

**REFERENCES
BIBLIOGRAPHIQUES**

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- [1] **NASLAIN, R.** Introduction aux matériaux composites. 2- Matrices métalliques et céramiques, *Ecole d'été du CNRS*, Bombanes, Sept. 1979, 20 p.
- [2] **NEMOZ, G.** Les fibres et les nouvelles générations de fibres pour le renforcement des liants hydrauliques, Les composites fibres-ciments, *Journées de l'Association Française de Recherche et d'Essais sur les Matériaux et les Constructions*, Lyon, 14 Nov. 1991, 10 p.
- [3] Les voies nouvelles du matériau béton: les bétons de fibres, *Ciments et Chaux*, Janv. 1987 p. 16 -20.
- [4] **JEJCIC, D. et ZANGELINI, F.** Mortiers et ciments armés de fibres, Une étude bibliographique, *Annales de l'Institut Technique du Bâtiment et des Travaux Publics*, Fév. 1977, No 347, 72 p.
- [5] **NISHIOKA, K. YAMAKAWA, S. and SHIRAKAWA, K.** Properties and applications of carbon fibre reinforced cement composites, *RILEM Symposium*, Sheffield, July 13-17 1986, 10 p.
- [6] **HAMELIN, P.** Bétons de fibres. Les composites fibres ciments. *Journées de l'Association Française de Recherche et d'Essais sur les Matériaux et les Constructions*. Lyon: 14 Nov. 1991, 38 p.

- [7] **BENTUR, A.** Fiber reinforced cementitious materials, *Material Science of Concrete*, Vol I, Edited by J.P. Skalny, Waterville, USA, American Society Inc., 1989, p. 223-283.
- [8] **RITCHIE, A.G.B. and RAHMAN, T.A.** The effect of fiber reinforcement on the rheological properties of concrete mixes, *ACI- An international symposium: Fiber reinforced concrete*, USA, 1974 , SP 44-2 p. 29-44.
- [9] **EDINGTON, I. , HANNANT, D.J. and WILLIAMS, R.I.T.** Steel fibre reinforced concrete. *Building Research Establish*, G-B, (July1974),17 p., Current Paper, CP 69/74.
- [10] **VENUAT, M.** Des fibres pour alléger et renforcer le béton, *Cahiers techniques du bâtiment*, 1983, No 58, p. 59-70.
- [11] **SOCOTEC**, Rapport de techniques nouvelles sur les composites ciment-verre modifiés par un polymère, Paris, SOCOTEC, Déc. 1986, 25 p., *Bulletin technique* No J83571.
- [12] **BIJEN, J.** Polymer modified glass fiber composite reinforced cement: a succesful composite, *Proceedings of the International Congress on Polymers in Concrete*. Edited by D. van GEMERT, Oostende, Belgium, 1995, p. 533-540.
- [13] **PERA, J. , DEJEAN, J. , AMBROISE, J.** Amélioration de la durabilité des composites ciment-verre E par ajout de métakaolin, In: *Textile composite in Building Construction*, Part 1. Edited by P. Hamelin et G. Verchery, Lyon: Pluralis, Juil. 1990 p. 107-114.
- [14] **ACCION, F. ,GORBANTES , J. et BLANCO , M.T.** Cement reinforced by acrylic fibres, Infrared studies, I/Hydratation and hydrolysis process in the fibres, *Cement and Concrete Research*, 1990, Vol. 20, No 5, p. 702-710.

- [15] **AMBROISE, J. , MURAT, M. , PERA, J.** Durabilité des fibres de verres dans les différents milieux cimentaires en cours de consolidation, Etude d'une fibre de verre E, *Verre et Réfractaire*, Nov. et Déc. 1985, Vol. 39, No 6 , p. 905-910.
- [16] **JELEDI, A.** Conception d'un matériau composite à matrice cimentaire renforcée par des fibres de polyester, Thèse Sci. Institut National des Sciences Appliquées de Lyon, Univ Lyon 1, 1991, 171 p.
- [17] **BENTUR, A. BANTIA, N., BAGGOT et al.** Fiber-Matrix Interfaces, *Pre-Proceedings of International Workshop on High Performance Fiber Reinforced Composites*, Vol. 2 (HPFRC 95) Edited by A.E. NAAMAN and H.W. REINHARDT. Michigan, USA, 1995, 417 p.
- [18] **OLLIVIER, J.P. , MASO, J.C. and BOURDETTE B.** Interfacial transition zone in concrete, *Advanced Cement Based Materials*, 1995, Vol 91, No3, p. 306-313.
- [19] **BENTUR, A. DIAMOND, S.** The microstructure of steel fibre-cement interface, *Journal of Materials Science*, 1985, Vol. 20 , p. 3610-3620.
- [20] **BENTUR, A.** Interface in fibre reinforced cement, *Bonding in Cementitious Composites, Proceedings Symposium in Boston*, 2-4 Dec. 1987, Edited by Mindess S. and Shah S.P. , Pittsburgh, Pennsylvania, Material Research Society, 1988, 354 p.
- [21] **WEI, S. , MANDEL, J.A. and SAID, S.** Study of the interface strength of steel fibre reinforced cement based composites, *American Concrete Institute Journal*, 1986, Vol. 83, p. 597-605.

- [22] **CHEN ZHI YUAN and WANG NIAN ZHI.** Strengthening the interfacial zone between steel fibres and cement paste, in *Proc. Int. Symp. Brittle Matrix Composites 2*, 20-22 Sept 1988, Cedzyna,(eds A.M. Brandt and I.H. Marshall), London: Elsevier Applied Science, 1989, p. 342-351.
- [23] **BRANDT, A.M.** Cement-based composites Materials, Mechanical Properties and Performance, London: E & FN Spon, 1995, p. 142.
- [24] **COX , H.L.** The elasticity and strength of paper and other fibrous materials, *British Journal of Applied Physics*, 1952 , Vol. 3, p. 72-79.
- [25] **LAWRENCE, P.** Some considerations of fibre pull-out from an elastic matrix, *Journal of Material Science*, 1972, Vol. 7, p. 1-6 .
- [26] **GOPALARATNAM, V.P. and SHAH, S.P.** Tensile fracture of steel-fiber reinforced mortar, *Journal of Engineering Mechanics Division*, ASCE, 1987, Vol. 113, p. 635-652.
- [27] **BENTUR, A. and MINDESS, S.** Fiber reinforced cementitious composites, London, New York: Elsevier Applied Science, 1991, 267 p.
- [28] **NAAMAN, A.E., NAMUR, G.G., ALWAN, J.M. and NAJM, H.S.** Fiber pull-out bond slip I: Analytical study, ASCE, *Journal of Structural Engineering*, 1991, Vol 117, No 9, p. 2769-2790.
- [29] **NAAMAN, A.E., NAMUR, G.G., ALWAN, J.M. and NAJM, H.S.** Fiber pull-out bond slip II:Experimental validation, ASCE, *Journal of Structural Engineering*, 1991, Vol. 117, No 9, p. 2791- 2800.

- [30] **GRAY, J.R.** Analysis of the effect of embedded fibre length on fibre debonding and pull-out from an elastic matrix, Part I: review of theories, *Journal of Materials Science*, 1984, Vol. 19, p. 861-870.
- [31] **NAAMAN, A.E.** Fibre-matrix interfaces. High performance fibre reinforced composite, Vol. 2, *Pre-proceedings*, edited by Naaman A.E. and Reinhardt H.W., Ann Arbor, June 11-14, 1995, p. 139-182.
- [32] **OUYANG, C., PACIOS, A. SHAH, S.P.** Pull out of inclined fibre from cementitious matrix, *Journal of Engineering Mechanics*, ASCE, 1994, Vol.120, No 12, p. 139-182.
- [33] **LI,V.C, WANG, Y., BACKER, S.** Effect on inclining angle, bundling and surface treatment synthetic fibre pull-out from cement matrix, *Composites*, 1990, Vol. 21, No 2, p. 132-140.
- [34] **MORRISON, J.K. , SHAH, S.P., JENQ, Y.S.** Analysis of fiber debonding and pull-out in composites, ASCE, *Journal of Engineering Mechanics*, 1980, Vol. 114, No2, p. 277-295.
- [35] **ZHOU, L-M., KIM, J-K., MAI, Y-W.** Interfacial debonding and fibre pull-out, *Journal of Materials Science*, 1992, Vol. 27, No 12, p. 3155-3166.
- [36] **MOBASHER, B., CHENG, Y.L.** Modeling of stiffness degradation of the interfacial zone during fiber debonding, *Journal of Composite Engineering*, 1995, Vol. 5, p. 1349-1365.
- [37] **ALWAN, J.M. , NAAMAN, A.E.** New formulation for elastic modulus of fiber-reinforced quasi-brittle matrices, *Journal of Engineering Mechanics*, Nov. 1994, Vol.120, No 11, p. 2443-2460.

- [38] High performance fiber reinforced cement composites, Vol 2, *Pre-proceedings*, edited by Naaman A.E. and Reinhardt H.W. , Ann Arbor, June 11-14, 1995, 467 p.
- [39] **ESCHENHAUER, H.** und **SCHNELL, W.** Elastizitätstheorie I. B.I. Wissenschaftsverlag 2, überarbeitete Auflage, 1986, 277 p.
- [40] **BAALBAKI, W., AITCIN, P.C., BALLIVY, G.** On predicting modulus of elasticity in high strength concrete, *ACI Material Journal*, 1991, Vol 88, No 6, p. 603-612.
- [41] **KRENCHER, H.** Fiber reinforcement. Akademisk Forlag, Copenhagen, 1988, 70p.
- [42] **NIELSEN, H.G., CHEN, E.L.** Young's modulus of composites filled with randomly oriented short fibers, *Journal of Materials*, 1968, Vol. 3, No 2, p. 352-358.
- [43] **SHAH, S.P. , RANGAN, B.V.** Fiber reinforced concrete properties, *ACI Journal*, 1971, Vol 68, No 2, p. 126-135.
- [44] **ALLEN, H.G.** Tensile properties of seven asbestos cements, *Composites*, 1971, Vol 2, p. 98-103.
- [45] **PAKORIPRAPHA, B. , PAMA, R.P., LEE, S.L.** Mechanical properties of cement mortar with randomly oriented short steel wires, *Magazine of Concrete Research*, 1974, Vol 26, No 86, p. 3-15.
- [46] **SANADI, A.R., PIGGOT, M.R.** Interfacial effects in carbon epoxies, Part I and II : Strength and modulus of composites with short aligned fibres, *Journal of Materials Science*, 1985, Vol 20, p. 4221-4370.

- [47] **NAAMAN, A.E. , OTTER, D. , NAJM, H.** Elastic modulus of SIFCON in tension and compression, *ACI Material Journal*, 1992, Vol. 89, No 5, p. 517-520.
- [48] **LOU, H.A. , WENG, G.J.** On Eshelby's stress tensor in a three phase cylindrical concentric solid and the elastic moduli of fiber reinforced composites, *Mechanics of Materials*, 1989, Vol 8, p. 77-88.
- [49] **CHRISTENSEN, R.M. LO, K.H.** Erratum: solutions for effective shear properties, in three phase sphere and cylinder models, *Journal of Mechanics and Physics of Solids*, 1986, Vol 34, p. 639.
- [50] **MIKATA, Y. TAYA, M.** Thermal stress in a coated short fiber composite, *Journal of Applied Mechanics*, 1986, Vol 53, p. 554.
- [51] **MURA, T.** Micromechanics of defects solids, the Hague, the Netherlands, 1982, 121 p. Martinus Nijhoff.
- [52] **ALWAN, J.M.** Modelling of the mechanical behaviour of fiber reinforced cement-based composites under tensile loads, Ph D thesis, Departement of Civil and Environmental Engineering, Univ. of Michigan, Ann Arbor, August 1994, 247 p.
- [53] **SWAMY, R.N., MANGAT, P.S.** A theory of flexural strength of steel-fibre reinforced composite, *Cement and Concrete Research*, 1974, Vol. 4, p. 313-320.
- [54] **NAAMAN, A.E.** A statistical theory of strength for fiber reinforced concrete, Thesis presented to the Massachussets Institut of Technology, Civil Engineering Department in partial fullfillment for the degree of doctor of philosophy, Sept 1972, 196 p.

- [55] **NAAMAN, A.E.** High performance fiber reinforced cement composites, *Proceedings of the IABSE Symposium on Concrete Structures for the Future*, Paris, France, September 1987, p. 371-376.
- [56] **NAAMAN, A.E.** High performance fiber reinforced cement composites, Vol 2, *Pre-proceedings*, edited by Naaman A.E. and Reinhardt H.W. Ann Arbor, June 11-14, 1995, p. 3-5.
- [57] **LI, V.C., LEUNG, C.K.Y.** Theory of the steady state and multiple cracking of random discontinuous fiber reinforced brittle matrix composites, *ASCE, Journal of Engineering Mechanics*, 1992, Vol. 118, No 11, p. 2246-2264.
- [58] **TJIPTOBROTO, P. , HANSEN, W.** Tensile strain hardening and multiple cracking, in high performance cement based composites, *ACI Material Journal*, January-February 1993, Vol. 90, No 1, p. 315-327.
- [59] **KABELE, P. , HORII, H.** Analytical modelling and fracture analysis of engineered cementitious composites, *5th East Asian Pacific Conference on Structural Engineering and Construction*, Wallolong, NSW, Australia, 25-27 July 1995, 350p.
- [60] **FRANCOIS, D., PINEAU, A., ZAOUI, A.** Comportement mécanique des matériaux: viscoplasticité, endommagement, mécanique de la rupture, mécanique des contacts, Paris: Hermès, 1993, 360p.
- [61] **GRIFFITH, A.A.** The phenomena of rupture and flow in solids, *Philosophical Transactions*, Royal Society of London, 1920, Vol. 221, 21p.
- [62] **SEDOV, L.** Mécanique des milieux continus, Paris: Editions de Moscou, 1967, 360 p.

- [63] **BARENBLATT, G.I.** The mathematical theory of equilibrium of cracks, in brittle fracture, *Advances in Applied Mechanics*, New York: Academic press, 1962, 110 p.
- [64] **RICE, J.R.** A path dependent integral on the approximate analysis of strain concentration by notches and cracks, *Journal of Applied Mechanics*, 1968, Vol. 35.
- [65] **VISALVANICH, K., NAAMAN, A.E.** Fracture model for fibre reinforced concrete, *ACI Journal*, 1983, Vol. 80, No2, p. 128-138.
- [66] **THOMPSON R., FULLER E.** Crack morphology in relatively brittle crystals, *Proceedings symposium on the fracture mechanics of ceramics*, New York: Plenum press, 1973, Vol. 1, p. 283-295.
- [67] **LI, V.C.** Postcrack scaling relation for fibre reinforced cementitious composites, *Journal of Materials in Civil Engineering*, 1992, Vol. 4, No 1, p. 41-57.
- [68] **TARTAR, L.** Nonlinear constitutive relations and homogenization, in *Contemporary developments in continuum mechanics and partial differential equations*, Proceedings on the international conference in Rio de Janeiro, 1977, Amsterdam: North Holland, 1978, p. 472-484.
- [69] **BENSOUSSAN, A., LIONS, J.L., PAPANICOLAOU, G.** Asymptotic analysis for periodic structures, Vol. 5, Amsterdam: North Holland, 1978, 168 p.
- [70] **SANCHEZ-PALENCIA, E.** Boundary layers and edges effects in composites, in lecture notes in physics, Vol. 127, Berlin: Springer, 1980, 36p.

- [71] **LIONS, J.L.** Homogenization and reinforced structures, In *struct. contr. Proceedings on the 2nd international Symposium*, Waterloo, July 1985, Dordrecht: Reidel, 1986, p. 426-445.
- [72] **NGUETSENG, G.** A general convergence result for a fonctional related to the theory of homogenization, *Society for Industrial and Applied Mechanics*, 1989, Vol. 20, No 3, p. 608-623.
- [73] **PARTON, Z.V., KUDRYATSEV, B.A.** Engineering mechanics of composite structures, London: CRC Press, 397p.
- [74] **KALAMKAROV, A.L., KUDRYATSEV, B.A., PARTON, Z.V.** The asymptotic method of homogenization in the mechanics of composites with regular structure. *Itogi Nauki i Tekn. VINITI. Mekn. Deform. Tv. Tela*, 1987, Vol. 19, p. 78-147.
- [75] **DEJEAN, J.** Composite ciment-verre E. Amélioration de la durabilité par ajout de métakaolin, Thèse Sci. Institut National des Sciences Appliquées de Lyon , 1989, 190 p.
- [76] **HOUGET, V., AMBROISE, J., PERA, J.** Propriétés mécaniques des composites ciment fibres organiques, *Materials and Structures*, 1995, Vol. 28, No 178, p. 220-229.
- [77] **ROLS, S.** Conception d'un composite ciment-fibres de polypropylène ductile et durable, Thèse Sci. Institut National des Sciences Appliquées de Lyon, 1996, 202 p.
- [78] **OAKLEY, D.R., PROCTOR, B.A.** Tensile stress strain behaviour of glass fiber reinforced cement composites, in *RILEM symposium in fibre reinforced cement and concrete*, London: The construction press, 1975, pp. 347-359.

- [79] **FARHA, M.** Conception de composites ciment-verre à porosité minimale, Thèse Sci. Institut National des Sciences Appliquées de Lyon, 1990, 138 p.
- [80] **BIJEN, J.** Polymer modified glass fiber reinforced cement: a successful composite, *Proceedings on the international congress on polymers in concrete*, edited by D. van Gemert, Oostende, Belgium, 1995, p. 533-540.
- [81] **OHAMA, Y.** Concrete admixtures handbook, Ottawa: Noyes publication, 1985, Polymer modified mortars and concretes, p. 337-429.
- [82] **BENTUR, A.** Fibre reinforced cementitious materials, *Materials Science of Concrete*, Vol. I, edited by J.P. Skalny, Waterville, USA, American Ceramic Society Inc., 1989, p. 223-283.
- [83] **RAMASHADRAN, V.S** Uso dei superfluidificanti nel calcestruzzo, *Il cemento*, 1987, Vol. 3, p. 273-298.
- [84] **RAMASHADRAN, V.S., BEAUDOIN, J.J, SHISHUA, Z.** Control of slump loss in superplasticized concrete, *Matériaux et Constructions*, 1989, Vol. 22 , No 128, p. 107-111.
- [85] **HAMELIN, P., COURTADE, R.M.** Mechanical modelization of interfaces in cementitious fiber composites. *International Union of Testing and Research Laboratories for Materials and Constructions*, International Conference, Toulouse, 21.10.1992, London: E & FN Spon, 1992, p. 169-176.
- [86] **KACHANOV, L.M.** Time of the rupture process under creep conditions. *Izv. Akad. Nauk. S.S.R. Otd. Tekn. Nauk*, 1958, No 8, p. 26-31.

- [87] **LEMAITRE, J., CHABOCHE, J.L.** Mécanique des matériaux solides, Paris: Dunod, 1985, 544 p.
- [88] **CHANVILLARD, G.** Analyse expérimentale et modélisation micromécanique du comportement des fibres d'acier tréfilées, ancrées dans une matrice cimentaire, Paris: Laboratoire Central des Ponts et Chaussées, 1993, 197 p., *Etudes et recherches OA12*.
- [89] **TJIPTOBBROTO, P., HANSEN, W.** Model for predicting the elastic strain of fiber reinforced composites containing high volume fractions of discontinuous fibres, *ACI Material Journal*, 1993, Vol. 90, p. 134-142.
- [90] **NAJM, H.** Elastic modulus of high performance fiber reinforced cement based composites, PhD thesis, Department of Civil Engineering, University of Michigan, Ann Harbor, 1992, 192 p.
- [91] **NAAMAN, A. E., OTTER, D. and NAJM, H.** Elastic modulus of SIFCON in tension and compression, *ACI Material Journal*, 1992, Vol. 89, No 5, p. 517-520.
- [92] **KENDALL, K.** In physics and chemistry in porous media, Editors D.L.Johnson and P.N. Sen, New York: *American Institute of Physics*, 1984, 79 p.