- 1965 – 1966, Associate Professor, Pahlavi University, Shiraz, Iran.
- 1965 (summer) Research Professor, General Technology Corporation.
- 1964 – 1965, Assistant Professor of Mechanics and Aerospace Engineering, University of Kansas, Lawrence, Kansas.

Consulting, Patents, etc.

Cummins Engine Company, summers of 1968 and 1969.

Teaching Interests

During the retirement, have taught only undergraduate dynamics and mechanics of materials. Before retirement, have taught many graduate and undergraduate courses in solid mechanics, fluid mechanics, heat transfer, and mathematics.

ME Courses Taught Recently

ME 272 Mechanics of Materials and ME 274 Basic Mechanics II.

Principal Publications (the last five years before retirement)

1. A.K. Naghdi, “Thermal Stress in a Cylinder with longitudinal Circular Cylinder Cutouts”, Journal of Thermal Stresses, Vol. 19, No. 4 June 1996 P.P. 341 – 357.
2. A.K. Naghdi, “Laminar Flow Heat Transfer in a Cylinder with Circumferential Tubes”, Transaction of the Canadian Society of Mechanical Engineers, Vol. 20, No. 1, 1996.

E. Syllabi of Courses

3. A.K. Nagdi, "Torsion of Rectangular Bars with Multiple Cylindrical Reinforcement or Cavities," ASME Journal of Applied Mechanics Vol. 61, No. 2 June 1994 p.p. 483 – 487.
4. A.K. Naghdi, "Certain Solutions of Biharmonic Equation in a Multiply-Connected Circular Region and Application," presented at the Seventh South Eastern Conference on Theoretical and Applied Mechanics, University of Arkansas, April 1994 – Proceeding p.p. 65 – 74.
5. A.K. Naghdi, "Torsion of Circular Bars with Multiple Cylindrical Reinforcement or Cavities," presented at the 14th Canadian Congress of Applied Mechanics, June 1993.
6. A.K. Naghdi, "Heat Transfer in Circular Plate Fin with Inner Circular Boundaries", Presented at the 16th South Eastern Conference on Theoretical and Applied Mechanics, April 1992. Proceedings: Developments in Theoretical and Applied Mechanics pp. II 19.9 – II 19.14.
7. A.K. Naghdi, "Bending of Rectangular Cross – Section Cantilever with Cylinder Cutouts", ASCE Journal of Engineering Mechanics, vol. 118, no. 4, April 1992, pp. 831 – 842.
8. A.K. Naghdi, "Bending of a Perforated Circular Cylindrical Cantilever," The International Journal of Solids and Structures, vol. 28, no.6, June 1991, pp. 739 – 749.
9. A.K. Naghdi and J.R. O'Loughlin, "Steady Heat Transfer in a Rectangular Plate with Circular Heat Sources," Presented at the Third ASME/JSME Thermal Engineering Joint Conference, Reno Nevada, March 17 – 22, 1991.
10. A.K. Naghdi, "Three Dimensional Heat Conduction in a Circular Cylinder with Longitudinal Cutouts," Proceedings of the 13th Canadian Congress of Applied Mechanics, vol. 2, June 2 – 6, 1991, pp. 534 – 535.

Honors and Awards

1. Departmental Outstanding Teaching Award in Mechanical Engineering, awarded on April. 16, 1993.
2. The Frank E. Burley Distinguished Professorship Award, awarded on April 14, 1989.