



Fig. 1 Load-displacement relationship

## Professor Sinniah Ilanko

The right-most image is from: Ilanko, S., 2002. Vibration and post-buckling of in-plane loaded rectangular plates using a multi-term Galerkin's method. *Journal of Applied Mechanics* 69, 589–592.

See:

<http://www.iste.co.uk/book.php?id=759>  
<https://sci.waikato.ac.nz/about-us/people/ilanko>  
[https://www.researchgate.net/profile/Sinniah\\_Ilanko](https://www.researchgate.net/profile/Sinniah_Ilanko)

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### Summary:

Sinniah Ilanko is Professor in the School of Engineering at the University of Waikato in New Zealand and is currently also the Head of School. His research interests include stability and vibration of structures, stress analysis, numerical modelling and engineering education. He teaches or has taught Engineering Mechanics, Mechanics of Materials, Structural Analysis, Numerical Analysis and Finite Element Method. He has been serving as a Subject Editor for the *Journal of Sound and Vibration* since January 2009.

### Selected Publications:

#### Book:

Sinniah Ilanko, Luis E. Monterrubio and Yusuke Mochida, *The Rayleigh-Ritz Method for Structural Analysis*, Wiley, 2014, 252 pages

#### Journal Articles, etc.:

S. Ilanko and S.M. Dickinson. The vibration and post-buckling of geometrically imperfect, simply supported, rectangular plates under uni-axial loading, part I: Theoretical approach. *Journal of Sound and Vibration*, 118:313–336, 1987.

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- L. E. Monterrubio and S. Ilanko , Proof of convergence for a set of admissible functions for the Rayleigh-Ritz analysis of beams and plates and shells of rectangular platform, *Comput. Struct.* 147 (2015) 236–243
- Marco Barbieri, Sinniah Ilanko and Francesco Pellicano, “Active vibration control of seismic excitation”, *Nonlinear Dynamics*, Vol. 93, No. 1, pp 41-52, July 2018