**REFERENCES**

[1] Hamou. K., Ramdane K., 2007, *Etablissement de la Courbe de Fragilité par la Méthode Pushover*, 7 Colloque National AFPS 2007 – Ecole Centrale Paris.

[2] Association française du génie parasismique, cahier technique AFPS N° 26, 2006 *«Méthodes en Déplacement : Principe – Codification – Application»*, Avril 2006.

[3] Luis A. Montejo, Mervyn J. Kowalsky, 2007, *CUMBIA, Set of Codes for the Analysis of Reinforced Concrete Members,* Technical Report No. IS-07-01, Department of civil, construction and environmental engineering North Carolina State University Raleigh, NC, 2007.

[4] Olivier GERMAIN, 2006, *Contribution à l’Analyse du Comportement et au Dimensionnement des Colonnes Elancées en Béton Arme,*  Thèse de doctorat.

[5] Moehle, J. P., Eberhard, M.O, *Earthquake Damage to Bridges, Bridge Engineering Handbook*, 2000.

[6] Priestley and Paulay, *Seismic Design of Reinforced concrete and masonry buildings,* 1992

[7] Mattock, A.H.: Rotational Capacity of Hinging Regions in Reinforced Concrete Beams. Portland Cement Association, Bulletin 0 101. Skokie. 1965

[8] S. Bae, O. Bayrak, Plastic hinge length of reinforced concrete columns. ACI structural journal title n° 105-S28

[9] Shunsuke Otani, «*SAKE A computer program for R/C frames to earthquakes*», University of Illinois at Urbana-champaign, Nov, 1974.

[10] S. Pommier, Mécanique des matériaux, Université Pierre et Marie Curie, 2009-2010.

[11] C. Bathias, J. P. Bailon, Fatigue des matériaux et des structures, Edition Maline,1980.

[12] H. D. Bui, Mécanique de la rupture fragile, Edition Masson, 1978.

[13] C. Gardin, Introduction à la mécanique de la rupture, ENSMA, Poitiers, France, 2005.

[14] N. K. Mukhopadhyay, S. K. Maiti and A. Kakodkar, 2000, Review of SIF evaluation and modeling of singularities in BEM, Journal of Computational Mechanics, Vol. 25, 4, pp. 358-375.

[15] A. A. Grifﬁth. 1920. The phenomena of rupture and ﬂow in solids. Philosophical Transactions, Series A 221: 163–198.

[16] C. E. Inglis (1913), “Stresses in a plate due to the presence of cracks and sharp corners”. Trans. Institution of Naval Architects 55, pp 219-242.

[17] G. R. Irwin, Analysis of stresses and strains near the end of a crack traversing a plate, Journal of Applied Mechanics. vol. 24, pp. 361-364, September 1957.

[18] G. C. Sih, P.C. Paris & G. R. Irwin, 1965, On cracks in rectilinearly anisotropic bodies”, International Journal of Fracture Mechanics 1: 189–203

[19] Westergaard H M (1934): Stresses at a crack, size of the crack and the bending of reinforced concrete, Proc. American Concrete Institute, 30, 93-102

[20] J.R.Rice, A Path Independent Integral and the Approximate Analysis of Strain Concentration by Notches and Cracks, Journal of Applied Mechanics, 35 (1968), p. 379-386

[21] Knott, J. ‘From CODs to CODES (The Realisation of Fracture Mechanics in the UK)’, Fracture Research in Retrospect – An Anniversary Volume in Honour of George R, Irwin’s 90th Birthday, Edited by H P Rossmanith, Published by A.A.Balkema, Netherlands, ISBN 9054106794, 1997.

[22] Wells, A A., Unstable crack propagation in metals: cleavage and fast fracture, Proceedings of the crack propagation symposium, Cranfield, UK, Vol. 2, 210, 1961.

[23] J. R. Rice,A Path Independent Integral and the Approximate Analysis of Strain Concentration by Notches and Cracks, Journal of Applied Mechanics, 35 (1968), p. 379-386

[24] M. H. Aliabadi, 2002, Boundary Elements method: Application in Solids and Structures, Vol. 2. Chichester, Edition John Wiley & sons, p. 580.

[25] T. L. Anderson 2005, Fracture mechanics: fundamentals and applications, 3rd. Boca Raton, FL: Taylor & Francis, 621 p.

[26] J. R. Rice, Mathematical analysis in the mechanics of fracture, London Academic press, Vol. 2, pp 191-311, 1968.

[27] K. Z. Xian, A. J. Joyce, Review of fracture toughness (G, K, J, CTOD, CTOA) testing and standardization, Engineering Fracture Mechanics, 85(2012)1–46.

### [28] JD Eshelby, [The Determination of the Elastic Field of an Ellipsoidal Inclusion, and Related Problems](http://adsabs.harvard.edu/abs/1957RSPSA.241..376E), Proceedings of the Royal Society of London, 1957

### [29] Yau, J., F., Wang, S, S. and Corten, H, T. (1980) A Mixed-mode crack analysis of isotropic solids using conservation laws of elasticity, Journal of Applied Mechanics 47, 335-341．

[30] J. P. Matthew & N. H. Kim, Modeling Failure in Composite Materials with the Extended Finite Element and Level Set Methods, University of Florida, Gainesville, FL 32611.

[31] S. Mohammadi 2008, Extended finite element method for fracture analysis of structures, by Ed. Blackwell Publishing Ltd.

[32] M. Chabaat, Elasticité Avancée et Mécanique de la Rupture, Polycopié pour Post-Graduation, Faculté de Génie Civil/USTHB (2004).

[33] M. Chabaat, Elasticité et Application, Polycopié pour Post-Graduation, Faculté de Génie Civil/USTHB (2002).