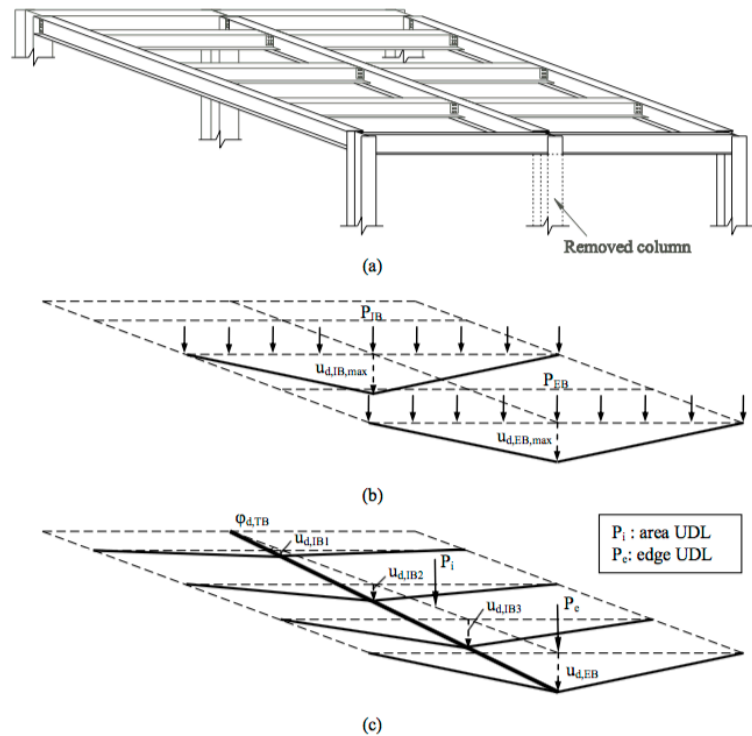




**Professor Bassam A. Izzuddin**



**FIGURE 8** Progressive collapse assessment for the peripheral column removal case. (a) Original floor grillage; (b) Uncoupled mode for the edge and most critical internal longitudinal beams; (c) Deformation mode for the assembled system.

From: Izzuddin BA, Vlassis AG, Elghazouli AY, et al., 2008, Progressive collapse of multi-storey buildings due to sudden column loss - Part I: Simplified assessment framework, Engineering Structures, Vol:30, ISSN:0141-0296, Pages:1308-1318

See:

- <http://www.imperial.ac.uk/people/b.izzuddin>
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**Research Interests:**

Advanced nonlinear finite element analysis, Modelling of structures subject to extreme loading (blast, impact, fire, earthquakes, Simplified design-oriented structural modeling, Robustness and progressive collapse assessment of tall buildings, Multi-scale objective modelling of reinforced concrete structures, Multi-scale modelling of masonry structures, Risk assessment of structures subject to extreme loading, Soil-structure interaction

**Developed Software – ADAPTIC:**

Advanced nonlinear structural analysis program; Geometric and material nonlinearities; Novel frame, plate, membrane and shell elements; Steel, reinforced concrete and composite structures; Extreme loading (static, dynamic and fire); Robust nonlinear solution procedures

**Selected Publications:**

Maunder EAW, Izzuddin BA. A hybrid equilibrium element for folded plate and shell structures, *Int J Numer Methods Eng*, 2013; 95:451-477.

Jokhio GA, Izzuddin BA, 2013, Parallelisation of nonlinear structural analysis using dual partition super elements, *Advances in Engineering Software*, Vol:60-61, ISSN:0965-9978, Pages:81-88

Abidin ARZ, Izzuddin BA, 2013, Meshless local buckling analysis of steel beams with irregular web openings, *Engineering Structures*, Vol:50, ISSN:0141-0296, Pages:197-206

Li, Z. X., Liu, Y. F., Izzuddin, B. A. and Vu-Quoc, L., “A stabilized co-rotational curved quadrilateral composite shell element”, *International Journal for Numerical Methods in Engineering*, Vol. 86, No. 8, May 2011, pp. 975–999

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