Basir Shafiq, Ph. D.

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Professional Preparation

• Southern IllinoisUniversity	Engineering Mechanics	B.S. 1989
• University of Illinois at Chicago	Engineering Mechanics	M.S. 1990
• University of Illinois at Chicago	Engineering Mechanics	Ph.D. 1996

Appointments

- Professor, Department of Engineering Science and Materials, University of Puerto Rico (07/06 to present)
- Associate Professor, General Engineering Department, University of Puerto Rico (07/01 to 06/06)
- Assistant Professor, General Engineering Department, University of Puerto Rico (07/96 to 06/01)
- Research Faculty, Naval Air Warfare Center, PAX River, Maryland (Summer 1999 to 2002)
- Structural Engineer, Boeing, Wichita, Kansas (Summer 2006)
- Adjunct Faculty, Triton College, Rivergrove, Illinois (08/91 to 12/95)

Representative Publications

- S. Charca, B. Shafiq, "Damage Assessment Due to Repeated Slamming of Foam Core Sandwich Composites", Journal of Sandwich Structures and Materials, vol.13, No. 1, p 97-109, 2011.
- S. Charca, B. Shafiq, S. Gonzalez, O. Lopez, "Fatigue lifetime assessment of foam core sandwich composites", Journal of Advanced Materials, v 42, n 2, p 56-64, 2010.
- S. Charca, B. Shafiq, "Damage Assessment Due to Single Slamming of Foam Core Sandwich Composites", Journal of Sandwich Structures and Materials, Vol. 12, No. 1, 97-112, 2010.
- B. Shafiq, A. Quispitupa, S. Charca, O. Uwakweh: "Hydrogen Assisted Fatigue Lifetime Characteristic of AF1410 Steel", AIAA Journal of Aircraft, vol. 45, No. 5, pp. 1654-1660, 2008.
- Quispitupa, B. Shafiq, S. Charca, O. Uwakweh, M. Suarez, "Effect of Hydrogen and Hold Time on the Fatigue Lifetime of AF1410 Aircraft Structural Steel", AIAA-Journal of Aircraft, Vol. 44, No. 2, pp. 453-458, 2007.

- Shafiq and V. Agarwala: “Corrosion Fatigue in 7075-T6 Aluminum: Life Prediction Issues for Carrier Based Operations”, AIAA - Journal of Aircraft, Vol. 41, No. 2, pp. 393-398, 2004.
- Barkah, B. Shafiq and D. Dooner: “3-D Mesh Generation for Static Stress Determination in Spiral Noncircular Gears Used for Torque Balancing”, ASME Journal of Mechanical Design, Vol. 124, No. 2, pp. 313-319, 2002.
- M. Issa and B. Shafiq: “Fatigue Characteristics of Aligned Fiber Reinforced Quasi-Brittle Materials, ASCE Journal of Engineering Mechanics”, Vol. 125, No. 2, pp. 156-164, 1999.

Synergistic Activities

- Served as a mentor to numerous undergraduate and graduate engineering students.
- Actively participated in the development of research infrastructure at UPRM, especially in the areas of fracture mechanics and dynamic characterization of engineering materials.
- Took a pro-active role in the creation of a forward looking research environment in the General Engineering Department that involved hiring competitive educators and researchers, as well as, conducting and promoting collaborative work with faculty of other departments and institutions.